# A Bibliography of CORDIC Algorithms

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: https://www.math.utah.edu/~beebe/

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## Title word cross-reference

$2 \times 2$ [315]. $^{2+}$ [1327]. $\alpha$ [380]. $\arctan(Y/X)$ [744]. $\cos^{-1}$ [275]. $\delta$ [1260]. $J$ [124]. $K$ [1144]. $\mu$ [1251, 623, 308, 445, 116, 772, 138, 1244]. $N$ [924, 654, 1449, 99, 1217, 1357]. $N^{\text{th}}$ [1284]. $\pi/4$ [1434]. $QR$ [1087, 925, 798, 1090, 1317, 1451, 931, 1263, 436, 932, 315, 1384, 179, 1212, 1213, 1048, 997, 1214, 1055, 1056, 1224, 1292, 345, 1021, 1141]. $\sigma$ [411, 441]. $\sin^{-1}$ [275]. $\sqrt{1-t^2}$ [443]. $\sqrt{x}$ [68]. $Z$ [199, 669].

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**0.18-** [1244]. **0.29-V** [1244]. **0.35um** [759]. **0.75-V** [1251, 1252].

**1-bit** [677]. **1-V** [1244]. **10.1109/TVLSI.2019.2919557** [1277]. **100** [1244]. **1024-point** [902]. **10G** [1569]. **10th** [1588]. **11th** [1590]. **12-stage** [1516]. **13th** [1592]. **14-bit** [1294]. **14th** [1593]. **16** [1004]. **16-bit** [859, 539, 108].

**16-QAM** [1004]. **16-stage** [1429]. **16th** [1594]. **17th** [1595]. **180-nm** [1057]. **181-** [1251]. **1980** [1581, 1582]. **19th** [1598]. **1b** [1576]. **1D** [1041]. **1D-DCT** [1041].

**2** [607, 500, 501, 966]. **2-D** [1026, 301, 481, 607, 500, 501]. **2-level** [586]. **2003** [1594]. **200MHz** [715]. **2015** [1599]. **2017** [1600]. **2020** [1601]. **2024** [1602]. **22nd** [1599]. **24th** [1600]. **25** [963]. **256** [1576]. **256-QAM** [1576]. **27th** [1601]. **2D** [652, 1539, 1542, 264, 808, 1387, 512]. **2D-DCT** [1387, 512]. **2K** [475]. **2K/4K/8K** [475]. **2K/4K/8K-point** [475]. **2N** [662]. **2r** [1334].

**3** [1207]. **3-D** [608, 1073]. **3-DOF** [1207]. **3-Phase** [1354, 804]. **30** [1538]. **300MHz** [759]. **31st** [1602]. **32** [1251, 1252]. **32-Bit** [1510, 1458, 1391]. **32-MHz** [1251]. **32-point** [1208, 1252]. **340** [1252]. **340-** [1252]. **35** [22]. **380** [623]. **3D** [430, 652, 1539, 483, 936, 991, 473, 567, 1341, 1175, 1012]. **3D-Camera** [430]. **3G** [896].

**4096-Point** [1560]. **4D** [1120, 1121]. **4G** [1275, 1008]. **4K** [475]. **4th** [1597].

**5/3** [1147]. **512-point** [808]. **58** [1252]. **58-MHz** [1252]. **5G** [1275, 1560].

**6** [684]. **6-DOF** [684]. **6.7** [182]. **6.7-MFLOPS** [182]. **61000** [1538]. **61000-4-30** [1538]. **65-nm** [1266]. **65nm** [1102, 1251, 1252].

**7000** [1182]. **754** [1088]. **754-based** [1088]. **7th** [1581, 1584].

**8-bit** [795, 796, 231]. **8/16/32** [1208]. **8/16/32-point** [1208]. **802.15.4** [977]. **802.16m** [1008]. **'89** [1586]. **8K-point** [475]. **8th** [1585].

**9.5** [1514]. **9th** [1587].

**A/D** [1180, 482, 502]. **AB-Like** [1531]. **Absolute** [1448, 540]. **Abstract** [1336]. **AC** [1380]. **Accelerate** [605, 771, 636]. **Accelerating** [1507, 1458, 1350, 1011, 716]. **Acceleration** [1312, 1313, 1465, 1566, 596, 1115]. **Accelerator** [1089, 1497, 1324, 1513, 1389, 1391, 1410, 1363, 1443, 1577, 1148, 1149]. **Accelerators** [1388, 1525]. **Accelerometer** [1216, 821, 914]. **accelerometer-based** [821, 914]. **Accelerometers** [942]. **Accumulate** [1488]. **Accumulation** [1210, 1163]. **Accuracy** [621, 429, 1456, 1507, 1461, 1227, 1394, 1127, 836, 1527, 1568, 1441, 650, 1489, 22, 467, 468, 274, 208, 897, 777, 1075, 1076]. **Accurate** [505, 220, 736, 1504, 511, 948, 453]. **acoustic** [1285]. **Acquiring** [587]. **Acquisition** [1569, 749, 784]. **Activation** [1490, 1491, 1332, 1551, 1552, 1392, 1521, 1346, 1526, 1566, 1436, 1478, 434, 1071, 1572]. **Active** [1481]. **Activity** [1505]. **Actuation** [1505]. **Adaptable** [1402]. **Adaptive**

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# References

**Briggs:1624:ALL**

[1] Henry Briggs. *Arithmetica Logarithmica. (Latin) [Logarithmic arithmetic]*. Excudebat Gulielmus Iones, London, UK, 1624. URL `http://www.17centurymaths.com; https://archive.org/details/bub_gb_L88WAAAAQAAJ; https://en.wikipedia.org/wiki/Henry_Briggs_(mathematician); https://old.maa.org/press/periodicals/convergence/mathematical-treasure-iarithmetica-logarithmicai-of-henry-briggs; https://www.google.com/books/edition/Arithmetica_logarithmica/L88WAAAAQAAJ?hl=en`. This may be the earliest use of a CORDIC-like algorithm for computing tables of logarithms, although it seems to have been unknown to those who are later credited with the CORDIC invention [3, 4, 6, 7, 21]. See [831] for an analyis and description of Briggs' computational methods, and a list of 120 publications about Briggs' tables.

**Marx:1956:ABL**

[2] Helmut Marx. Additionsverfahren zur Berechnung des Logarithmus und der Exponentialfunktion (I). (German) [Addition method for calculating the logarithm and the exponential function (I)]. *Mitteilungen des Mathematischen Seminars der Universität Gießen*, (54):i + 26, ???? ??, 1956.

**Volder:1956:BCA**

[3] Jack E. Volder. Binary computation algorithms for coordinate rotation and function generation. Internal report IAR-1.148, Convair Corporation, Ft. Worth, TX, USA, June 15, 1956.

**Bemer:1958:SMC**

[4] Robert W. Bemer. A subroutine method for calculating logarithms. *Communications of the ACM*, 1(5):5–8, May 1958. CODEN CACMA2. ISSN 0001-0782 (print), 1557-7317 (electronic).

**Daggett:1959:DBC**

[5] D. H. Daggett. Decimal–binary conversions in CORDIC. *IRE Transactions on Electronic Computers*, EC-8(3):335–339, September 1959. CODEN IRELAO. ISSN 0367-9950.

**Volder:1959:CCT**

[6] Jack E. Volder. The CORDIC computing technique. In ????, editor, *Proceedings of the Western Joint Computer Conference 1959*, pages 257–261. ????, ????, 1959. Reprinted in [7]. See also internal report [3].

**Volder:1959:CTC**

[7] Jack E. Volder. The CORDIC trigonometric computing technique. *IRE Transactions on Electronic Computers*, EC-8(3):330–334, September 1959. CODEN IRELAO. ISSN 0367-9950. Reprint of [6]. See also internal report [3].

**Wensley:1959:CNA**

[8] J. H. Wensley. A class of non-analytical iterative processes. *The Computer Journal*, 1(4):163–167, January 1959. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic). URL `http://comjnl.oxfordjournals.org/content/1/4/163.full.pdf+html; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/010163.sgm.abs.html; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/tiff/163.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/tiff/164.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/tiff/165.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/tiff/166.tif; http://www3.oup.co.uk/computer_journal/hdb/Volume_01/Issue_04/tiff/167.tif`.

**Akushsky:1960:MSO**

[9] I. Y. Akushsky, L. B. Emelianow-Yaroslavsky, E. A. Klyamko, V. S. Linsky, and G. D. Monakhov. Methods of speeding-up the operation of digital computers. In ????, editor, *Information Processing, Proceedings of the International Conference on Information Processing, UNESCO, Paris, 15–20 June 1959*, pages 382–389 (or 382–388??). UNESCO / R. Oldenbourg / Butterworths, Paris, France / Munich, West Germany / London, UK, 1960. URL `https://www.vldb.org/dblp/db/conf/ifip/ifip1959.html`.

**Maehly:1960:RAT**

[10] H. J. Maehly. Rational approximations for transcendental functions. In ????, editor, *Information Processing, Proceedings of the International Conference on Information Processing, UNESCO, Paris, 15–20 June 1959*, pages 57–62. UNESCO / R. Oldenbourg / Butterworths, Paris, France / Munich, West Germany / London, UK, 1960. URL `https://www.vldb.org/dblp/db/conf/ifip/ifip1959.html`.

**ASG:1962:TDF**

[11] Advanced Systems Group. Technical description of fix-taking tie-in equipment. Report FZE-052, General Dynamics Aerosystems, ????, August 6, 1962. This report records the successful passing of tests by the

CORDIC-II navigation computer, the second hardware implementation for ground and aircraft use of the CORDIC algorithm [6, 7].

**Meggitt:1962:PDP**

[12] J. E. Meggitt. Pseudo division and pseudo multiplication processes. *IBM Journal of Research and Development*, 6(2):210–226, April 1962. CODEN IBMJAE. ISSN 0018-8646 (print), 2151-8556 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5392356`.

**Senzig:1962:DDG**

[13] D. N. Senzig. Digit-by-digit generation of the trigonometric and hyperbolic functions. IBM Research Report RC-860, IBM Corporation, Armonk, NY, USA, December 17, 1962.

**Sideus:1965:INB**

[14] G. Sideus. Inertial navigation at a bargain price. *Electronics*, ??(??): 108–112, May 17, 1965.

**Parini:1966:DGA**

[15] J. M. Parini. Divic gives answer to complex navigation question. *Electronics*, ??(??):105–111, September 5, 1966.

**Liccardo:1968:IPE**

[16] M. A. Liccardo. An interconnect processor with emphasis on CORDIC mode. Masters thesis, Electrical Engineering Department, University of California at Berkeley, Berkeley, CA, USA, 1968.

**Tung:1968:CAF**

[17] Chin Tung. *A Combinational Arithmetic Function Generation System*. Ph.D. thesis, University of California, Los Angeles, Los Angeles, CA, USA, 1968. 230 pp. URL `https://www.proquest.com/pqdtglobal/docview/302294704`.

**Linhardt:1969:DDT**

[18] R. J. Linhardt and H. S. Miller. Digit-by-digit transcendental-function computation. *RCA Review*, 30(2):209–247, June 1969. CODEN RCARCI. ISSN 0033-6831. URL `https://www.worldradiohistory.com/ARCHIVE-RCA/RCA-Review/RCA-Review-1969-06.pdf`.

**DeLugish:1970:CAAa**

[19] Bruce Gene De Lugish. A class of algorithms for automatic evaluation of certain elementary functions in a binary computer. Technical Report

399, Department of Computer Science, University of Illinois at Urbana-Champaign, Urbana, Illinois, 1970. 191 pp.

**DeLugish:1970:CAAb**

[20] Bruce Gene De Lugish. *A Class of Algorithms for Automatic Evaluation of Certain Elementary Functions in a Binary Computer*. Ph.D. thesis, Department of Electrical Engineering, University of Illinois at Urbana–Champaign, Urbana, IL, USA, June 1970. ix + 244 pp. URL `https://www.proquest.com/pqdtglobal/docview/302409094/`.

**Walther:1971:UAE**

[21] J. S. Walther. A unified algorithm for elementary functions. In Anonymous [1580], pages 379–385. LCCN ???? Reprinted in [24, 54].

**Cochran:1972:AAH**

[22] D. S. Cochran. Algorithms and accuracy in the HP-35. *Hewlett-Packard Journal: technical information from the laboratories of Hewlett-Packard Company*, 23(10):10–11, June 1972. CODEN HPJOAX. ISSN 0018-1153. URL `http://www.hp.com/hpj/72jun/ju72a2.htm`.

**Fettweis:1972:PSS**

[23] A. Fettweis. Pseudopassivity, sensitivity, and stability of wave digital filter. *IEEE Transactions on Circuit Theory*, 19(??):668–673, November 1972. CODEN IECTAF. ISSN 0018-9324.

**Walther:1972:UAE**

[24] J. S. Walther. A unified algorithm for elementary functions. In Orlando R. Petrocelli, editor, *The Best Computer Papers in 1971*, pages 69–81. Auerbach Publishers, Princeton, NJ, USA, 1972. Reprint of [21].

**Baker:1973:PAS**

[25] P. W. Baker. Predictive algorithms for some elementary functions in radix 2. *Electronics Letters*, 9(21):493–494, October 1973. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic).

**Ercegovac:1973:REC**

[26] Miloš D. Ercegovac. Radix-16 evaluation of certain elementary functions. *IEEE Transactions on Computers*, C-22(6):561–566, June 1973. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `http://www.acsel-lab.com/arithmetic/arith2/papers/ARITH2_Ercegovac.pdf; https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5009107`.

**Oppenheim:1973:DSP**

[27] Alan V. Oppenheim and Ronald W. Schafer. *Digital Signal Processing*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1973. ISBN 0-13-214635-5. xiv + 585 pp. LCCN Q4C/Q4.4/495; TK5102.5 .O245.

**Pisarenko:1973:RHC**

[28] V. F. Pisarenko. The retrieval of harmonics from a covariance function. *Geophys. J. Roy. Astronom. Soc.*, 33(??):347–366, ???? 1973.

**Schmid:1973:UDC**

[29] Hermann Schmid and A. Bogacki. Use decimal CORDIC for generation of many transcendental functions. *EDN Magazine*, ??(??):64–73, February 20, 1973.

**Walther:1973:EFP**

[30] J. S. Walther. Elementary floating point CORDIC function processor and shifter. US Patent 3,766,370., October 16, 1973. URL `https://patentimages.storage.googleapis.com/30/7f/a0/1201036cf71cea/US3766370.pdf`. Filed 14 May 1971.

**Despain:1974:FTC**

[31] Alvin M. Despain. Fourier transform computers using CORDIC iterations. *IEEE Transactions on Computers*, C-23(10):993–1001, October 1974. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1672393`.

**Hitotumatu:1974:CAT**

[32] Sin Hitotumatu. Complex arithmetic through CORDIC. *Kōdai Math. Semin Rep.*, 26:176–186, 1974/75. ISSN 0023-2599. URL `http://projecteuclid.org/euclid.kmj/1138846999`.

**Hitotumatu:1974:NMC**

[33] Sin Hitotumatu. A new method for the computation of square root, exponential, and logarithmic functions through hyperbolic CORDIC. *Revue d'Analyse Numérique et de la Théorie de l'Approximation*, 3(2):173–180, ???? 1974. ISSN 0301-9241.

**Schmid:1974:DC**

[34] Hermann Schmid. *Decimal Computation*. Wiley, New York, NY, USA, 1974. ISBN 0-471-76180-X. xi + 266 pp. LCCN QA75 .S34.

**Baker:1975:MER**

[35] P. W. Baker. More efficient radix-2 algorithms for some elementary functions. *IEEE Transactions on Computers*, C-24(11):1049–1054, November 1975. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1672725`.

**Baker:1975:PMA**

[36] P. W. Baker. Parallel multiplicative algorithms for some elementary functions. *IEEE Transactions on Computers*, C-24(3):322–325, March 1975. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1672808`.

**Burg:1975:MES**

[37] J. P. Burg. *Maximum Entropy Spectral Analysis*. Ph.D. thesis, Stanford University, Stanford, CA, USA, 1975.

**Gray:1975:NDF**

[38] A. H. Gray, Jr. and J. D. Markel. A normalized digital filter structure. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, 23(3): 268–277, June 1975. CODEN IETABA. ISSN 0096-3518.

**Hitotumatu:1975:CAT**

[39] Sin Hitotumatu. Complex arithmetic through CORDIC. *Kodai Mathematical Seminar Reports*, (26):176–186, 1975. ISSN 0023-2599.

**Lem:1975:ICF**

[40] Albert G. Lem. Implementation of a CORDIC function generator. M.S.E. thesis, California Polytechnic State University, San Luis Obispo, CA, USA, 1975. 74 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/implementation-cordic-function-generator/docview/2703960112/se-2`.

**Baker:1976:SFB**

[41] P. W. Baker. Suggestion for a fast binary sine/cosine generator. *IEEE Transactions on Computers*, C-25(11):1134–1136, November 1976. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1674566`.

**Smith:1976:MER**

[42] B. T. Smith, J. M. Boyle, J. J. Dongarra, B. S. Garbow, Y. Ikebe, V. C. Klema, and C. B. Moler. *Matrix Eigensystem Routines: EISPACK Guide*, volume 6 of *Lecture Notes in Computer Science, Editors: G. Goos and J. Hartmanis*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1976. ISBN 0-387-06710-8. vii + 387 pp. LCCN QA193 .M37, QA267.A1 L43 no.6. URL `http://link.springer.com/10.1007/3-540-07546-1`.

**Chen:1977:FCA**

[43] W. H. Chen, C. H. Smith, and S. C. Fralick. A fast computational algorithm for the discrete cosine transform. *IEEE Transactions on Communications*, COM-25(??):1004–1009, September 1977. CODEN IECMBT. ISSN 0090-6778 (print), 1558-0857 (electronic).

**Ercegovac:1977:GHO**

[44] Miloš D. Ercegovac. A general hardware-oriented method for evaluation of functions and computations in a digital computer. *IEEE Transactions on Computers*, C-26(7):667–680, July 1977. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1674900`.

**Nishimura:1977:ACH**

[45] Kazuo Nishimura. An algorithm to calculate Hessenberg matrix by CORDIC. *Keio Math. Semin. Rep.*, 2(2):61–65, 1977. ISSN 0388-3469.

**Paige:1977:LSE**

[46] C. C. Paige and M. A. Saunders. Least squares estimation of discrete linear dynamic systems using orthogonal transformations. *SIAM Journal on Numerical Analysis*, 14(2):180–193, April 1977. CODEN SJNAAM. ISSN 0036-1429 (print), 1095-7170 (electronic).

**Steer:1977:DHS**

[47] Steer and Penstone. Digital hardware for sine-cosine function. *IEEE Transactions on Computers*, C-26(12):1283–1286, December 1977. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Andrews:1978:PCA**

[48] Michael Andrews and Daniel E. Eggerding. A pipelined computer architecture for unified elementary function evaluation. *Computers and Electrical Engineering*, 5(2):189–202, June 1978. CODEN CPEEBQ.

ISSN 0045-7906 (print), 1879-0755 (electronic). URL `https://www.sciencedirect.com/science/article/abs/pii/0045790678900307`.

**Eschenbach:1978:ECR**

[49] R. F. Eschenbach and B. M. Oliver. An efficient coordinate rotation algorithm. *IEEE Transactions on Computers*, C-27(12):1178–1180, December 1978. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1675020`.

**Kropa:1978:CA**

[50] James C. Kropa. Calculator algorithms. *Mathematics Magazine*, 51(2): 106–109, March 1978. CODEN MAMGA8. ISSN 1930-0980.

**Despain:1979:VFF**

[51] Despain. Very Fast Fourier Transform algorithms hardware for implementation. *IEEE Transactions on Computers*, C-28(5):333–341, May 1979. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Dongarra:1979:LUG**

[52] J. J. Dongarra, J. R. Bunch, C. B. Moler, and G. W. Stewart. *LINPACK Users' Guide*. Society for Industrial and Applied Mathematics, Philadelphia, PA, USA, 1979. ISBN 0-89871-172-X (paperback). 320 pp. LCCN QA76.73 .L22 L5 1979; QA184 .L56 1982; QA214 .L56 1979.

**Friedlander:1979:ELC**

[53] B. Friedlander, T. Kailath, M. Morf, and L. Ljung. Extended Levinson and Chandrasekhar equations for general discrete time linear estimation problems. *IEEE Transactions on Automatic Control*, C-23(4):653–659, August 1979. CODEN IETAA9. ISSN 0018-9286 (print), 1558-2523 (electronic).

**Hwang:1979:CAP**

[54] Kai Hwang. *Computer Arithmetic: Principles, Architecture, and Design*. Wiley, New York, NY, USA, 1979. ISBN 0-471-03496-7. xiii + 423 pp. LCCN TK7888.3 .H9. Includes reprint of [21].

**Kailath:1979:DRM**

[55] T. Kailath, S. Y. Kung, and M. Morf. Displacement ranks of matrices and linear equations. *Journal of Mathematical Analysis and Applications*, 68(2):395–407, ???? 1979. CODEN JMANAK. ISSN 0022-247X (print), 1096-0813 (electronic).

**Nishimura:1979:MSL**

[56] Kazuo Nishimura. A method to solve linear equation by CORDIC. *Keio Math. Semin. Rep.*, 4:61–67, 1979. ISSN 0388-3469.

**Schmidt:1979:MEL**

[57] R. Schmidt. Multiple emitter locations and signal parameter estimation. In ????, editor, *Proceedings of the RADC Spectral Estimation Workshop, Rome, NY, 1979*, pages 243–258. ????, ????, 1979.

**Haviland:1980:CAPa**

[58] Gene L. Haviland and Al A. Tuszynski. A CORDIC arithmetic processor chip. *IEEE Transactions on Computers*, C-29(2):68–79, February 1980. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Haviland:1980:CAPb**

[59] G. L. Haviland and A. A. Tuszynski. A CORDIC arithmetic processor chip. *IEEE Journal of Solid-State Circuits*, 15(1):4–15, February 1980. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Kalman:1980:NAL**

[60] R. E. Kalman. A new approach to linear filtering and prediction problems. *J. of Basic Engineering*, 82D(??):34–45, March 1980.

**Nave:1980:NDP**

[61] Rafi Nave and John F. Palmer. A numeric data processor. In Anonymous [1582], pages 108–109. ISBN ???? LCCN ???? URL `https://ieeexplore.ieee.org/document/1156144`. IEEE Catalog Number 80CH1490-2-SSC.

**Palmer:1980:IND**

[62] J. Palmer. The Intel 8087 numeric data processor. In Anonymous [1581], pages 174–181. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

**Ahmed:1981:SCS**

[63] H. M. Ahmed and M. Morf. Synthesis and control of signal processing architectures based on rotations. In ????, editor, *Proceedings of the First International Conference on VLSI, Edinburgh, Scotland, August 18–21, 1981*, page ?? ????, ????, 1981.

**Ahmed:1981:VSA**

[64] H. M. Ahmed, M. Morf, D. T. L. Lee, and P. H. Ang. A VLSI speech analysis chip set based on square-root normalized ladder forms. In ????,

editor, *Proceedings of 1981 ICASSP. Atlanta. GA, 1981*, pages 648–653. ????, ????, 1981.

**Gentleman:1981:MTS**

[65] W. M. Gentleman and H. T. Kung. Matrix triangularization by systolic array. In ????, editor, *Proceedings of SPIE*, volume 298 (Real-time signal processing IV), pages 19–26. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1981.

**Ahmed:1982:HCC**

[66] Hassan M. Ahmed, Jean-Marc Delosme, and Martin Morf. Highly concurrent computing structures for matrix arithmetic and signal processing. *Computer*, 15(1):65–82, January 1982. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

**Ahmed:1982:SPA**

[67] H. M. Ahmed. *Signal Processing Algorithms and Architectures*. Ph.D. thesis, Stanford University, Stanford, CA, USA, 1982.

**Andrews:1982:MMS**

[68] M. Andrews. Mathematical microprocessor software: a $\sqrt{x}$ comparison. *IEEE Micro*, 2(3):63–79, August 1982. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Friedlander:1982:LFA**

[69] B. Friedlander. Lattice filtering for adaptive signal processing. *Proceedings of the IEEE*, 70(8):829–867, August 1982. CODEN IEEPAD. ISSN 0018-9219 (print), 1558-2256 (electronic).

**Heller:1982:SNO**

[70] D. Heller and I. Ipsen. Systolic network for orthogonal equivalence transformations and their application. In *Proceedings of the Conference on Advanced Research in VLSI*, pages 113–122. MIT Press, Cambridge, MA, USA, 1982.

**Kung:1982:TAM**

[71] S. Y. Kung. A Toeplitz approximation method and some applications. In ????, editor, *Proceedings of the International Symposium on Mathematical Theory. Network Systems. Santa Monica, CA, August 1981*, pages 262–266. ????, ????, 1982.

**Kung:1982:WSA**

[72] H. T. Kung. Why systolic architectures? *Computer*, 15(1):37–46, January 1982. CODEN CPTRB4. ISSN 0018-9162 (print), 1558-0814 (electronic).

**Lee:1982:GCD**

[73] D. Lee and M. Morf. Generalized CORDIC for digital signal processing. In ????, editor, *ICASSP '82. IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 7, pages 1748–1751. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1982.

**Bracewell:1983:DHT**

[74] R. N. Bracewell. Discrete Hartley Transform. *Journal of the Optical Society of America*, 73(12):1832–1835, December 1983. CODEN JOSAAH. ISSN 0030-3941. URL `https://opg.optica.org/view_article.cfm?pdfKey=3525ca6f-bf7d-49c1-a39b962c2419210f_84262`.

**Delosme:1983:VIR**

[75] Jean-Marc Delosme. VLSI implementation of rotations in pseudo-Euclidean spaces. In ????, editor, *ICASSP Proceedings of International Conference on Acoustics, Speech and Signal Processing, Boston, MA, 14–16 April 1983*, volume 2, pages 927–930. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1983.

**Deprettere:1983:SFP**

[76] Ed. F. Deprettere. Synthesis and fixed point implementation of pipelined true orthogonal filters. In ????, editor, *IEEE International Conference on ASSP. Boston, MA, Vol. I, 1983*, pages 217–220. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1983.

**Hanrot:1983:MOD**

[77] D. Hanrot and C. T. Mulles. A modular and orthogonal digital filter structure for parallel processing. In ????, editor, *Proceedings of ICASSPBJ, Boston, MA, 1983*, pages 623–626. ????, ????, 1983.

**Kung:1983:HCA**

[78] S. Y. Kung and Yu Hen Hu. A highly concurrent algorithm and pipelined architecture for solving Toeplitz systems. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, 31(I):66–76, February 1983. CODEN IETABA. ISSN 0096-3518.

**McWhirter:1983:RLS**

[79] J. G. McWhirter. Recursive least squares minimization using asystolic array. In ????, editor, *Proceedings SPIE 431, Real Time Signal Processing VI, 1983*, pages 105–112. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1983.

**Nave:1983:ITF**

[80] R. Nave. Implementation of transcendental functions on a numerics processor. *Microprocessing and Microprogramming*, 11(3–4):221–225, March–April 1983. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic). URL `https://ieeemilestones.ethw.org/w/images/8/8b/Nave_implenent_transcendental_algos_1983.pdf; https://www.sciencedirect.com/science/article/pii/0165607483901515`.

**Schelin:1983:CFA**

[81] Charles W. Schelin. Calculator function approximation. *American Mathematical Monthly*, 90(5):317–325, May 1983. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL `https://www.jstor.org/stable/2975781`.

**Schmid:1983:DC**

[82] Hermann Schmid. *Decimal computation*. Robert E. Kreiger, Malabar, FL, USA, 1983. ISBN 0-89874-318-4. xi + 266 pp. LCCN ????

**Udo:1983:IOO**

[83] R. Udo, E. Deprettere, and P. Dewilde. On the implementation of orthogonal and orthogonalizing algorithms using pipelined CORDIC architectures. In ????, editor, *IEEE EUSIPCO Proceedings of 2nd European Signal Processing, Erlangen, Germany. Sept. 1983*, page ?? IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1983.

**Volz:1983:CAA**

[84] H. Völz. CORDIC und ähnliche Algorithmen der elementaren Funktionen mit besonderer Eignung für Mikrorechner. (German) [CORDIC and similar algorithms for elementary functions with particular aptitude for microcomputers]. *Nachrichtentechnik Elektronik*, 33(12):506–510, ???? 1983. CODEN NTELAP. ISSN 0323-4657.

**Abruzzo:1984:ACA**

[85] J. Abruzzo. Applicability of CORDIC algorithm to arithmetic processing. In Kirk [1583], pages 79–86. ISBN 0-8186-0673-8 (paperback), 0-8186-8673-1 (hard), 0-8186-4673-X (microfiche). LCCN TK 7801 A83 1984.

**Abuzzo:1984:ACA**

[86] J. Abuzzo. Applicability of CORDIC algorithm to arithmetic processing. In ????, editor, *IEEE Eighteenth Asilomar Conf. on Circuits, Systems and Computers, Pacific Grove, CA, USA, November 5–7, 1984*, pages 79–86. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984.

**Deprettere:1984:PCA**

[87] E. Deprettere, P. Dewilde, and R. Udo. Pipelined CORDIC architectures for fast VLSI filtering and array processing. In *ICASSP '84. IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 9, pages 250–253. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984.

**Dewilde:1984:ODF**

[88] P. Dewilde, E. F. Deprettere, and C. V. K. Prabhakara Rao. Orthogonal digital filters. In ????, editor, *Proceedings ICASSP84, Vol. I., San Diego, CA. 1984*, pages 230–233. ????, ????, 1984.

**Lev-Ari:1984:LFP**

[89] H. Lev-Ari and T. Kailath. Lattice filter parameterizations and modeling of nonstationary process. *IEEE Transactions on Information Theory*, IT-30(??):2–16, ???? 1984. CODEN IETTAW. ISSN 0018-9448 (print), 1557-9654 (electronic).

**Naseem:1984:IPC**

[90] Asif Naseem. *Implementation of Parallel Computational Algorithms on a Modified CORDIC Arithmetic Logic Unit*. Ph.D. thesis, Michigan State University, East Lansing, MI, USA, 1984. 137 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/implementation-parallel-computational-algorithms/docview/303294026/se-2`.

**Naseem:1984:MCA**

[91] Asif Naseem and P. David Fisher. Modified CORDIC algorithm. In ????, editor, *Proceedings — IEEE International Conference on Computer Design: VLSI in Computers, ICCD '84, October 1984*, pages 144–152. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984.

**Rao:1984:ODF**

[92] S. K. Rao and T. Kailath. Orthogonal digital filters for VLSI implementation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 31

(11):933–945, November 1984. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Sibul:1984:ACR**

[93] Leon H. Sibul and A. L. Fogelsanger. Application of coordinate rotation algorithm to singular value decomposition. In ????, editor, *Proceedings of IEEE International Symposium on Circuits and Systems, Montreal, Quebec, May 1984*, pages 821–824. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984.

**Wold:1984:PPP**

[94] Erling H. Wold and Alvin M. Despain. Pipeline and parallel-pipeline FFT processors for VLSI implementations. *IEEE Transactions on Computers*, C-33(5):414–426, May 1984. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Ahmed:1985:AAU**

[95] H. M. Ahmed. *Alternative arithmetic unit architectures for VLSI digital signal processors*. Prentice-Hall, Englewood Cliffs, NJ, USA, 1985.

**Brent:1985:CSV**

[96] R. P. Brent, F. T. Luk, and C. F. Van Loan. Computation of the singular value decomposition using mesh-connected processors. *Journal of VLSI and Computer Systems*, 1(3):242–270, ???? 1985. ISSN 0733-5644.

**Brent:1985:SSV**

[97] Richard P. Brent and Franklin T. Luk. The solution of singular-value and symmetric eigenvalue problems on multiprocessor arrays. *SIAM Journal on Scientific and Statistical Computing*, 6(1):69–84, January 1985. CODEN SIJCD4. ISSN 0196-5204. See simplifications in [187].

**Deprettere:1985:DHT**

[98] Ed F. Deprettere and Kishan Jainandunsing. Design of a high throughput architecture for the regular excitation reduction speech coding algorithm. In ????, editor, *IEEE International Symposium on Circuits and Systems, Kyoto, Japan. June 1985*, pages 1521–1524. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1985.

**Deprettere:1985:DIC**

[99] Ed F. Deprettere and Kishan Jainandunsing. Design and implementation of a concurrent solver for $N$ coupled least-squares fitting problem. In

????, editor, *Proceedings — ICASSP 85, Tampa, FL, March 1985*, pages 200–203. ????, ????, 1985.

**Dewilde:1985:PPV**

[100] P. Dewilde, Ed. F. Deprettere, and R. Nouta. Parallel and pipelined VLSI implementation of signal processing algorithms. In S. Y. Kung et al., editors, *VLSI and Modern Signal Processing*, page ?? Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1985.

**Given:1985:VNI**

[101] Raymond E. Given. A VLSI NMOS implementation of a building block processor using CORDIC algorithms (array processor). M.S.E. thesis, Florida Atlantic University, Boca Raton, FL, USA, 1985. 127 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/vlsi-nmos-implementation-building-block-processor/docview/220053644/se-2`.

**Hahn:1985:CRP**

[102] Helmut Hahn, J. Buddefeld, Bedrich J. Hosticka, and U. Kleine. CORDIC realization of power-wave digital filters. In ????, editor, *Proceedings of the 1985 European Conference on Circuit Theory and Design, Prague, Czechoslovakia, September 1985*, pages 507–510. ????, ????, 1985.

**Hu:1985:PCA**

[103] Yu Hen Hu. Pipelined CORDIC architecture for the implementation of rotation-based algorithms. In ????, editor, *International Symposium VLSI Technology Systems, and Algorithms, Taipei, Taiwan, May 1985*, page ?? ????, ????, 1985.

**Jou:1985:CIP**

[104] I-Chang Jou, Tze-Yunn Sung, Yu-Hen Hu, and Ttai-Ming Parng. CORDIC implementation of pipelined Toeplitz system solver. In ????, editor, *IEEE International Symposium on Circuits and Systems, Kyoto, Japan. June 1985*, pages 459–462. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1985.

**Muller:1985:DBC**

[105] Jean-Michel Muller. Discrete basis and computation of elementary functions. *IEEE Transactions on Computers*, C-34(9):857–862, September 1985. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1676643`.

**Naseem:1985:MCA**

[106] Asif Naseem and P. David Fisher. The modified CORDIC algorithm. In Hwang [1584], pages 144–152. ISBN 0-8186-0632-0 (paperback), 0-8186-8632-4 (hard), 0-8186-4632-2 (microfiche). LCCN QA76.9.C62 S95 1985. URL `http://www.acsel-lab.com/arithmetic/arith7/papers/ARITH7_Naseem_Fisher.pdf`. IEEE catalog number 85CH2146-9. IEEE Computer Society order number 632.

**Sung:1985:DPC**

[107] Tze-Yun Sung Sung, Yu Hen Hu, and H. J. Yu. Doubly pipelined CORDIC array processor for solving Toeplitz systems. In ????, editor, *Proceedings of the Twenty-third Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, October 1985*, pages 764–773. ????, ????, 1985.

**Tran:1985:ECF**

[108] Chau Quang Tran. Evaluation of CORDIC in FFT algorithm with 16-bit microprocessors (Fast Fourier Transform). M.S. thesis, California State University, Long Beach, Long Beach, CA, USA, 1985. 145 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/evaluation-cordic-fft-algorithm-with-16-bit/docview/303402726/se-2`.

**Vaidyanathan:1985:UAO**

[109] P. P. Vaidyanathan. A unified approach to orthogonal digital filters and wave digital tilters based on the LBR two-pair extraction. *IEEE Transactions on Circuits and Systems*, ??(??):673–686, July 1985. CODEN ICSYBT. ISSN 0098-4094 (print), 1558-1276 (electronic).

**vanGinderdeuren:1985:CBH**

[110] J. van Ginderdeuren, L. van Paepegem, J. Lecoco, R. Govaerts, F. Catthoor, P. Vandebroek, S. Slock, T. A. C. M. Claasen, and H. de Man. CORDIC-based HIFI digital FM demodulator algorithm for compact VLSI implementation. *Electronics Letters*, 21(??):1227–1229, ???? 1985. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic).

**Baxter:1986:PTF**

[111] Michael Baxter and Zwie Amitai. Parallel transcendental-function processor built from LSI building blocks. In ????, editor, *Midcon 86, Dallas, TX, September 1986, Pap. 17.2, 5p and Northcon 86, Seattle, WA, September 1986*, pages 4.2.1–4.2.4. ????, ????, 1986.

**Bu:1986:OSC**

[112] J. Bu, E. F. A. Deprettere, and F. De-Lange. On the optimization of silicon CORDIC algorithm. In ????, editor, *Proceedings of EUSIPCO-86 Signal Processing III, Theories and Applications. The Hague, Netherlands, 2–5 September, 1986*, pages 1227–1230. ????, ????, 1986.

**Curtis:1986:CPL**

[113] T. W. Curtis, Paul Allison, and James A. Howard. A CORDIC processor for laser trimming. *IEEE Micro*, 6(3):61–71, May/June 1986. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Delosme:1986:MEA**

[114] Jean-Marc Delosme. The matrix exponential approach to elementary operations. In ????, editor, *Proceedings of the SPIE Advanced Algorithms and Architectures for Signal Processing*, volume 696, pages 188–1995. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1986.

**Jou:1986:VAP**

[115] I. C. Jou, Yu Hen Hu, and T. M. Parng. VLSI algorithms and pipelined architectures for solving structured linear systems. In ????, editor, *Proceedings of VLSI Algorithms and Architectures. Aegean Workshop on Computing, Loutraki, Greece, July 1986*, page ?? ????, ????, 1986.

**Quong:1986:FPI**

[116] D. Quong. Floating-point $\mu$P implements high-speed math functions. *EDN Magazine*, 31(??):143–150, ???? 1986.

**Schmidt:1986:POC**

[117] G. Schmidt, Dirk Timmermann, J. F. Böhme, Helmut Hahn, Bedrich J. Hostica, and G. Zimmer. Parameter optimization of the CORDIC-algorithm and implementation in a CMOS-chip. In ????, editor, *Proceedings of EUSIPCO-86 Signal Processing III, Theories and Applications. The Hague, Netherlands, 2–5 September, 1986*, pages 1219–1222. ????, ????, 1986.

**Sung:1986:DIV**

[118] Tze-Yun Sung, Tai-Ming Parng, Yu-Hen Hu, and Pin-Kuan Chou. Design and implementation of a VLSI CORDIC processor. In ????, editor, *IEEE International Symposium on Circuits and Systems, San Jose, CA, May 1986*, pages 934–935. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1986.

**Sung:1986:DPC**

[119] Tze-Yun Sung, Yu-Hen Hu, and H. J. Yu. Doubly pipelined CORDIC array for digital signal processing algorithms. In *ICASSP '86. IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 11, pages 1169–1172. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1986.

**Takagi:1986:HAC**

[120] Naofumi Takagi, T. Asada, and S. Yajima. A hardware algorithm for computing sine and cosine using redundant binary representation. *Transactions IEEE Japan*, J69-D(??):841–847, ???? 1986.

**Cavallaro:1987:ACS**

[121] Joseph R. Cavallaro and F. T. Luk. Architectures for a CORDIC SVD processor. In ????, editor, *Proceedings SPIE Int. Soc. Opt. Eng. (USA)*, volume 698, pages 45–53. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1987.

**Cavallaro:1987:CAS**

[122] Joseph R. Cavallaro and Franklin T. Luk. CORDIC arithmetic for an SVD processor. In Irwin and Stefanelli [1585], pages 113–120. ISBN 0-8186-0774-2 (paperback), 0-8186-4774-4 (microfiche), 0-8186-8774-6 (case). LCCN QA 76.9 C62 S95 1987. URL `http://www.acsel-lab.com/arithmetic/arith8/papers/ARITH8_Cavallaro_Luk.pdf`.

**Cosnard:1987:FAC**

[123] M. Cosnard, A. Guyot, B. Hochet, Jean-Michel Muller, H. Ouaouicha, P. Paul, and E. Zysman. The FELIN arithmetic coprocessor chip. In Irwin and Stefanelli [1585], pages 107–112. ISBN 0-8186-0774-2 (paperback), 0-8186-4774-4 (microfiche), 0-8186-8774-6 (case). LCCN QA 76.9 C62 S95 1987. URL `http://www.acsel-lab.com/arithmetic/arith8/papers/ARITH8_Cosnard_Guyot_Hochet_Muller_Ouaouicha_Paul_Zysman.pdf`.

**Deprettere:1987:OOM**

[124] E. F. Deprettere and K. Jainandunsing. Orthogonal and $J$-orthogonal matrix inversion techniques. In ????, editor, *IEEE International Symposium on Circuits and Systems, Philadelphia, PA, USA, 4–7 May 1987*, volume 1, pages 143–146. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1987. ISSN 0271-4302.

**Ercegovac:1987:FCR**

[125] Miloš D. Ercegovac and Tomás Lang. On-the-fly conversion of redundant into conventional representations. *IEEE Transactions on Computers*, C-36(7):895–897, July 1987. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1676986`.

**Ercegovac:1987:FCS**

[126] Miloš D. Ercegovac and Tomás Lang. Fast cosine/sine implementation using on-line CORDIC. In ????, editor, *Proceedings of the 21st Asilomar Conference Signals, Systems, Computers*, pages 222–226. ????, ????, 1987.

**Ercegovac:1987:RLC**

[127] Miloš D. Ercegovac and Tomás Lang. Redundant and on-line CORDIC: Application to matrix triangularization and SVD. Technical Report CSD-870046, Department of Computer Science, UCLA, Los Angeles, CA, USA, 1987.

**Hu:1987:ODV**

[128] Yu Hen Hu and T. Y. Sung. The optimal design of VLSI CORDIC processor. In ????, editor, *Proceedings of the International Symposium on VLSI Technology, Systems and Applications, Taipei, Taiwan, R.O.C., May 1987*, pages 31–35. ????, ????, 1987.

**Kung:1987:VAP**

[129] S. Y. Kung. *VLSI Array Processors*. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1987. ???? pp.

**Lee:1987:MPC**

[130] C. S. Lee and P. Chang. A maximum pipelined CORDIC architecture for inverse kinematic position computation. *IEEE Journal of Robotics and Automation*, 3(5):445–458, 1987. CODEN IJRAE4. ISSN 0882-4967.

**Nudd:1987:CVP**

[131] Graham R. Nudd and John G. Vaudin. Cellular VLSI processing architecture using CORDIC elements for image processing. In ????, editor, *IEE Colloquium on VLSI for Image Processing, London, UK, April 1987*, pages 3.1–3.6. ????, ????, 1987.

**Sung:1987:DPC**

[132] Tze Yun Sung, Tai Ming Parng, and Yu Hen Hu. Doubly pipelined CORDIC array for digital signal processing algorithms. *Journal of the*

*Chinese Institute of Engineers = Chung-kuo kung ch'eng hsueh kan*, 10 (4):375–383, June 1987. CODEN CKCKDZ. ISSN 2158-7299.

**Sung:1987:HPV**

[133] Tze Yun Sung, Tai Ming Parng, and Yu Hen Hu. High performance VLSI CORDIC algorithms, architecture and chip design. *Journal of the Chinese Institute of Engineers = Chung-kuo kung ch'eng hsueh kan*, 10 (5):493–502, July 1987. CODEN CKCKDZ. ISSN 2158-7299.

**Sung:1987:PVI**

[134] T. Y. Sung and Yu Hen Hu. Parallel VLSI implementation of Kalman filter. *IEEE Transactions on Aerospace and Electronic Systems*, AES 23 (2):215–224, March 1987. CODEN IEARAX. ISSN 0018-9251 (print), 1557-9603 (electronic).

**Takagi:1987:HAC**

[135] Naofumi Takagi, T. Asada, and S. Yajima. A hardware algorithm for computing sine and cosine using redundant binary representation. *Systems and computers in Japan*, 18(??):1–9, ???? 1987. CODEN SCJAEP. ISSN 0882-1666 (print), 1520-684X (electronic).

**Takagi:1987:SHA**

[136] Naofumi Takagi. *Studies on Hardware Algorithms for Arithmetic Operations with a Redundant Binary Adder*. PhD dissertation, Department of Information Sciences, Faculty of Engineering, Kyoto University, Kyoto, Japan, August 1987. vii + 150 pp. URL `http://hdl.handle.net/2433/154053; https://repository.kulib.kyoto-u.ac.jp/server/api/core/bitstreams/b38960be-ee22-458e-9899-ed77db01155e/content;`.

**Vachss:1987:CMF**

[137] Raymond Vachss. The CORDIC magnification function. *IEEE Micro*, 7 (5):83–84, September/October 1987. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Vaudin:1987:VPE**

[138] G. J. Vaudin and G. R. Nudd. 3 $\mu$ m VLSI processing element using the CORDIC algorithm. *Electronics Letters*, 23(??):1164–1166, ???? 1987. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic).

**Yang:1987:SCG**

[139] B. Yang, Dirk Timmermann, J. F. Bome, Helmut Hahn, Bedrich J. Hosticka, G. Schmidt, and G. Zimmer. Special computers: graphics,

robotics. In ????, editor, *VLSI and computers. Proceedings of the 1st International Conference on Computer Technology, Systems and Applications. COMPEURO '87, Hamburg, Germany, 11–15 May 1987*, pages 727–730. ????, ????, 1987.

**Cavallaro:1988:CAS**

[140] Joseph R. Cavallaro and Franklin T. Luk. CORDIC arithmetic for an SVD processor. *Journal of Parallel and Distributed Computing*, 5(3):271–290, June 1988. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic).

**Cavallaro:1988:FPC**

[141] Joseph R. Cavallaro and F. T. Luk. Floating point CORDIC for matrix computations. In *Proceedings 1988 IEEE International Conference on Computer Design: VLSI, in Computers and Processors, Rye Brook, NY, 1988*, pages 40–42. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Cavallaro:1988:VCP**

[142] Joseph Rocco Cavallaro. *VLSI CORDIC processor architectures for the Singular Value Decomposition*. Ph.D. thesis, Cornell University, Ithaca, NY, USA, 1988. 124 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/vlsi-cordic-processor-architectures-singular/docview/303553119/se-2`.

**Chakrabarti:1988:ITT**

[143] N. B. Chakrabarti. An implementation of trigonometric transforms using plane rotations. *IETE Journal of Research*, 34(6):459–461, November 1988. CODEN JIETAU. ISSN 0377-2063 (print), 0974-780X (electronic).

**Chapmann:1988:GDM**

[144] R. Chapmann and M. A. Rahman. A generalized design method for orthogonal IIR lattice fillers. In ????, editor, *Proceedings ICASSP88. Glasgow. Scotland, 1988*, pages 829–832. ????, ????, 1988.

**deLange:1988:ADS**

[145] A. A. J. de Lange, A. J. van der Hoeven, Ed F. Deprettere, and J. Bu. Automated design of a signal processing chip. The floating point pipeline CORDIC processor. Delft Progress Report 12, University of Delft, Delft, The Netherlands, 1988. 233–244 pp.

**deLange:1988:OFP**

[146] A. A. J. de Lange, A. J. van der Hoeven, E. F. Deprettere, and J. Bu. An optimal floating-point pipeline CMOS CORDIC processor. In *IEEE International Symposium on Circuits and Systems, Espoo, Finland. June 7–9, 1988*, pages 2043–2047 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Delosme:1988:PTD**

[147] Jean-Marc Delosme. A processor for two-dimensional symmetric eigenvalue and singular value arrays. In ????, editor, *Proceedings of the 21st Asilomar Conference on Circuits, Systems, and Computers, November, 1988*, pages 217–221. ????, ????, 1988.

**Ercegovac:1988:IFA**

[148] Miloš D. Ercegovac and Tomás Lang. Implementation of fast angle calculation and rotation using on-line CORDIC. In ????, editor, *IEEE International Symposium on Circuits and Systems, Espoo, Finland. June 7–9, 1988*, pages 2703–2706 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Harber:1988:ABS**

[149] R. G. Harber, X. Hu, J. Li, and S. C. Bass. The application of bit-serial CORDIC computational units to the design of inverse kinematics processors. In *Proceedings. 1988 IEEE International Conference on Robotics and Automation, Philadelphia, PA, April 1988*, pages 1152–1157 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Hu:1988:EIC**

[150] Yu Hen Hu and S. Naganathan. Efficient implementation of Chirp Z-Transform using a CORDIC processor*. In *Proceedings of the Twenty-Second Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 1989*, volume 1, pages 157–160. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Hu:1988:QEC**

[151] Yu Hen Hu. The quantization effects of the CORDIC algorithm (coordinate rotation digital computer). In *ICASSP-88., International Conference on Acoustics, Speech, and Signal Processing, New York, NY, April 1988*, pages 1822–1825 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Lee:1988:CBA**

[152] C. S. G. Lee. CORDIC-based architectures for robot direct kinematics and Jacobian computations. In *Proceedings of the Third IEEE International Symposium on Intelligent Control, Arlington, VA, August 1988*, pages 609–614. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Note:1988:ASH**

[153] Stefaan Note, Jef Van Meerbergen, Francky Catthoor, and Hugo De Man. Automated synthesis of a high speed CORDIC algorithm with the Cathedral-III compilation system. In ????, editor, *IEEE International Symposium on Circuits and Systems, Espoo, Finland. June 7–9, 1988*, pages 581–584 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988.

**Privat:1988:LCA**

[154] Gilles Privat and Marc Renaudin. L'algorithme CORDIC dans les architectures spécialisées de traitement numérique du signal. (CORDIC-based digital signal processing hardware algorithms). *Trait. Signal*, 5(6):421–434, 1988. ISSN 0765-0019 (print), 1958-5608 (electronic).

**Ahmed:1989:EEF**

[155] Hassan M. Ahmed. Efficient elementary function generation with multipliers. In Ercegovac and Swartzlander, Jr. [1587], pages 52–59. ISBN 0-8186-8963-3 (case), 0-8186-5963-7 (microfiche). LCCN QA 76.9 C62 S95 1989. URL `http://www.acsel-lab.com/arithmetic/arith9/papers/ARITH9_Ahmed.pdf`. IEEE catalog no. 89CH2757-3.

**Ahmed:1989:GCC**

[156] Hassan M. Ahmed. Generalized convergence computation method. In ????, editor, *Proceedings of 1989 International Conference on Acoustics, Speech, and Signal Processing, Glasgow, Scotland, May 1989*, pages 849–852. ????, ????, 1989.

**Ahmed:1989:VAC**

[157] Hassan M. Ahmed and Kin-Ho Fu. A VLSI array CORDIC architecture. In ????, editor, *Proceedings of 1989 International Conference on Acoustics, Speech, and Signal Processing, Glasgow, Scotland, May 1989*, pages 2385–2388 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Baraniecki:1989:FCD**

[158] Anna Z. Baraniecki. Fast computation of the Discrete Hartley Transform. In ????, editor, *International Conference on Acoustics, Speech, and Signal Processing, Glasgow, Scotland, May 1989*, pages 1282–1285. ????, ????, 1989.

**Cavallaro:1989:CMF**

[159] Joseph R. Cavallaro and Anne C. Elster. Complex matrix factorizations with CORDIC arithmetic. Technical Report 89-1071, Department of Computer Science, Cornell University, Ithaca, NY, USA, ???? 1989. ???? pp.

**Cavallaro:1989:VIC**

[160] Joseph R. Cavallaro, M. P. Keleher, R. H. Price, and G. S. Thomas. VLSI implementation of a CORDIC SVD processor. In *Proceedings of the Eighth University/Government/Industry Microelectronics Symposium, Westborough, MA, June 1989*, pages 256–260. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Considine:1989:CTF**

[161] Vincent Considine. CORDIC trigonometric function generator for DSP. In *International Conference on Acoustics, Speech, and Signal Processing, Glasgow, Scotland, May 1989*, pages 2381–2384 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**deLange:1989:DMA**

[162] A. A. J. de Lange, A. J. van der Hoeven, E. F. Deprettere, P. Dewilde, and J. Bu. The design of a 50 mflop arithmetic chip for massively parallel pipelined DSP algorithms: the floating point pipeline CORDIC processor. In *1989 European Conference on Circuit Theory and Design, 05–08 September 1989, Brighton, UK*, pages 410–414. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989. URL `https://ieeexplore.ieee.org/document/51651/`.

**Delosme:1989:CAT**

[163] Jean-Marc Delosme. CORDIC algorithms: theory and extensions. In ????, editor, *SPIE Advanced Algorithms and Architectures for Signal Processing IV*, volume 1152, pages 131–145. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1989.

**Duh:1989:IDC**

[164] Wei-Jou Duh and Ja-Ling Wu. Implementing the discrete cosine transform by using CORDIC techniques. In *International Symposium on VLSI Technology, Systems and Applications, Taipei, Taiwan, 1989*, pages 281–285. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Eldon:1989:PRB**

[165] John A. Eldon and Terrence Chow. From polar to rectangular and back. In ????, editor, *Proceedings of the Twenty-Third Annual Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 1989*, pages 431–435. ????, ????, 1989.

**Harber:1989:BSC**

[166] R. G. Harber, J. Li, X. Hu, and S. C. Bass. Bit-serial CORDIC circuits for use in a VLSI silicon compiler. In *1989 IEEE International Symposium on Circuits and Systems (ISCAS), Portland, OR, May 1989*, pages 154–157 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Harber:1989:VDS**

[167] Ronald Gerard Harber. *VLSI design of systems of CORDIC processors*. Ph.D. thesis, Purdue University, West Lafayette, IN, USA, 1989. 136 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/vlsi-design-systems-cordic-processors/docview/303810953/se-2`.

**Hillis:1989:RFC**

[168] W. Daniel Hillis. Richard Feynman and the Connection Machine. *Physics Today*, 42(2):78–83, February 1989. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://www.kurzweilai.net/articles/art0504.html?printable=1`.

**Hu:1989:ARM**

[169] Yu Hen Hu and S. Naganathan. Angle recording method for efficient implementation of the CORDIC algorithm. In *IEEE International Symposium on Circuits and Systems, Portland, OR, May 1989*, pages 175–178 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Hu:1989:ARS**

[170] Yu Hen Hu and S. Naganathan. An angle recoding scheme for efficient realization of rotation-based digital signal processing algorithms. In ????,

editor, *Proceedings of the 32nd Midwest Symposium on Circuits and Systems, Champaign, IL, August 1989*, pages 349–352. ????, ????, 1989.

**Hu:1989:PED**

[171] Yu Hen Hu. Parallel eigenvalue decomposition for Toeplitz and related matrices. In ????, editor, *Proceedings of TCASSP. Glasgow, Scotland, May 1989*, pages 1107–1110. ????, ????, 1989.

**Hu:1989:SCD**

[172] Xiaobo Hu. *A silicon compiler for dedicated mathematical systems based on CORDIC arithmetic processors*. Ph.D. thesis, Purdue University, West Lafayette, IN, USA, 1989. 184 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/silicon-compiler-dedicated-mathematical-systems/docview/303729399/se-2`.

**Jainandunsing:1989:NCP**

[173] K. Jainandunsing and E. F. Deprettere. A new class of parallel algorithms for solving systems of linear equations. *SIAM Journal on Scientific and Statistical Computing*, 10(5):880–912, September 1989. CODEN SIJCD4. ISSN 0196-5204.

**Jou:1989:LRB**

[174] I.-C. Chang Jou. Linear rotation based algorithm and systolic architecture for solving linear system equations. *Parallel Computing*, 11(3): 367–379, ???? 28, 1989. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic).

**Kawasaki:1989:FPV**

[175] Shumpei Kawasaki, Mitsuru Watabe, and Shigeki Morinaga. A floating-point VLSI chip for the TRON architecture: an architecture for reliable numerical programming. *IEEE Micro*, 9(3):26–44, May/June 1989. CODEN IEMIDZ. ISSN 0272-1732 (print), 1937-4143 (electronic).

**Kwan:1989:CIN**

[176] Hon Keung Kwan and Ying Chun Lui. CORDIC implementation of normalized ARMA Schur algorithm. In *Proceedings of the 32nd Midwest Symposium on Circuits and Systems, Champaign, IL, August 1989*, pages 369–372 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Lai:1989:PAV**

[177] J. Z. C. Lai and Ming Chao. Parallel algorithm and VLSI architectures for a robot's inverse kinematics. In ACM [1586], pages 123–132. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

**Lee:1989:CBP**

[178] Lee and Chen. A CORDIC-based pipelined architecture for robot direct kinematic position computation. In *Proceedings of IEEE International Conference on Systems Engineering, Fairborn, OH, August 1989*, pages 317–320. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1989.

**Lee:1989:FIR**

[179] Jeong-A Lee and Tomás Lang. Floating-point implementation of redundant CORDIC for $QR$ decomposition. Technical report CSD-890044, Computer Science Dept., University of California, Los Angeles, CA, USA, 1989. 15 + 8 pp.

**Lin:1989:LCA**

[180] Hai Xiang Lin and Henk J. Sips. On-line CORDIC algorithms. In Ercegovac and Swartzlander, Jr. [1587], pages 26–33. ISBN 0-8186-8963-3 (case), 0-8186-5963-7 (microfiche). LCCN QA 76.9 C62 S95 1989. URL `http://www.acsel-lab.com/arithmetic/arith9/papers/ARITH9_Lin.pdf`. IEEE catalog no. 89CH2757-3.

**Mehling:1989:CAS**

[181] Rainer Mehling and Raimund Meyer. CORDIC-AU, a suitable supplementary unit to a general-purpose signal processor. *AEU, Archiv für Elektronik und Übertragungstechnik: Electronics and Communication*, 43 (??):394–397, ???? 1989.

**Nakayama:1989:MFP**

[182] Takashi Nakayama, Hisao Harigai, Shingo Kojima, Hiroaki Kaneko, Hatsuhide Igarashi, Tsuneo Toba, Yutaka Yamagami, and Yoichi Yano. A 6.7-MFLOPS floating-point coprocessor with vector/matrix instructions. *IEEE Journal of Solid-State Circuits*, 24(5):1324–1330, October 1989. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Takagi:1988:SHA**

[183] Naofumi Takagi. Studies on hardware algorithms for arithmetic operations with a redundant binary representation. Report, Department

of Information Sciences, Faculty of Engineering, Kyoto University, Kyoto, Japan, January 23, 1988. vii + 150 pp. URL `http://hdl.handle.net/2433/154053; https://repository.kulib.kyoto-u.ac.jp/server/api/core/bitstreams/b38960be-ee22-458e-9899-ed77db01155e/content;`.

**Timmermann:1989:HTU**

[184] Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. Hough transform using CORDIC method. *Electronics Letters*, 25(??):105–106, ???? 1989. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic).

**Timmermann:1989:MCA**

[185] Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. Modified CORDIC algorithm with reduced iterations. *Electronics Letters*, 25(15): 950–951, 1989. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911x (electronic).

**Williams:1989:CAC**

[186] Fred Williams. The CORDIC algorithm — cast in silicon. *Electronic Engineering*, 61(??):47–48, ???? 1989.

**Yang:1989:RCS**

[187] B. Yang and J. F. Böhme. Reducing the computations of the SVDarray given by Brent and Luk. In ????, editor, *Proceedings of SPIE Advanced algorithms and architectures for signal processing, August 1989*, pages 92–102. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1989. See [97].

**Chown:1990:NDB**

[188] Paul Chown. Notes on the design of a barrel shifter for the Warwick pipelined CORDIC. Research Report 161, Department of Computer Science, University of Warwick, Coventry CV4 7AL, UK, ???? 1990.

**Chown:1990:VDP**

[189] Paul Chown. VLSI design of a pipelined CORDIC processor. Research Report 164, Department of Computer Science, University of Warwick, Coventry CV4 7AL, UK, ???? 1990.

**Cioffi:1990:FAR**

[190] J. M. Cioffi. The fast adaptive ROTOR's RLS algorithm. *IEEE Transactions on Signal Processing*, 38(4):631–653, April 1990. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**deLange:1990:ASI**

[191] A. A. J. de Lange, A. J. van der Hoeven, E. F. Deprettere, and P. Dewilde. An application specific IC for digital signal processing: the floating point pipeline CORDIC processor. In *[Proceedings] EURO ASIC '90*, pages 62–67. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990.

**deLange:1990:RTA**

[192] A. A. J. de Lange, E. F. Deprettere, A. J. van der Veen, and J. Bu. Real time applications of the floating point pipeline CORDIC processor in massive-parallel pipelined DSP algorithms. In ????, editor, *Proceedings of the ICASSP International Conference on Acoustic, Speech, and Signal Processing, Albuquerque, New Mexico, April 1990*, pages 1013–1016 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990.

**Delosme:1990:CAF**

[193] Jean-Marc Delosme and S. H. Hsiao. CORDIC algorithms in four dimensions. In ????, editor, *SPIE Advanced Signal-Processing Algorithms, Architectures and Implementations, San Diego, CA, July 1990*, volume 1348, pages 349–360. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1990.

**Deprettere:1990:SIS**

[194] E. F. Deprettere, A. A. J. de Lange, and P. Dewilde. The synthesis and implementation of signal processing applications specific VLSI CORDIC arrays. In *IEEE International Symposium on Circuits and Systems, New Orleans, LA, May 1990*, pages 974–977 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990.

**Dixon:1990:API**

[195] Gareth Dixon. An array processor implementation of the CORDIC algorithm. In *IEE Colloquium on VLSI Signal Processing Architectures, 31–31 May 1990, London, UK*, pages 5/1–5/8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990. URL `https://ieeexplore.ieee.org/document/190293/`.

**Duh:1990:CRD**

[196] Wei-Jou Duh and Ja-Ling Wu. Constant-rotation DCT architecture based on CORDIC techniques. *International Journal of Electronics Theoretical & Experimental*, 69(5):583–593, November 1990. CODEN IJELA2. ISSN 1362-3060.

**Ercegovac:1990:RLC**

[197] Miloš D. Ercegovac and Tomás Lang. Redundant and on-line CORDIC: application to matrix triangularization and SVD. *IEEE Transactions on Computers*, 39(6):725–740, June 1990. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Hu:1990:EVC**

[198] Yu Hen Hu and H. M. Chern. An efficient VLSI CORDIC array structure implementation of Toeplitz eigensystem solvers. In *International Conference on Acoustics, Speech, and Signal Processing, Albuquerque, New Mexico, April 1990*, pages 1575–1578 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990.

**Hu:1990:NIC**

[199] Yu Hen Hu and S. Naganathan. A novel implementation of a chirp $Z$-transform using a CORDIC processor. *IEEE Transactions on Acoustics, Speech, and Signal Processing*, 38(2):352–354, 1990. CODEN IETABA. ISSN 0096-3518.

**Hu:1990:VCA**

[200] Yu Hen Hu and H. M. Chen. VLSI CORDIC array structure implementation of Toeplitz eigensystem solvers. In ????, editor, *Proceedings ICASSP April 1990*, pages 1575–1578. ????, ????, 1990.

**Jarvis:1990:ICA**

[201] P. Jarvis. Implementing CORDIC algorithms. *Dr. Dobb's Journal of Software Tools*, 15(10):152–158, October 1990. CODEN DDJOEB. ISSN 1044-789X.

**Konig:1990:OCA**

[202] D. König and J. E. Böhme. Optimizing the CORDIC algorithm for processors with pipeline architectures. In ????, editor, *Signal Processing V: Theories and Applications*, page ?? Elsevier Science, Amsterdam, The Netherlands, 1990.

**Kunemund:1990:CPC**

[203] R. Kunemund, H. Soldner, S. Wohlleben, and T. Noll. CORDIC processor with carry-save architecture. In *ESSCIRC '90: Sixteenth European Solid-State Circuits Conference, 19–21 September 1990, Grenoble, France*, volume 1, pages 193–196. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1990.

ISBN 2-86332-087-4. URL https://ieeexplore.ieee.org/document/5467738/.

**Lee:1990:RCT**

[204] Jeong-A Lee. *Redundant CORDIC: Theory and its application to matrix computations*. Ph.D. thesis, University of California, Los Angeles, Los Angeles, CA, USA, 1990. 188 pp. URL https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/redundant-cordic-theory-application-matrix/docview/303819978/se-2.

**Lin:1990:LCA**

[205] Hai Xiang Lin and Henk J. Sips. On-line CORDIC algorithms. *IEEE Transactions on Computers*, 39(8):1038–1052, August 1990. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Metafas:1990:DPP**

[206] Dimitris E. Metafas and Costas E. Goutis. A DSP processor with a powerful set of elementary arithmetic operations based on CORDIC and CCM algorithms. *Microprocessing and Microprogramming*, 30(1–5):51–57, August 1990. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic). URL https://www.sciencedirect.com/science/article/pii/016560749090217W. Proceedings Euromicro 90: Hardware and Software in System Engineering.

**Meyer:1990:APN**

[207] R. Meyer and R. Mehling. Architecture and performance of a new arithmetic unit for the computation of elementary functions. In ????, editor, *Proceedings of the 1990 International Conference on Acoustics, Speech, and Signal Processing, Albuquerque, New Mexico, 1990*, pages 1783–1786. ????, ????, 1990.

**Muller:1990:HCA**

[208] Volker Müller. Hochgenaue CORDIC-Algorithmen für reelle Standardfunktionen mittels dynamischer Defektberechnung. (German) [High-accuracy CORDIC algorithms for real elementary functions by means of dynamic error computation]. Diplomarbeit, Institut für angewandte Mathematik, Universität Karlsruhe, Karlsruhe, Germany, December 1990. ???? pp.

**Naganathan:1990:ADS**

[209] S. Naganathan and Yu Hen Hu. Architectural design styles in the VLSI implementation of real Discrete Fourier Transform. In ????, editor, *Pro-*

*ceedings ISCAS, IEEE Symposium on Circuits and Systems, New Orleans, LA. May 1–3, 1990*, pages 2316–2319. ????, ????, 1990.

**Naganathan:1990:DMI**

[210] S. Naganathan. *Design Methodology for the Implementation of Rotaion Based Algorithms Using a CORDIC Processor*. Ph.D. thesis, Department of Electrical Engineering, Southern Methodist University, Dallas, TX, USA, March 1990.

**Rader:1990:MSA**

[211] C. M. Rader, D. L. Allen, D. B. Glasco, and C. E. Woodward. MUSE — a systolic array fur adaptive nulling with 64 degrees of freedom, using Givens transformations and wafer scale integration. Technical report 886, MIT Lincoln Laboratory, Lexington, MA, USA, May 1990.

**Alippi:1991:DAV**

[212] Cesare Alippi. Determination of angular values and parameters in flat surfaces. From the mathematical approach to the CORDIC architecture. *Microprocessing and Microprogramming*, 32(1–5):349–355, August 1991. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic). URL `https://www.sciencedirect.com/science/article/pii/0165607491903695`.

**Bass:1991:BSF**

[213] S. C. Bass, G. M. Butler, R. L. Williams, F. Barlos, and D. R. Miller. A bit-serial, floating point CORDIC processor in VLSI. In *[Proceedings] ICASSP 91: 1991 International Conference on Acoustics, Speech, and Signal Processing, Toronto, Canada, May 1991*, pages 1165–1168 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Boehme:1991:CPA**

[214] Johann F. Boehme, D. Timmermann, H. Hahn, and Bedrich J. Hosticka. CORDIC processor architectures. In *Proceedings of SPIE, San Diego, CA, July 1991*, volume 1566, pages 208–219. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, July 1991.

**Chang:1991:SAD**

[215] L. W. Chang and S. W. Lee. Systolic arrays for the Discrete Hartley Transform. *IEEE Transactions on Signal Processing*, 29(11):2411–2418, November 1991. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Chen:1991:EIN**

[216] S. G. Chen and J.-F. Lin. Efficient implementation of the normalized recursive least square lattice filter. In ????, editor, *Proceedings of ICASSP91, Toronto, Canada, 1991*, pages 1565–1568. ????, ????, 1991.

**deLange:1991:DIF**

[217] A. A. J. de Lange and E. F. Deprettere. Design and implementation of a floating-point quasi-systolic general purpose CORDIC rotator for high-rate parallel data and signal processing. In *[1991] Proceedings 10th IEEE Symposium on Computer Arithmetic*, pages 272–281. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Duprat:1991:FVI**

[218] Jean Duprat and Jean-Michel Muller. Fast VLSI implementation of CORDIC using redundancy. In *Algorithms and parallel VLSI architectures. Vol. B: Proceedings of the international workshop, Pont-à-Mousson, France, June 10-16, 1990*, pages 155–164. Amsterdam: Elsevier, 1991. ISBN 0-444-89120-X; 0-444-89121-8.

**Duprat:1991:WND**

[219] J. Duprat and Jean-Michel Muller. Writing numbers differently for faster calculation. *Technique et Science Informatiques*, 10(3):211–224, ???? 1991. CODEN TTSIDJ. ISSN 0752-4072, 0264-7419.

**Ferguson:1991:AMA**

[220] Warren E. Ferguson, Jr. and Tom Brightman. Accurate and monotone approximations of some transcendental functions. In Kornerup and Matula [1588], pages 237–244. ISBN 0-8186-9151-4 (case), 0-8186-6151-8 (microfiche), 0-7803-0187-0 (library binding). LCCN QA76.9.C62 S95 1991. URL `https://ieeexplore.ieee.org/document/145566`. IEEE catalog no. 91CH3015-5.

**Harding:1991:CRC**

[221] John A. Harding, Tomás Lang, and Jeong-A. Lee. A comparison of redundant CORDIC rotation engines. In IEEE, editor, *Proceedings of the 1991 IEEE International Conference on Computer Design — VLSI in Computers and Processors, 14–16 October 1991, Cambridge, MA*, pages 556–559. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991. ISBN 0-8186-2270-9 (print), 0-8186-2271-7 (microfiche), 0-8186-2272-5 (case). LCCN TK7874 .I44 1991. URL `https://ieeexplore.ieee.org/document/139972/`.

**Harding:1991:RVS**

[222] John A. Harding and Tomás Lang. A redundant variable scaling CORDIC rotation engine implementation. In *[1991] Proceedings of the 34th Midwest Symposium on Circuits and Systems*, pages 287–290 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Hsiao:1991:CHA**

[223] Shen-Fu Hsiao and Jean-Marc Delosme. The CORDIC Householder algorithm. In Kornerup and Matula [1588], pages 256–263. ISBN 0-8186-9151-4 (case), 0-8186-6151-8 (microfiche), 0-7803-0187-0 (library binding). LCCN QA76.9.C62 S95 1991. URL `http://www.acsel-lab.com/arithmetic/arith10/papers/ARITH10_Hsiao.pdf`. IEEE catalog no. 91CH3015-5.

**Hu:1991:ERC**

[224] Xiabo Hu, Ronald G. Harber, and Steven C. Bass. Expanding the range of convergence of the CORDIC algorithm. *IEEE Transactions on Computers*, 40(1):13–21, January 1991. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Kikuchi:1991:DPP**

[225] Hisakazu Kikuchi, Makoto Nakashizuka, and Hiromichi Watanabe. Design of a pipelined plane-rotation algorithm based on the error analysis. *Electronics and Communications in Japan, Part III: Fundamental Electronic Science*, 74(??):53–65, ???? 1991.

**Kitabjian:1991:IAC**

[226] David Hagop Kitabjian. An investigation into angle coding in the CORDIC algorithm. M.S. thesis, Drexel University, Philadelphia, PA, USA, 1991. 216 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/investigation-into-angle-coding-cordic-algorithm/docview/2874659945/se-2`.

**Kota:1991:ANI**

[227] Kishore Kota. Architectural, numerical and implementation issues in the VLSI design of an integrated CORDIC-SVD processor. M.S. thesis, Rice University, Houston, TX, USA, 1991. 102 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/architectural-numerical-implementation-issues/docview/219894627/se-2`.

**Lee:1991:DFT**

[228] Jeong-A Lee and Kiseon Kim. Discrete Fourier Transform processors using CORDIC. In *[1991] Proceedings. First Great Lakes Symposium on VLSI*, pages 260–265. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Lee:1991:SCF**

[229] Jeong-A. Lee and Tomás Lang. SVD by constant-factor-redundant-CORDIC. In Kornerup and Matula [1588], pages 264–271. ISBN 0-8186-9151-4 (case), 0-8186-6151-8 (microfiche), 0-7803-0187-0 (library binding). LCCN QA76.9.C62 S95 1991. URL `http://www.acsel-lab.com/arithmetic/arith10/papers/ARITH10_Lee.pdf`. IEEE catalog no. 91CH3015-5.

**Metafas:1991:FPP**

[230] D. E. Metafas and C. E. Goutis. A floating point pipeline CORDIC processor with extended operation set. In *1991 IEEE International Symposium on Circuits and Systems (ISCAS), Singapore, Singapore, June 1991*, pages 3066–3069 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Metafas:1991:VDB**

[231] D. E. Metafas, G. A. Krikis, and C. E. Goutis. VLSI design of an 8-bit fixed point CORDIC processor with extended operation set. In *Euro ASIC '91*, pages 158–161. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Pulskamp:1991:CCC**

[232] R. J. Pulskamp and J. A. Delaney. Computer and calculator computation of elementary functions. *The UMAP Journal*, 12(??):317–348, ???? 1991. ISSN 0197-3622 (print), 1938-338X (electronic).

**Takagi:1991:RCM**

[233] Naofumi Takagi, Tohru Asada, and Shuzo Yajima. Redundant CORDIC methods with a constant scale factor for sine and cosine computation. *IEEE Transactions on Computers*, 40(9):989–995, September 1991. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Timmermann:1991:LLT**

[234] Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. A low latency time CORDIC algorithm with increased parallelism. In *1991 IEEE International Symposium on Circuits and Systems (ISCAS), Singapore,*

*Singapore, May 1991*, pages 2975–2978 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991.

**Timmermann:1991:NAS**

[235] Dirk Timmermann, Helmut Hahn, Bedrich J. Hosticka, and B. Rix. A new addition scheme and fast scaling factor compensation methods for CORDIC algorithms. *Integration, the VLSI Journal*, 11(1):85–100, March 1991. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/0167926091900089`.

**Timmermann:1991:PCC**

[236] Dirk Timmermann, Helmut Hahn, Bedrich J. Hosticka, and G. Schmidt. A programmable CORDIC chip for digital signal processing applications. *IEEE Journal of Solid-State Circuits*, 26(9):1317–1321, 1991. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Trandafir:1991:PCA**

[237] Titi Trandafir and Sorin Gheonea. Practical considerations about the evaluation of some functions. In ????, editor, *Proceedings of the 6th Mediterranean Electrotechnical Conference, Ljubljana, Slovenia, Yugoslavia, May 1991*, pages 359–362. ????, ????, 1991.

**Tu:1991:ALA**

[238] Paul K.-G. Tu and Miloš D. Ercegovac. Application of on-line arithmetic algorithms to the SVD computation: preliminary results. In Kornerup and Matula [1588], pages 246–255. ISBN 0-8186-9151-4 (case), 0-8186-6151-8 (microfiche), 0-7803-0187-0 (library binding). LCCN QA76.9.C62 S95 1991. URL `http://www.acsel-lab.com/arithmetic/arith10/papers/ARITH10_Tu.pdf`. IEEE catalog no. 91CH3015-5.

**Arjomand:1992:FPC**

[239] Ata'u'llah Arjomand. *Fast Parallel Computation of the Singular Value Decomposition of Real Matrices Using CORDIC Arithmetic*. Ph.D. thesis, Yale University, New Haven, CT, USA, 1992. 250 pp. URL `https://www.proquest.com/dissertations-theses/fast-parallel-computation-singular-value/docview/304011601/se-2`. Thesis (Ph.D.)–Yale University.

**Bertrand:1992:CMF**

[240] Michael Bertrand. The CORDIC method for faster `sin` and `cos` calculations. *C Users Journal*, 10(11):57–??, November 1992. ISSN 0898-9788.

**Dawid:1992:HSB**

[241] H. Dawid and H. Meyr. High speed bit-level pipelined architectures for redundant CORDIC implementation. In *[1992] Proceedings of the International Conference on Application Specific Array Processors, Berkeley, CA, August 1992*, pages 358–372. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Dawid:1992:VHS**

[242] Herbert Dawid and Heinrich Meyr. Very high speed CORDIC implementation: algorithm transformation and novel carry-save architecture. In Joost Vandewalle, René Boite, M. Moonen, and André Oosterlinck, editors, *Signal processing: theories and applications; proceedings of EUSIPCO ... European Signal Processing Conference. 1. Brussels, Belgium, August 24–27, 1992*, pages 1561–1564. Elsevier, Oxford, UK, 1992. ISBN 0-444-89587-6. LCCN TK5102.5 .E9 1992. URL `https://www.sciencedirect.com/science/article/pii/B9780444895875500931`.

**Dawid:1992:VIC**

[243] H. Dawid and H. Meyr. VLSI implementation of the CORDIC algorithm using redundant arithmetic. In *[Proceedings] 1992 IEEE International Symposium on Circuits and Systems*, volume 3, pages 1089–1092 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Hu:1992:CBV**

[244] Yu Hen Hu. CORDIC-based VLSI architectures for digital signal processing. *IEEE Signal Processing Magazine*, 9(3):16–35, July 1992. CODEN ISPRE6. ISSN 1053-5888 (print), 1558-0792 (electronic).

**Hu:1992:CCAa**

[245] Yu Hen Hu and H. E. Liao. CALF: a CORDIC adaptive lattice filter. In *[Proceedings] ICASSP-92: 1992 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 4, pages 193–196 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Hu:1992:CCAb**

[246] Yu Hen Hu and H. E. Liao. CALF: a CORDIC adaptive lattice filter. *IEEE Transactions on Signal Processing*, 40(4):990–993, 1992. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Hu:1992:QEC**

[247] Yu Hen Hu. The quantization effects of the CORDIC algorithm. *IEEE Transactions on Signal Processing*, 40(4):834–844, July 1992. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Kitabjian:1992:SAC**

[248] D. H. Kitabjian and P. R. Chitrapu. The suboptimality of angle coding in the CORDIC algorithm. In *[Proceedings] ICASSP-92: 1992 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 4, pages 421–424 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Kota:1992:NSR**

[249] K. Kota and Joseph R. Cavallaro. A normalization scheme to reduce numerical errors in inverse tangent computations on a fixed-point CORDIC processor. In *[Proceedings] 1992 IEEE International Symposium on Circuits and Systems*, volume 1, pages 244–247 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Lee:1992:CFR**

[250] J.-A. Lee and Tomás Lang. Constant-factor redundant CORDIC for angle calculation and rotation. *IEEE Transactions on Computers*, 41(8): 1016–1025, August 1992. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Mertzios:1992:FIR**

[251] Vassilios Basil G. Mertzios and Stylianos S. Scarlatos. *Fast Implementation of Robotic Manipulator Kinematics using CORDIC and Systolic Processors*, pages 19–26. Springer Netherlands, 1992. ISBN 94-011-2526-0.

**Peczalski:1992:HTC**

[252] A. Peczalski, P. Dietrich, R. Mactaggart, and D. Grider. High-throughput CORDIC coprocessor for signal and display processing. In *[1992] Proceedings IEEE/AIAA 11th Digital Avionics Systems Conference*, pages 564–567. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Rader:1992:MSA**

[253] C. M. Rader. MUSE — a systolic array for adaptive nulling with 64 degrees of freedom, using Givens transformations and wafer scale integration. In ????, editor, *Proceedings of the International Conference on*

*Application Specific Array Processors, Berkeley, CA, August 1992*, pages 277–291. ????, ????, 1992.

**Rix:1992:CBF**

[254] B. Rix, Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. A CORDIC-based floating-point arithmetic unit. In *1992 Proceedings of the IEEE Custom Integrated Circuits Conference*, pages 30.3.1–30.3.4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Rix:1992:CFA**

[255] B. Rix, Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. A CORDIC-based floating-point arithmetic unit. In IEEE [1589], pages 30.3/1–4. ISBN 0-7803-0246-X, 0-7803-0247-8, 0-7803-0248-6. LCCN ???? IEEE catalog no. 92CH3078-3.

**Timmermann:1992:ALE**

[256] Dirk Timmermann and I. Sundsbo. Area and latency efficient CORDIC architectures. In *[Proceedings] 1992 IEEE International Symposium on Circuits and Systems*, volume 3, pages 1093–1096 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992.

**Timmermann:1992:LLT**

[257] Dirk Timmermann, Helmut Hahn, and Bedrich J. Hosticka. Low latency time CORDIC algorithms. *IEEE Transactions on Computers*, 41(8): 1010–1015, August 1992. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Bruguera:1993:DPR**

[258] J. D. Bruguera, E. Antelo, and E. L. Zapata. Design of a pipelined radix 4 CORDIC processor. *Parallel Computing*, 19(7):729–744, 1993. CODEN PACOEJ. ISSN 0167-8191 (print), 1872-7336 (electronic). URL `https://www.sciencedirect.com/science/article/pii/016781919390061O`.

**Deprettere:1993:SFCa**

[259] E. F. Deprettere. Subband filtering: CORDIC modulation and systolic quadrature mirror filter tree. In *Linear Algebra for Large Scale and Real-Time Applications*, pages 69–89. Springer Netherlands, 1993. ISBN 94-015-8196-7.

**Deprettere:1993:SFCb**

[260] E. F. Deprettere, R. Heusdens, and H. Theunis. Subband filtering: CORDIC modulation and systolic quadrature mirror filter tree. In *Proceed-*

*ings of International Conference on Application Specific Array Processors (ASAP '93)*, pages 109–123. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Duprat:1993:CAN**

[261] Jean Duprat and Jean-Michel Muller. The CORDIC algorithm: New results for fast VLSI implementation. *IEEE Transactions on Computers*, 42(2):168–178, February 1993. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=204786`. See comments and corrections [399].

**Fowkes:1993:HEA**

[262] Raymond E. Fowkes. Hardware efficient algorithms for trigonometric functions. *IEEE Transactions on Computers*, 42(2):235–239, February 1993. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=204796`.

**Gotze:1993:CBJ**

[263] Jürgen Götze, Steffen Paul, and Matthias Sauer. A CORDIC-based Jacobi-like algorithm for eigenvalue computation. In *1993 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 3, pages 296–299 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Guo:1993:CBV**

[264] Jiun-In Guo, Chi-Min Liu, and Chein-Wei Jen. A CORDIC-based VLSI array for computing 2D discrete Hartley transform. In *1993 IEEE International Symposium on Circuits and Systems (ISCAS), Chicago, IL, 1993*, pages 1571–1574 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Hekstra:1993:FPC**

[265] Gerben J. Hekstra and Ed F. A. Deprettere. Floating point CORDIC. In Swartzlander, Jr. et al. [1590], pages 130–137. ISBN 0-7803-1401-8 (softbound), 0-8186-3862-1 (casebound), 0-8186-3861-3 (microfiche). ISSN 0018-9340 (print), 1557-9956 (electronic). LCCN QA 76.9 C62 S95 1993. URL `http://www.acsel-lab.com/arithmetic/arith11/papers/ARITH11_Hekstra.pdf`. IEEE Transactions on Computers **43(8)**, 1994.

**Hemkumar:1993:ECM**

[266] Nariankadu D. Hemkumar and Joseph R. Cavallaro. Efficient complex matrix transformations with CORDIC. In *Proceedings of IEEE 11th Symposium on Computer Arithmetic*, pages 122–129. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Hsiao:1993:MDC**

[267] Shen-Fu Hsiao. *Multi-dimensional CORDIC algorithms*. Ph.D. thesis, Yale University, New Haven, CT, USA, 1993. 214 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/multi-dimensional-cordic-algorithms/docview/304066755/se-2`.

**Hu:1993:ARM**

[268] Yu Hen Hu and S. Naganathan. An angle recoding method for CORDIC algorithm implementation. *IEEE Transactions on Computers*, 42(1):99–102, January 1993. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=192217`.

**Hu:1993:EIS**

[269] X. Hu, S. C. Bass, and R. G. Harber. An efficient implementation of singular value decomposition rotation transformations with CORDIC processors. *Journal of Parallel and Distributed Computing*, 17(4):360–362, 1993. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic).

**Hu:1993:FAR**

[270] Yu Hen Hu. A forward angle recoding CORDIC algorithm and pipelined processor array structure for digital signal processing. *Digital Signal Processing*, 3(1):2–15, 1993. CODEN DSPREJ. ISSN 1051-2004 (print), 1095-4333 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S105120048371002X`.

**Hu:1993:NES**

[271] Xiaobo Hu and Steven C. Bass. A neglected error source in the CORDIC algorithm. In Swartzlander, Jr. et al. [1590], pages 766–769 (vol. 1). ISBN 0-7803-1401-8 (softbound), 0-8186-3862-1 (casebound), 0-8186-3861-3 (microfiche). ISSN 0018-9340 (print), 1557-9956 (electronic). LCCN QA 76.9 C62 S95 1993. IEEE Transactions on Computers **43(8)**, 1994.

**Jones:1993:BSC**

[272] Keith John Jones. Bit-serial CORDIC DFT computation with multidimensional systolic processor arrays. *IEEE Journal of Oceanic Engineering*, 18(4):508–519, 1993.

**Juffa:1993:EYA**

[273] Norbert Juffa. Everything you always wanted to know about math coprocessors. Report, ????, ????, January 1993. URL `https://dougx.net/gaming/coproc.html`.

**Kota:1993:NAH**

[274] K. Kota and Joseph R. Cavallaro. Numerical accuracy and hardware tradeoffs for CORDIC arithmetic for special-purpose processors. *IEEE Transactions on Computers*, 42(7):769–779, July 1993. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Mazenc:1993:CFU**

[275] Christophe Mazenc, Xavier Merrheim, and Jean-Michel Muller. Computing functions $\cos^{-1}$ and $\sin^{-1}$ using CORDIC. *IEEE Transactions on Computers*, 42(1):118–122, January 1993. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=192222`.

**Metafas:1993:IGR**

[276] D. E. Metafas, E. P. Mariatos, S. S. Nikolaidis, and C. E. Goutis. Implementation of Givens' rotation processors for DSP real-time applications. *Microprocessing and Microprogramming*, 38(1–5):351–357, September 1993. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic).

**Metafas:1993:RTC**

[277] Dimitris E. Metafas, S. S. Nikolaidis, and C. E. Goutis. Real time cepstrum computation based on an advanced CORDIC processor. *Microprocessing and Microprogramming*, 37(1–5):57–60, January 1993. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic). URL `https://www.sciencedirect.com/science/article/abs/pii/016560749390015D`.

**Nikolaidis:1993:CBP**

[278] S. S. Nikolaidis, D. E. Metafas, and C. E. Goutis. CORDIC based pipeline architecture for all-pass filters7. In *Proceedings of the 1993 IEEE International Symposium on Circuits and Systems, Chicago, IL, 1993*, pages

1917–1920 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Panescu:1993:FPC**

[279] D. Panescu, Yu Hen Hu, and W. J. Tompkins. A fast pipelined CORDIC-based adaptive lattice filter. In *1993 IEEE International Conference on Acoustics, Speech, and Signal Processing, Minneapolis, MN, 1993*, volume 3, pages 424–427 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Risse:1993:ACP**

[280] W. Risse, A. Kecskeméthy, and M. Hiller. Anwendung von CORDIC-Prozessoren bei der inversen Kinematik von Mechanismen. (German) [Application of CORDIC processors in the inverse kinematics of mechanisms]. *Zeitschrift für Angewandte Mathematik und Mechanik*, 73(4–5): t220–t222, 1993. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic).

**Sauer:1993:BSC**

[281] Matthias Sauer, Ernst Bernard, and Josef A. Nossek. Block sequential CORDIC architectures. In *1993 IEEE International Symposium on Circuits and Systems*, pages 1591–1594 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993.

**Anuradha:1994:CBP**

[282] V. K. Anuradha and V. Visvanathan. A CORDIC based programmable DXT processor array. In *Proceedings of 7th International Conference on VLSI Design*, pages 343–348. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Arguello:1994:PAF**

[283] F. Arguello, J. D. Bruguera, R. Doallo, and E. L. Zapata. Parallel architecture for fast transforms with trigonometric kernel. *IEEE Transactions on Parallel and Distributed Systems*, 5(10):1091–1099, October 1994. CODEN ITDSEO. ISSN 1045-9219 (print), 1558-2183 (electronic).

**Bajard:1994:BNH**

[284] Jean-Claude Bajard, Sylvanus Kla, and Jean-Michel Muller. BKM: a new hardware algorithm for complex elementary functions. *IEEE Transactions on Computers*, 43(8):955–963, August 1994. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=295857`.

**Clarke:1994:RAC**

[285] C. T. Clarke and G. R. Nudd. A redundant arithmetic CORDIC system with a unit scale factor. In *Mathematics in signal processing III. Based on the proceedings of the third IMA conference on signal processing, University of Warwick, Coventry, UK, December 15-17, 1992*, pages 63–71. Oxford: Clarendon Press, 1994. ISBN 0-19-853480-9.

**Hahn:1994:UDF**

[286] Helmut Hahn, Dirk Timmermann, Bedrich J. Hosticka, and Bernold Rix. A unified and division-free CORDIC argument reduction method with unlimited convergence domain including inverse hyperbolic functions. *IEEE Transactions on Computers*, 43(11):1339–1344, November 1994. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Hemkumar:1994:JLM**

[287] Nariankadu D. Hemkumar and Joseph R. Cavallaro. Jacobi-like matrix factorizations with CORDIC-based inexact diagonalizations. In *Applied linear algebra. Proceedings of the 5th SIAM conference, held in Snowbird, UT, USA, June 15–18, 1994*, pages 295–299. Philadelphia, PA: SIAM, 1994. ISBN 0-89871-336-6.

**Hemkumar:1994:RLC**

[288] Nariankadu D. Hemkumar and Joseph R. Cavallaro. Redundant and on-line CORDIC for unitary transformations. *IEEE Transactions on Computers*, 43(8):941–954, August 1994. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `hdl.handle.net/1911/19948`.

**Hsiao:1994:HTC**

[289] Jue-Hsuan Hsiao, Liang-Gee Chen, Tzi-Dar Chiueh, and Chun-Te Chen. High throughput CORDIC-based systolic array design for the discrete cosine transform. In *1994 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 2, pages 85–88 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Hsiao:1994:PPC**

[290] Shen-Fu Hsiao and Jean-Marc Delosme. Parallel processing of complex data using quaternion and pseudo-quaternion CORDIC algorithms. In *Proceedings of IEEE International Conference on Application Specific Array Processors (ASSAP'94)*, pages 324–335. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Huseby:1994:CLG**

[291] Sverre H. Huseby, George Matas, and Timothy M. Farnum. CUG393 — LL, GIFSave, and Cordic++. *C Users Journal*, 12(1):88–??, January 1994. ISSN 0898-9788.

**Lee:1994:VIC**

[292] J.-A. Lee and M. Ahmad. VLSI implementation of CORDIC angle units. In *Proceedings of 4th Great Lakes Symposium on VLSI*, pages 144–149. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Mariatos:1994:FDP**

[293] E. P. Mariatos, D. E. Metafas, J. A. Hallas, and C. E. Goutis. A fast DCT processor, based on special purpose CORDIC rotators. In *Proceedings of IEEE International Symposium on Circuits and Systems — ISCAS '94*, volume 4, pages 271–274 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Mariatos:1994:RDB**

[294] E. P. Mariatos, M. K. Birbas, and A. N. Birbas. A reconfigurable DSP board based on CORDIC elements. In *Proceedings of IEEE 5th International Workshop on Rapid System Prototyping*, pages 22–25. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Merakos:1994:EMC**

[295] P. Merakos, E. Mariatos, M. Birbas, A. Birbas, E. Frantzeskakis, and H. Karathanasis. Efficient mapping of cepstrum algorithms on a reconfigurable CORDIC system. In *Proceedings of Twentieth Euromicro Conference. System Architecture and Integration*, pages 597–602. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Meyer-Base:1994:CRD**

[296] U. Meyer-Base, A. Meyer-Baese, and W. Hilberg. Coordinate rotation digital computer (CORDIC) synthesis for FPGA. *Lecture Notes in Computer Science*, 849:397–??, 1994. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

**Meyer-Bse:1994:CRD**

[297] U. Meyer-Bäse, A. Meyer-Bäse, and W. Hilberg. *Coordinate Rotation DIgital Computer (CORDIC) synthesis for FPGA*, pages 397–408.

Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1994. ISBN 3-540-48783-2. ISSN 1611-3349.

**Sarmiento:1994:ICP**

[298] R. Sarmiento and K. Eshraghian. Implementation of a CORDIC processor for CFFT computation in gallium arsenide technology. In *Proceedings of European Design and Test Conference EDAC-ETC-EUROASIC*, pages 238–244. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Timmermann:1994:CFP**

[299] Dirk Timmermann, B. Rix, Helmut Hahn, and Bedrich J. Hosticka. A CMOS floating-point vector-arithmetic unit. *IEEE Journal of Solid-State Circuits*, 29(5):634–639, May 1994. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Wang:1994:CDC**

[300] Shaoyun Wang and E. E. Swartzlander. Critically damped CORDIC algorithm. In *Proceedings of 1994 37th Midwest Symposium on Circuits and Systems*, volume 1, pages 253–256 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Wang:1994:SAC**

[301] Ling Wang and I. Hartimo. Systolic architectures for computing 2-d DCT based on CORDIC techniques. In *Proceedings of MELECON '94. Mediterranean Electrotechnical Conference*, pages 73–76 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1994.

**Antelo:1995:RCR**

[302] E. Antelo, J. D. Bruguera, J. Villalba, and E. L. Zapata. Redundant CORDIC rotator based on parallel prediction. In *Proceedings of the 12th Symposium on Computer Arithmetic*, pages 172–179. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Chen:1995:CCC**

[303] Sau-Gee Chen, Chieh-Chih Li, and Yuan-Der Hou. Compatible CORDIC and CCM algorithms for small area realization. In *VLSI Signal Processing, VIII*, pages 572–578. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Chen:1995:MCD**

[304] A. Chen, R. McDanell, M. Boytim, and R. Pogue. Modified CORDIC demodulator implementation for digital IF-sampled receiver. In *Proceedings of GLOBECOM '95*, volume 2, pages 1450–1454 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Dhar:1995:DUC**

[305] A. S. Dhar and S. Banerjee. Doppler ultrasonograph with CORDIC based spectrum analyzer for blood flow velocity estimation. In *Proceedings of the First Regional Conference, IEEE Engineering in Medicine and Biology Society and 14th Conference of the Biomedical Engineering Society of India. An International Meet*, pages 2/107–2/108. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**El-Guibaly:1995:HSC**

[306] F. El-Guibaly, A. Almulhem, A. Sabaa, and D. Shpak. A high speed CORDIC algorithm. In *IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing. Proceedings*, pages 485–488. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Freeman:1995:CAD**

[307] S. Freeman and M. O'Donnell. A complex arithmetic digital signal processor using CORDIC rotators. In *1995 International Conference on Acoustics, Speech, and Signal Processing*, volume 5, pages 3191–3194 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Gotze:1995:AAB**

[308] Jürgen Götze and Gerben J. Hekstra. An algorithm and architecture based on orthonormal $\mu$-rotations for computing the symmetric EVD. *Integration, the VLSI Journal*, 20(1):21–39, 1995. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/016792609500016X`. Algorithms and parallel VLSI architectures.

**Guo:1995:NCB**

[309] Jiun-In Guo, Chi-Min Liu, and Chein-Wei Jen. A novel CORDIC-based array architecture for the multidimensional discrete Hartley transform.

*IEEE transactions on circuits and systems. 2, Analog and digital signal processing*, 42(5):349–355, 1995. CODEN ICSPE5. ISSN 1057-7130 (print), 1558-125X (electronic). URL `semanticscholar.org/paper/a9f1ff58421140372b9ec48acae1f69a388431f5`.

**Hamill:1995:CSF**

[310] R. Hamill, J. V. McCanny, and R. L. Walke. Constant scale factor, on-line CORDIC algorithm in the circular coordinate system. In *VLSI Signal Processing, VIII*, pages 562–571. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Hsiao:1995:HCA**

[311] Shen-Fu Hsiao and Jean-Marc Delosme. Householder CORDIC algorithms. *IEEE Transactions on Computers*, 44(8):990–1001, August 1995. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=403715`.

**Hsiao:1995:HTC**

[312] Jue-Hsuan Hsiao, Liang-Gee Ghen, Tzi-Dar Chiueh, and Chun-Te Chen. High throughput CORDIC-based systolic array design for the discrete cosine transform. *IEEE Transactions on Circuits and Systems for Video Technology*, 5(3):218–225, 1995. CODEN ITCTEM. ISSN 1051-8215 (print), 1558-2205 (electronic).

**Hu:1995:ECA**

[313] Yu Hen Hu and Zhenyang Wu. An efficient CORDIC array structure for the implementation of discrete cosine transform. *IEEE Transactions on Signal Processing*, 43(1):331–336, 1995. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Hwang:1995:VCD**

[314] Jeng-Kuang Hwang and Jing-Hsien Chang. VLSI chip design of a CORDIC-based adaptive lattice filter. In *VLSI Signal Processing, VIII*, pages 368–377. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Kapteijn:1995:IRA**

[315] P. Kapteijn, E. Deprettere, L. Timmoneri, and A. Farina. Implementation of the recursive $QR$ algorithm on a $2 \times 2$ CORDIC testboard: a case study for radar applications. In *1995 25th European Microwave Conference*, volume 1, pages 500–505. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Lo:1995:NMI**

[316] Hao-Yung Lo, Hsiu-Feng Lin, and Kuen-Shiuh Yang. A new method of implementation of VLSI CORDIC for sine and cosine computation. In *1995 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 3, pages 1984–1987 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Metafas:1995:FPA**

[317] D. E. Metafas and C. E. Goutis. A floating-point advanced CORDIC processor. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 10(1):53–65, June 1995. CODEN JVSPED. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Moller:1995:PIC**

[318] F. T. Moller, J. B. Andersen, H. R. Jensen, O. Olsen, and F. K. Fink. PSEUDEC: implementation of the computation-intensive PARTRAN functionality using a dedicated on-line CORDIC co-processor. In *1995 International Conference on Acoustics, Speech, and Signal Processing*, volume 5, pages 3207–3210 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Osorio:1995:DLL**

[319] R. R. Osorio, E. Antelo, J. D. Bruguera, J. Villalba, and E. L. Zapata. Digit on-line large radix CORDIC rotator. In *Proceedings The International Conference on Application Specific Array Processors*, pages 246–257. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Paul:1995:EAC**

[320] Steffen Paul, Jürgen Götze, and Matthias Sauer. Error analysis of CORDIC-based Jacobi algorithms. *IEEE Transactions on Computers*, 44(7):947–951, July 1995. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Suarez:1995:CAA**

[321] Elisardo Antelo Suárez. *Algoritmos y arquitecturas CORDIC con aritmética redundante para procesamiento de alta velocidad (Spanish) [CORDIC algorithms and architectures with redundant arithmetic for high-speed processing]*. Tesis doctorales, Universidade de Santiago de Compostela, Santiago de Compostela, Spain, 1995. ix + 210 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-algorithms-architectures-with-redundant/docview/304224973/se-2`.

**Villalba:1995:CAP**

[322] J. Villalba, J. A. Hidalgo, E. L. Zapata, E. Antelo, and J. D. Bruguera. CORDIC architectures with parallel compensation of the scale factor. In *Proceedings The International Conference on Application Specific Array Processors*, pages 258–269. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Wang:1995:MCA**

[323] Shaoyun Wang and E. E. Swartzlander. Merged CORDIC algorithm. In *1995 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 3, pages 1988–1991 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Zhou:1995:HSD**

[324] Feng Zhou and P. Kornerup. High speed DCT/IDCT using a pipelined CORDIC algorithm. In *Proceedings of the 12th Symposium on Computer Arithmetic*, pages 180–187. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1995.

**Andraka:1996:BHP**

[325] R. J. Andraka. Building a high performance bit serial processor in an FPGA. In ????, editor, *Proceedings of Design SuperCon '96, Jan 1996*, pages 5.1–5.21. ????, ????, 1996.

**Antelo:1996:HRC**

[326] E. Antelo, J. D. Bruguera, Tomás Lang, J. Villalba, and E. L. Zapata. *High radix CORDIC rotation based on selection by rounding*, pages 155–164. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1996. ISBN 3-540-70636-4. ISSN 1611-3349.

**Antelo:1996:UMR**

[327] Elisardo Antelo, Javier D. Bruguera, and Emilio L. Zapata. Unified mixed radix 2–4 redundant CORDIC processor. *IEEE Transactions on Computers*, 45(9):1068–1073, September 1996. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `semanticscholar.org/paper/6e377a94ae2b2b74ef20255014e1b3451a07bc73`.

**Bruguera:1996:CBP**

[328] J. D. Bruguera, N. Guil, Tomás Lang, J. Villalba, and E. L. Zapata. CORDIC based parallel/pipelined architecture for the Hough transform. *Journal of VLSI Signal Processing Systems for Signal, Image and Video*

*Technology*, 12(3):207–221, June 1996. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Codenie:1996:IDA**

[329] J. Codenie, X. Wang, Qiu Xing Zhi, J. Vlietinck, P. Lambrecht, J. Vandewege, K. De Meyer, and W. Trog. Implementation of a digital amplitude detector based on the CORDIC transform. In *Proceedings of the 39th Midwest Symposium on Circuits and Systems*, volume 2, pages 860–863 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Dawid:1996:DCA**

[330] Herbert Dawid and Heinrich Meyr. The differential CORDIC algorithm: Constant scale factor redundant implementation without correcting iterations. *IEEE Transactions on Computers*, 45(3):307–318, March 1996. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=485569`.

**El-Guibaly:1996:HSC**

[331] Fayez El-Guibaly and A. Sabaa. High-speed CORDIC algorithm. In Luk [1591], page 512. ISBN 0-8194-2234-7. LCCN ???? URL `http://spiedigitallibrary.org/proceedings/resource/2/psisdg/2846/1`.

**Hampson:1996:PSB**

[332] Grant Hampson and Andrew Papliński. Phase shift beamforming using CORDIC. In *Fourth International Symposium on Signal Processing and Its Applications, 25–30 August 1996, Gold Coast, QLD, Australia*, volume 2, pages 684–687. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996. ISBN 0-7803-4114-7. URL `https://ieeexplore.ieee.org/document/615135/`.

**Hsiao:1996:PSV**

[333] Shen-Fu Hsiao and Jean-Marc Delosme. Parallel singular value decomposition of complex matrices using multidimensional CORDIC algorithms. *IEEE Transactions on Signal Processing*, 44(3):685–697, 1996. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Hu:1996:NIC**

[334] Yu Hen Hu and Homer H. M. Chern. A novel implementation of CORDIC algorithm using backward angle recoding (BAR). *IEEE Transactions on Computers*, 45(12):1370–1378, December 1996. CODEN ITCOB4. ISSN

0018-9340 (print), 1557-9956 (electronic). URL `digital.library.wisc.edu/1793/9178`.

**Kantabutra:1996:HCE**

[335] Vitit Kantabutra. On hardware for computing exponential and trigonometric functions. *IEEE Transactions on Computers*, 45(3):328–339, March 1996. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=485571`.

**Kar:1996:CBU**

[336] D. C. Kar and V. V. Bapeswara Rao. A CORDIC-based unified systolic architecture for sliding window applications of discrete transforms. *IEEE Transactions on Signal Processing*, 44(2):441–444, 1996. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Krieger:1996:IKC**

[337] C. Krieger and Bedrich J. Hosticka. Inverse kinematics computations with modified CORDIC iterations. In ????, editor, *IEE Proceedings Computer Digital Techniques*, volume 143(1), pages 87–92. ????, ????, 1996.

**Li:1996:NRC**

[338] Chieh-Chih Li and Sau-Gee Chen. New redundant CORDIC algorithms with fast variable scale factor compensations. In *1996 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 264–267 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Nikolaidis:1996:CVC**

[339] S. S. Nikolaidis and D. E. Metafas. CORDIC versus conventional logic for realisation of normalised lattice all-pass filters. In *Proceedings of Third International Conference on Electronics, Circuits, and Systems*, volume 1, pages 538–541 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Simon:1996:CBA**

[340] S. Simon, P. Rieder, C. Schimpfle, and J. A. Nossek. CORDIC-based architectures for the efficient implementation of discrete wavelet transforms. In *1996 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 77–80 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Vanderaar:1996:TPS**

[341] M. Vanderaar and R. Bexten. Transmit pulse shaping filters and CORDIC algorithm based precompensation for digital satellite communications. In *Proceedings of the 39th Midwest Symposium on Circuits and Systems*, volume 3, pages 1219–1222 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Villalba:1996:RVC**

[342] J. Villalba, J. C. Arrabal, E. L. Zapata, E. Antelo, and J. D. Bruguera. Radix-4 vectoring CORDIC algorithm and architectures. In *Proceedings of International Conference on Application Specific Systems, Architectures and Processors: ASAP '96*, pages 55–64. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Vuori:1996:IDP**

[343] J. Vuori. Implementation of a digital phase-locked loop using CORDIC algorithm. In *1996 IEEE International Symposium on Circuits and Systems. Circuits and Systems Connecting the World. ISCAS 96*, volume 4, pages 164–167 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Vuori:1996:IEP**

[344] Jarkko Vuori and Jorma Skyttä. Implementation of a European paging system receiver using CORDIC algorithm. In *1996 8th European Signal Processing Conference (EUSIPCO 1996), 10–13 September 1996, Trieste, Italy*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996. ISBN 88-86179-83-9. URL `https://ieeexplore.ieee.org/document/7082948/`.

**Wang:1996:CDC**

[345] Shaoyun Wang and E. E. Swartzlander. The critically damped CORDIC algorithm for $QR$ decomposition. In *Conference Record of The Thirtieth Asilomar Conference on Signals, Systems and Computers*, pages 908–911 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Wang:1996:GPC**

[346] Shaoyun Wang, V. Piuri, and E. E. Swartzlander. Granularly-pipelined CORDIC processors for sine and cosine generators. In *1996 IEEE International Conference on Acoustics, Speech, and Signal Processing Conference Proceedings*, volume 6, pages 3298–3301 (vol. 6). IEEE Computer

Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Wang:1996:UVC**

[347] Shaoyun Wang, V. Piuri, and E. E. Swartzlander. A unified view of CORDIC processor design. In *Proceedings of the 39th Midwest Symposium on Circuits and Systems*, volume 2, pages 852–855 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1996.

**Al-Sawi:1997:HHP**

[348] Ahmad Nour Al-Islam Al-Sawi. HCORDIC: a high-performance CORDIC algorithm. M.S. thesis, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia, 1997. 130 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/hcordic-high-performance-cordic-algorithm/docview/304432028/se-2`.

**Antelo:1997:EAR**

[349] E. Antelo, J. D. Bruguera, Tomás Lang, and E. L. Zapata. Error analysis and reduction for angle calculation using the CORDIC algorithm. *IEEE Transactions on Computers*, 46(11):1264–1271, November 1997. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Antelo:1997:HPR**

[350] E. Antelo, J. Villalba, J. D. Bruguera, and E. L. Zapata. High-performance rotation architectures based on the radix-4 CORDIC algorithm. *IEEE Transactions on Computers*, 46(8):855–870, August 1997. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Aoki:1997:HRC**

[351] T. Aoki, H. Nogi, and T. Higuchi. High-radix CORDIC algorithms for VLSI signal processing. In *1997 IEEE Workshop on Signal Processing Systems. SiPS 97 Design and Implementation formerly VLSI Signal Processing*, pages 183–192. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Chen:1997:CPP**

[352] Jie Chen and K. J. Ray Liu. A complete pipelined parallel CORDIC architecture for motion estimation. In *1997 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 2801–2804 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Chen:1997:FPP**

[353] Jie Chen and K. J. Ray Liu. A fully pipelined parallel CORDIC architecture for half-pel motion estimation. In *Proceedings of International Conference on Image Processing*, volume 2, pages 574–577 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Haller:1997:HIS**

[354] B. Haller, M. Streiff, U. Fleisch, and R. Zimmermann. Hardware implementation of a systolic antenna array signal processor based on CORDIC arithmetic. In *1997 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 5, pages 4141–4144 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Hsiao:1997:VID**

[355] Shen-Fu Hsiao and Jen-Yin Chen. VLSI implementation of digit-recurrent CORDIC with constant scaling factor. In *1997 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 3, pages 2068–2071 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Hsiao:1997:VIH**

[356] Shen-Fu Hsiao and Jen-Yin Chen. VLSI implementation of a high-throughput CORDIC processor for both angle calculation and vector rotation. In *Proceedings of Technical Papers. International Symposium on VLSI Technology, Systems, and Applications*, pages 227–231. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Lang:1997:CBC**

[357] Tomás Lang and E. Antelo. CORDIC-based computation of ArcCos and ArcSin. In *Proceedings IEEE International Conference on Application-Specific Systems, Architectures and Processors*, pages 132–143. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Lang:1997:CVA**

[358] Tomás Lang and Elisardo Antelo. CORDIC vectoring with arbitrary target value. In Lang et al. [1592], pages 108–115. ISBN 0-8186-7846-1, 0-8186-7847-X, 0-8186-7848-8. ISSN 1063-6889. LCCN QA76.9.C62

S95 1997. URL `http://www.acsel-lab.com/arithmetic/arith13/papers/ARITH13_Lang.pdf`. IEEE Computer Society order number PR07846. IEEE Order Plan catalog number 97CB36091.

**Li:1997:RRC**

[359] Chieh-Chih Li and Sau-Gee Chen. A radix-4 redundant CORDIC algorithm with fast on-line variable scale factor compensation. In *1997 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 1, pages 639–642 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Lo:1997:UCA**

[360] Hao-Yung Lo. A unidirectional CORDIC algorithm for angle computation and rotation. *Journal of the Chinese Institute of Engineers = Chung-kuo kung ch'eng hsueh kan*, 20(6):693–700, November 1997. CODEN CKCKDZ. ISSN 2158-7299.

**Ma:1997:PCBa**

[361] Jun Ma, E. F. Deprettere, and K. K. Parhi. Pipelined CORDIC based QRD-RLS adaptive filtering using matrix lookahead. In *1997 IEEE Workshop on Signal Processing Systems. SiPS 97 Design and Implementation formerly VLSI Signal Processing*, volume 1, pages 131–140. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997. ISBN 0-7803-3806-5. ISSN 1520-6130 (print), 2374-7390 (electronic).

**Ma:1997:PCBb**

[362] J. P. Ma, K. K. Parhi, and E. F. Deprettere. Pipelining of CORDIC based IIR digital filters. In *1997 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 1, pages 643–646. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Muller:1997:CA**

[363] Jean-Michel Muller. *The CORDIC Algorithm*, pages 101–125. Birkhäuser Boston Inc., Cambridge, MA, USA, 1997. ISBN 1-4757-2646-5.

**Nahm:1997:FDS**

[364] Seunghyeon Nahm and Wonyong Sung. A fast direction sequence generation method for CORDIC processors. In *1997 IEEE International Conference on Acoustics, Speech, and Signal Processing*, volume 1, pages 635–638 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**P:1997:NCB**

[365] S. Kumar P and K. M. M. Prabhu. Novel CORDIC-based systolic arrays for the DFT and the DHT. In *Proceedings High Performance Computing on the Information Superhighway. HPC Asia '97*, pages 547–551. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Schimpfle:1997:LPC**

[366] C. V. Schimpfle, S. Simon, and Josef A. Nossek. Low power CORDIC implementation using redundant number representation. In *Proceedings IEEE International Conference on Application-Specific Systems, Architectures and Processors*, pages 154–161. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Timmermann:1997:URC**

[367] Dirk Timmermann and Steffen Dolling. *Unfolded Redundant CORDIC VLSI Architectures With Reduced Area and Power Consumption*, pages 251–262. Springer US, 1997. ISBN 0-387-35311-9.

**Underwood:1997:HDC**

[368] J. Underwood and B. Edwards. How do calculators calculate trigonometric functions? Educational Resources Information Center (ERIC) document ED461519, 1997. URL `http://www.math.ufl.edu/~haven/papers/paper.pdf; https://eric.ed.gov/?q=ED461519&id=ED461519`.

**Villalba:1997:LLW**

[369] J. Villalba and Tomás Lang. Low latency word serial CORDIC. In *Proceedings IEEE International Conference on Application-Specific Systems, Architectures and Processors*, pages 124–131. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Wang:1997:HCA**

[370] S. Wang, V. Piuri, and E. E. Swartzlander. Hybrid CORDIC algorithms. *IEEE Transactions on Computers*, 46(11):1202–1207, November 1997. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Wang:1997:MSM**

[371] Shaoyun Wang, V. Piuri, and E. E. Swartzlander. Merged scaling multiplication CORDIC algorithm. In *1997 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 2581–2584 (vol. 4). IEEE

Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Wang:1997:UVC**

[372] Shaoyun Wang and Vincenzo Piuri. *A Unified View of CORDIC Processor Design*, pages 121–160. Springer US, 1997. ISBN 1-4613-1457-7. ISSN 0893-3405.

**Wedlake:1997:CID**

[373] M. Wedlake and H. L. Kwok. A CORDIC implementation of a digital artificial neuron. In *1997 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, PACRIM. 10 Years Networking the Pacific Rim, 1987-1997*, volume 2, pages 798–801 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997.

**Abdoel-Gawad:1998:EHI**

[374] F. S. Abdoel-Gawad. *Efficient hardware implementation of the CORDIC algorithm (BL)*. Ph.D. thesis, Liverpool John Moores University, Liverpool, UK, 1998. 1 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/efficient-hardware-implementation-cordic/docview/301520737/se-2`.

**Ahn:1998:VDC**

[375] Youngho Ahn, Seunghyeon Nahm, and Wonyong Sung. VLSI design of a CORDIC-based derotator. In *1998 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 2, pages 449–452 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Andraka:1998:SCA**

[376] R. Andraka. A survey of CORDIC algorithms for FPGA based computers. In ????, editor, *FPGA '98, Proceedings of the 1998 ACM/SIGDA Sixth International Symposium on Field Programmable Gate Arrays, Monterey CA, 1998*, pages 191–200. ACM Press, New York, NY 10036, USA, 1998.

**Chen:1998:CPP**

[377] J. Chen and K. J. Ray Liu. A complete pipelined parallel CORDIC architecture for motion estimation. *IEEE transactions on circuits and systems. 2, Analog and digital signal processing*, 45(5):653–660, 1998. CODEN ICSPE5. ISSN 1057-7130 (print), 1558-125X (electronic).

**Chen:1998:RCC**

[378] A. Chen and S. Yang. Reduced complexity CORDIC demodulator implementation for D-AMPS and digital IF-sampled receiver. In *IEEE GLOBECOM 1998 (Cat. NO. 98CH36250)*, volume 3, pages 1491–1496 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Eklund:1998:CEF**

[379] Neil Eklund. CORDIC: Elementary function computation using recursive sequences. *Electronic Proceeding of the ICTCM*, 11(??):C027–??, 1998.

**Elguibaly:1998:CAC**

[380] Fayez Elguibaly. $\alpha$-CORDIC: an adaptive CORDIC algorithm. *Canadian Journal of Electrical and Computer Engineering*, 23(3):133–138, 1998. CODEN CJEEEL. ISSN 0840-8688.

**Ghariani:1998:DCI**

[381] M. Ghariani, N. Masmoudi, M. W. Kharrat, and L. Kamoun. Design and chip implementation of modified CORDIC algorithm for sine and cosine functions application: PARK transformation. In *Proceedings of the Tenth International Conference on Microelectronics (Cat. No. 98EX186)*, pages 241–244. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Grayver:1998:DDF**

[382] E. Grayver and B. Daneshrad. Direct digital frequency synthesis using a modified CORDIC. In *ISCAS '98. Proceedings of the 1998 IEEE International Symposium on Circuits and Systems (Cat. No. 98CH36187)*, volume 5, pages 241–244 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Hekstra:1998:CHP**

[383] Gerben Johan Hekstra. *CORDIC for high-performance numerical computation*. Dr. proefschrift, Technische Universiteit Delft, Delft, The Netherlands, 1998. xiv + 236 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-high-performance-numerical-computation/docview/304492591/se-2`.

**Hormigo:1998:CAD**

[384] J. Hormigo, J. Villalba, and E. L. Zapata. CORDIC algorithm with digits skipping. In *Conference Record of Thirty-Second Asilomar Conference on*

*Signals, Systems and Computers (Cat. No. 98CH36284)*, volume 1, pages 194–196 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Hsiao:1998:DIA**

[385] Shen-Fu Hsiao and Jen-Yin Chen. Design, implementation and analysis of a new redundant CORDIC processor with constant scaling factor and regular structure. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 20(3):267–278, December 1998. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Hu:1998:CCA**

[386] Yu Hen Hu. On the convergence of the CORDIC adaptive lattice filtering (CALF) algorithm. *IEEE Transactions on Signal Processing*, 46(7): 1861–1871, 1998. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Hu:1998:DCB**

[387] Xiaobo Hu and M. L. Benson. Design CORDIC-based systems using term rewriting techniques. In *1998 Midwest Symposium on Circuits and Systems (Cat. No. 98CB36268)*, pages 288–291. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Kwak:1998:ILI**

[388] Jae-Hyuek Kwak and E. E. Swartzlander. An implementation of level-index arithmetic based on the low latency CORDIC system. In *Conference Record of Thirty-Second Asilomar Conference on Signals, Systems and Computers (Cat. No. 98CH36284)*, volume 1, pages 208–212 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Lang:1998:CVA**

[389] Tomás Lang and E. Antelo. CORDIC vectoring with arbitrary target value. *IEEE Transactions on Computers*, 47(7):736–749, July 1998. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Lin:1998:CAF**

[390] Chun-Fu Lin and Sau-Gee Chen. A CORDIC algorithm with fast rotation prediction and small iteration number. In *1998 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 5, pages 229–232 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Looye:1998:MMF**

[391] A. Looye, G. Hekstra, and E. Deprettere. Multiport memory and floating-point CORDIC pipeline in Jacobium processing elements. In *1998 IEEE Workshop on Signal Processing Systems. SIPS 98. Design and Implementation (Cat. No. 98TH8374)*, pages 406–416. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Ma:1998:HSC**

[392] Jun Ma, K. K. Parhi, and Ed.F. Deprettiere. High-speed CORDIC based parallel weight extraction for QRD-RLS adaptive filtering. In *1998 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 5, pages 245–248 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Ma:1998:PCB**

[393] Jun Ma, K. K. Parhi, and E. F. Deprettere. Pipelined CORDIC based QRD-MVDR adaptive beamforming. In *Proceedings of the 1998 IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP '98 (Cat. No. 98CH36181)*, volume 5, pages 3025–3028 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Ma:1998:PIC**

[394] Jun Ma, K. K. Parhi, and E. F. Deprettere. Pipelined implementation of CORDIC-based QRD-MVDR adaptive beamforming. In *ICSP '98. 1998 Fourth International Conference on Signal Processing (Cat. No. 98TH8344)*, pages 514–517 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Mencer:1998:ARC**

[395] O. Mencer, L. Semeria, M. Morf, and J.-M. Delosme. Application of reconfigurable CORDIC architectures. In *Conference Record of Thirty-Second Asilomar Conference on Signals, Systems and Computers (Cat. No. 98CH36284)*, volume 1, pages 182–186 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Mertzios:1998:FID**

[396] Basil G. Mertzios. Fast implementation of direct robot kinematics with CORDIC systolic arrays. *International Journal of Computer Mathematics*, 67(3–4):239–260, January 1998. CODEN IJCMAT. ISSN 1029-0265.

**Meyer-Base:1998:FMC**

[397] U. Meyer-Bäse, A. Meyer-Bäse, J. Mellott, and F. Taylor. A fast modified CORDIC — implementation of radial basis neural networks. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 20(3):211–218, December 1998. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Nahm:1998:CBD**

[398] Seunghyeon Nahm, Kyungtae Han, and Wonyong Sung. A CORDIC-based digital quadrature mixer: comparison with a ROM-based architecture. In *1998 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 385–388 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Phatak:1998:CDM**

[399] D. S. Phatak. Comments on Duprat and Muller's branching CORDIC paper. *IEEE Transactions on Computers*, 47(9):1037–1040, September 1998. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). See [261].

**Phatak:1998:DSB**

[400] D. S. Phatak. Double step branching CORDIC: a new algorithm for fast sine and cosine generation. *IEEE Transactions on Computers*, 47(5):587–602, May 1998. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Saranli:1998:CRR**

[401] Afsar Saranli and Buyurman Baykal. Complexity reduction in radial basis function (RBF) networks by using radial B-spline functions. *Neurocomputing*, 18(1):183–194, 1998. CODEN NRCGEO. ISSN 0925-2312 (print), 1872-8286 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0925231297000787`.

**Sarmiento:1998:CPF**

[402] R. Sarmiento, F. Tobajas, V. de Armas, R. Esper-Chain, J. F. Lopez, J. A. Montiel-Nelson, and A. Nunez. A CORDIC processor for FFT computation and its implementation using gallium arsenide technology. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 6 (1):18–30, 1998. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Shi:1998:ICA**

[403] Jinglin Shi, Tao Li, Bo Yu, Qunying Zhang, and Yueqiu Han. Improvement of CORDIC algorithm. *J. Beijing Inst. Tech.*, 7(4):400–405, 1998. ISSN 1004-0579.

**Shiraishi:1998:INA**

[404] S. i. Shiraishi, M. Haseyama, and H. Kitajima. An implementation of a normalized ARMA lattice filter with a CORDIC algorithm. In *1998 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 5, pages 253–256 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Villalba:1998:PCS**

[405] J. Villalba, Tomás Lang, and E. L. Zapata. Parallel compensation of scale factor for the CORDIC algorithm. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 19(3):227–241, August 1998. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Villalba:1998:RVC**

[406] J. Villalba, E. L. Zapata, E. Antelo, and J. D. Bruguera. Radix-4 vectoring CORDIC algorithm and architectures. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 19(2):127–147, July 1998. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Wang:1998:CAP**

[407] Shaoyun Wang. *A CORDIC arithmetic processor*. Ph.D. thesis, The University of Texas at Austin, Austin, TX, USA, 1998. 136 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-arithmetic-processor/docview/304459653/se-2`.

**Wassatsch:1998:AMR**

[408] A. Wassatsch, S. Dolling, and Dirk Timmermann. Area minimization of redundant CORDIC pipeline architectures. In *Proceedings International Conference on Computer Design. VLSI in Computers and Processors (Cat. No. 98CB36273)*, pages 136–141. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1998.

**Antelo:1999:VHR**

[409] E. Antelo, Tomás Lang, and J. D. Bruguera. Very-high radix CORDIC vectoring with scalings and selection by rounding. In *Proceedings 14th IEEE Symposium on Computer Arithmetic (Cat. No. 99CB36336)*, pages

204–213. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Antelo:1999:VRC**

[410] Elisardo Antelo, Tomás Lang, and Javier D. Bruguera. Very-high radix CORDIC vectoring with scalings and selection by rounding. In Koren and Kornerup [1593], pages 204–213. ISBN 0-7803-5609-8, 0-7695-0116-8, 0-7695-0118-4. ISSN 1063-6889. LCCN QA76.6 .S887 1999. URL `http://euler.ecs.umass.edu/paper/final/paper-154.pdf; http://euler.ecs.umass.edu/paper/final/paper-154.ps; http://www.acsel-lab.com/arithmetic/arith14/papers/ARITH14_Antelo.pdf`. IEEE Computer Society Order Number PR00116. IEEE Order Plan Catalog Number 99CB36336.

**Choi:1999:HSC**

[411] Jae Hun Choi, Jae-Hyuck Kwak, and E. E. Swartzlander. High-speed CORDIC architecture based on redundant sum formation and overlapped $\sigma$-selection. In *Proceedings 1999 IEEE International Conference on Computer Design: VLSI in Computers and Processors (Cat. No. 99CB37040)*, pages 68–72. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Hormigo:1999:ISC**

[412] J. Hormigo, J. Villalba, and E. L. Zapata. Interval sine and cosine functions computation based on variable-precision CORDIC algorithm. In *Proceedings 14th IEEE Symposium on Computer Arithmetic (Cat. No. 99CB36336)*, pages 186–193. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Hsiao:1999:HSC**

[413] Shen-Fu Hsiao. A high-speed constant-factor redundant CORDIC processor without extra correcting or scaling iterations. In *1999 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 1, pages 455–458 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Juang:1999:LPF**

[414] Tso Bing Juang and Shen Fu Hsiao. Low power and fast CORDIC processor for vector rotation. In *42nd Midwest Symposium on Circuits and Systems (Cat. No. 99CH36356)*, volume 1, pages 81–83 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Kantabutra:1999:HRC**

[415] Vitit Kantabutra. High-radix CORDIC for vector rotation with pipelined FPGA implementation. In *ICECS'99. Proceedings of ICECS '99. 6th IEEE International Conference on Electronics, Circuits and Systems (Cat. No. 99EX357)*, volume 2, pages 1131–1134 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Katiyar:1999:ARC**

[416] Mayank Katiyar and K. M. M. Prabhu. Angle recoding CORDIC-based systolic arrays for DFT and DHT of prime length. *Computers and Electrical Engineering*, 25(3):181–193, 1999. CODEN CPEEBQ. ISSN 0045-7906 (print), 1879-0755 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0045790698000342`.

**Kuhlmann:1999:HSC**

[417] M. Kuhlmann and K. K. Parhi. A high-speed CORDIC algorithm and architecture for DSP applications. In *1999 IEEE Workshop on Signal Processing Systems. SiPS 99. Design and Implementation (Cat. No. 99TH8461)*, pages 732–741. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Kuhlmann:1999:NCR**

[418] M. Kuhlmann and K. K. Parhi. A novel CORDIC rotation method for generalized coordinate systems. In *Conference Record of the Thirty-Third Asilomar Conference on Signals, Systems, and Computers (Cat. No. CH37020)*, volume 2, pages 1361–1367 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Kwak:1999:NSP**

[419] Mae-Hyuck Kwak and E. E. Swartzlander. A new scheme for prediction of rotation directions in CORDIC processing. In *42nd Midwest Symposium on Circuits and Systems (Cat. No. 99CH36356)*, volume 2, pages 870–873 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Lewis:1999:CLN**

[420] D. Lewis. Complex logarithmic number system arithmetic using high-radix redundant CORDIC algorithms. In *Proceedings 14th IEEE Symposium on Computer Arithmetic (Cat. No. 99CB36336)*, pages 194–203. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Ma:1999:ATA**

[421] Jun Ma, K. K. Parhi, and E. F. Deprettere. An algorithm transformation approach to CORDIC based parallel singular value decompositions architectures. In *Conference Record of the Thirty-Third Asilomar Conference on Signals, Systems, and Computers (Cat. No. CH37020)*, volume 2, pages 1401–1405 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**McInerney:1999:HMC**

[422] S. McInerney and R. B. Reilly. Hybrid multiplier/CORDIC unit for online handwriting recognition. In *1999 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings. ICASSP99 (Cat. No. 99CH36258)*, volume 4, pages 1909–1912 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Padala:1999:PCP**

[423] Satish Kumar Padala and K. M. M. Prabhu. Pipelined CORDIC processors for generating Gaussian random numbers. *Signal Processing*, 72(3): 177–181, 1999. CODEN SPRODR. ISSN 0165-1684 (print), 1872-7557 (electronic).

**Park:1999:DSS**

[424] Minkyoung Park, Sungsoo Choi, Seunggeun Kim, Kiseon Kim, and Jeong-A Lee. A digital sinusoid synthesis based on the postscaled CORDIC. In *Fifth Asia-Pacific Conference on ... and Fourth Optoelectronics and Communications Conference on Communications*, volume 2, pages 948–951 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Vankka:1999:CBM**

[425] J. Vankka, M. Kosunen, J. Hubach, and K. Halonen. A CORDIC-based multicarrier QAM modulator. In *Seamless Interconnection for Universal Services. Global Telecommunications Conference. GLOBECOM'99. (Cat. No. 99CH37042)*, volume 1A, pages 173–177 (vol. 1a). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999.

**Hu:19xx:ECB**

[426] Yu Hen Hu and H. M. Chern. An efficient CORDIC backward angle recoding algorithm and its applications to digital signal processing. *????*, ??(??):??, ???? 19xx.

**Antelo:2000:VHRa**

[427] Elisardo Antelo, Tomás Lang, and Javier D. Bruguera. Very-high radix CORDIC rotation based on selection by rounding. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25 (2):141–153, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Antelo:2000:VHRb**

[428] E. Antelo, Tomás Lang, and J. D. Bruguera. Very-high radix circular CORDIC: vectoring and unified rotation/vectoring. *IEEE Transactions on Computers*, 49(7):727–739, July 2000. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Bekooij:2000:NAF**

[429] M. Bekooij, J. Huisken, and K. Nowak. Numerical accuracy of Fast Fourier Transforms with CORDIC arithmetic. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):187–193, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Bellis:2000:CAF**

[430] Stephen J. Bellis and William P. Marnane. *A CORDIC Arctangent FPGA Implementation for a High-Speed 3D-Camera System*, pages 485–494. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 3-540-44614-1. ISSN 0302-9743 (print), 1611-3349 (electronic).

**Chih:2000:FCA**

[431] Jen-Chuan Chih and Sau-Gee Chen. A fast CORDIC algorithm based on a novel angle recoding scheme. In *2000 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 621–624 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Costello:2000:BSLa**

[432] J. Costello and D. Al-Khalili. Behavioural synthesis of low power floating point CORDIC processors. In *ICECS 2000. 7th IEEE International Conference on Electronics, Circuits and Systems (Cat. No. 00EX445)*, volume 1, pages 506–509 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Costello:2000:BSLb**

[433] Joseph Patrick Costello. Behavioural synthesis of low-power floating point CORDIC processors. M.Eng. thesis, Royal Military College

of Canada, Kingston, ON, Canada, 2000. 183 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/behavioural-synthesis-low-power-floating-point/docview/304678593/se-2`.

**Gisutham:2000:HSF**

[434] B. Gisutham, T. Srikanthan, and K. V. Asari. A high speed flat CORDIC based neuron with multi-level activation function for robust pattern recognition. In *Proceedings Fifth IEEE International Workshop on Computer Architectures for Machine Perception*, pages 87–94. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Gisuthan:2000:FCU**

[435] B. Gisuthan and T. Srikanthan. Flat CORDIC: a unified architecture for high-speed generation of trigonometric and hyperbolic functions. In *Proceedings of the 43rd IEEE Midwest Symposium on Circuits and Systems (Cat. No. CH37144)*, volume 3, pages 1414–1417 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Hamill:2000:OCA**

[436] R. Hamill, J. V. McCanny, and R. L. Walke. Online CORDIC algorithm and VLSI architecture for implementing $QR$-array processors. *IEEE Transactions on Signal Processing*, 48(2):592–598, 2000. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Hekstra:2000:SIC**

[437] Gerben Hekstra, Ed Deprettere, and Jeong-A Lee. Special issue on CORDIC. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):99–196, 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Hsiao:2000:RCF**

[438] Shen-Fu Hsiao, Chun-Yi Lau, and Jean-Marc Delosme. Redundant constant-factor implementation of multi-dimensional CORDIC and its application to complex SVD. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):155–166, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Juang:2000:DCP**

[439] Tso-Bing Juang and Shen-Fu Hsiao. Discussions on the CORDIC processor using leading zeros detector. In *2000 Southwest Symposium on*

*Mixed-Signal Design (Cat. No. 00EX390)*, pages 175–178. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Kwak:2000:FTH**

[440] J.-H. Kwak, V. Piuri, and E. E. Swartzlander. Fault-tolerant high-performance CORDIC processors. In *Proceedings IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems*, pages 164–172. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Kwak:2000:HSCa**

[441] Jae-Hyuck Kwak, Jae Hun Choi, and Earl E. Swartzlander, Jr. High-speed CORDIC based on an overlapped architecture and a novel $\sigma$-prediction method. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):167–177, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Kwak:2000:HSCb**

[442] Jae-Hyuck Kwak. *High speed CORDIC processor designs: Algorithms, architectures, and applications*. Ph.D. thesis, The University of Texas at Austin, Austin, TX, USA, 2000. 115 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/high-speed-cordic-processor-designs-algorithms/docview/304633329/se-2`.

**Lang:2000:CBC**

[443] Tomás Lang and Elisardo Antelo. CORDIC-based computation of ArcCos and $\sqrt{1-t^2}$. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(1):19–38, May 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Ma:2000:ARL**

[444] Jun Ma, K. K. Parhi, and E. F. Deprettere. Annihilation-reordering look-ahead pipelined CORDIC-based RLS adaptive filters and their application to adaptive beamforming. *IEEE Transactions on Signal Processing*, 48(8):2414–2431, 2000. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Ma:2000:EIP**

[445] Jun Ma, K. K. Parhi, G. J. Hekstra, and E. F. Deprettere. Efficient implementations of pipelined CORDIC based IIR digital filters using fast orthonormal $\mu$-rotations. *IEEE Transactions on Signal Processing*, 48(9):

2712–2716, 2000. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Ma:2000:HPC**

[446] Jun Ma. *High-performance CORDIC-based orthogonal recursive and adaptive filtering*. Ph.D. thesis, University of Minnesota, Minneapolis, MN, USA, 2000. 171 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/high-performance-cordic-based-orthogonal/docview/304607791/se-2`.

**Ma:2000:PCB**

[447] J. Ma, K. K. Parhi, and E. F. Deprettere. Pipelined CORDIC-based cascade orthogonal IIR digital filters. *IEEE transactions on circuits and systems. 2, Analog and digital signal processing*, 47(11):1238–1253, 2000. CODEN ICSPE5. ISSN 1057-7130 (print), 1558-125X (electronic).

**Mencer:2000:ARCa**

[448] Oskar Mencer, Luc Séméria, Martin Morf, and Jean-Marc Delosme. *Application of Reconfigurable CORDIC Architectures*, pages 85–95. Springer US, 2000. ISBN 1-4615-4417-3.

**Mencer:2000:ARCb**

[449] Oskar Mencer, Luc Séméria, Martin Morf, and Jean-Marc Delosme. Application of reconfigurable CORDIC architectures. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 24(2–3): 211–221, March 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Musicer:2000:MCM**

[450] J. M. Musicer and J. Rabaey. MOS current mode logic for low power, low noise CORDIC computation in mixed-signal environments. In *ISLPED'00: Proceedings of the 2000 International Symposium on Low Power Electronics and Design (Cat. No. 00TH8514)*, pages 102–107. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Otte:2000:CCL**

[451] M. Otte, M. Bucker, and Jürgen Götze. Complex CORDIC-like algorithms for linearly constrained MVDR beamforming. In *2000 International Zurich Seminar on Broadband Communications. Accessing, Transmission, Networking. Proceedings (Cat. No. 00TH8475)*, pages 97–104. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Pashea:2000:MCM**

[452] Michael Pashea. Microcontrollers and CORDIC methods. *Dr. Dobb's Journal of Software Tools*, 25(9):86, 88–90, 92, September 2000. CODEN DDJOEB. ISSN 1044-789X. URL `http://www.ddj.com/ftp/2000/2000_09/cordic.txt; http://www.ddj.com/ftp/2000/2000_09/cordic.zip`.

**Shiraishi:2000:HAP**

[453] S. Shiraishi, M. Haseyama, and H. Kitajima. A highly accurate pipelined architecture for a CORDIC ARMA lattice filter. In *2000 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 5, pages 369–372 (vol. 5). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Valls:2000:EMC**

[454] J. Valls, M. Kuhlmann, and K. K. Parhi. Efficient mapping of CORDIC algorithms on FPGA. In *2000 IEEE Workshop on SiGNAL PROCESSING SYSTEMS. SiPS 2000. Design and Implementation (Cat. No. 00TH8528)*, pages 336–345. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**vanderKolk:2000:FPV**

[455] K. J. van der Kolk, J. A. Lee, and E. F. A. Deprettere. A floating point vectoring algorithm based on fast rotations. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):125–139, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Volder:2000:BC**

[456] Jack E. Volder. The birth of CORDIC. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25(2):101–105, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Walther:2000:SUC**

[457] John Stephen Walther. The story of unified CORDIC. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 25 (2):107–112, June 2000. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Wu:2000:MVR**

[458] Cheng-Shing Wu and An-Yeu Wu. Modified vector rotational CORDIC (MVR-CORDIC) algorithm and its application to FFT. In *2000 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, pages 529–532 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Wu:2000:NRV**

[459] Cheng-Shing Wu and An-Yeu Wu. A novel rotational VLSI architecture based on extended elementary angle set CORDIC algorithm. In *Proceedings of Second IEEE Asia Pacific Conference on ASICs. AP-ASIC 2000 (Cat. No. 00EX434)*, pages 111–114. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2000.

**Banerjee:2001:FRC**

[460] Ayan Banerjee, Anindya Sundar Dhar, and Swapna Banerjee. FPGA realization of a CORDIC based FFT processor for biomedical signal processing. *Microprocessors and Microsystems*, 25(3):131–142, 2001. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933101001065`.

**Chakraborty:2001:CRT**

[461] M. Chakraborty, A. S. Dhar, and S. Pervin. CORDIC realization of the transversal adaptive filter using a trigonometric LMS algorithm. In *2001 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No. 01CH37221)*, volume 2, pages 1225–1228 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Chakraborty:2001:HLA**

[462] M. Chakraborty, S. Pervin, and T. S. Lamba. A hyperbolic LMS algorithm for CORDIC based realization. In *Proceedings of the 11th IEEE Signal Processing Workshop on Statistical Signal Processing (Cat. No. 01TH8563)*, pages 373–376. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Chuang:2001:DCB**

[463] Tso-Pin Chuang, Chao-Chuan Huang, and Shen-Fu Hsiao. Design of a CORDIC-based SIN/COS intellectual property (IP) using predictable sign bits. In *Proceedings of the 27th European Solid-State Circuits Conference, 18–20 September 2001, Villach, Austria*, pages 277–280. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001. URL `https://ieeexplore.ieee.org/document/1471387/`.

**Dietmayer:2001:IOD**

[464] Klaus C. J. Dietmayer. Integrated online diagnosis for AMR-based angular measurement systems. *Sensors and Actuators A: Physical*, 91(1):

12–15, 2001. ISSN 0924-4247. URL `https://www.sciencedirect.com/science/article/pii/S0924424701005076`. Third European Conference on Magnetic Sensors & Actuators.

**Eklund:2001:CEF**

[465] Neil Eklund. CORDIC: elementary function computation using recursive sequences. *College Mathematics Journal*, 32(5):330–333, November 2001. ISSN 0746-8342 (print), 1931-1346 (electronic).

**Jung:2001:HSC**

[466] Gunok Jung, Seonki Kim, and G. E. Sobelman. High-speed CORDIC implementations using advanced circuit techniques. In *2001 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No. 01CH37221)*, volume 2, pages 1237–1240 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Kabulepa:2001:LBA**

[467] L. D. Kabulepa, T. Kella, and M. Glesner. Lower bound on the accuracy of the CORDIC-based frequency offset compensation in burst oriented OFDM systems. In *IEEE 54th Vehicular Technology Conference. VTC Fall 2001. Proceedings (Cat. No. 01CH37211)*, volume 2, pages 839–842 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Kabulepa:2001:NAC**

[468] L. D. Kabulepa, T. Kella, T. Pionteck, R. Ludewig, J. Becker, J. Plechinger, and M. Glesner. On the numerical accuracy of CORDIC-based frequency offset compensation in burst oriented OFDM systems. In *ICECS 2001. 8th IEEE International Conference on Electronics, Circuits and Systems (Cat. No. 01EX483)*, volume 2, pages 1069–1072 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Kadam:2001:CID**

[469] S. Kadam, M. Soderstrand, and L. Johnson. CORDIC implementation of digital heterodyne filter in VLSI. In *Conference Record of Thirty-Fifth Asilomar Conference on Signals, Systems and Computers (Cat. No. 01CH37256)*, volume 1, pages 529–532 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Kahan:2001:PDA**

[470] William Kahan. Pseudo-division algorithms for floating-point logarithms and exponentials. May 20, 2001. URL `https://ieeemilestones.ethw.org/w/images/3/30/Wk_pseudo_division_log_exp_may01.pdf`.

**Kharrat:2001:NMI**

[471] M. W. Kharrat, M. Loulou, N. Masmoudi, and L. Kamoun. A new method to implement CORDIC algorithm. In *ICECS 2001. 8th IEEE International Conference on Electronics, Circuits and Systems (Cat. No. 01EX483)*, volume 2, pages 715–718 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Kwak:2001:TST**

[472] Jae-Hyuck Kwak, V. Piuri, and E. E. Swartzlander. Time-shared TMR for fault-tolerant CORDIC processors. In *2001 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No. 01CH37221)*, volume 2, pages 1241–1244 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Lang:2001:HTR**

[473] Tomás Lang and E. Antelo. High-throughput 3D rotations and normalizations. In ????, editor, *Conference Record of the 35th Asilomar Conference on Signals, Systems and Computers*, pages 846–851. ????, ????, 2001.

**Paplinski:2001:RUS**

[474] A. P. Paplinski, N. Bhattacharjee, and C. Greif. Rotating ultrasonic signal vectors with a word-parallel CORDIC processor. In *Proceedings Euromicro Symposium on Digital Systems Design*, pages 254–261. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Park:2001:DPF**

[475] Sang Yoon Park, Nam Ik Cho, Sang Uk Lee, Kichul Kim, and Jisung Oh. Design of 2K/4K/8K-point FFT processor based on CORDIC algorithm in OFDM receiver. In *2001 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing (IEEE Cat. No. 01CH37233)*, volume 2, pages 457–460 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Shiraishi:2001:INA**

[476] Shin'ichi Shiraishi, Miki Haseyama, and Hideo Kitajima. An implementation of a normalized ARMA lattice filter with a CORDIC algorithm. *Electronics and Communications in Japan (Part III: Fundamental Electronic Science)*, 84(4):76–86, 2001. URL `https://onlinelibrary.wiley.com/doi/abs/10.1002/1520-6440%28200104%2984%3A4%3C76%3A%3AAID-ECJC9%3E3.0.CO%3B2-G`.

**Vankka:2001:CA**

[477] Jouko Vankka and Kari Halonen. *CORDIC Algorithm*, pages 23–32. Springer US, 2001. ISBN 1-4757-3395-X.

**Wu:2001:MVR**

[478] Cheng-Shing Wu and An-Yeu Wu. Modified vector rotational CORDIC (MVR-CORDIC) algorithm and architecture. *IEEE transactions on circuits and systems. 2, Analog and digital signal processing*, 48(6):548–561, 2001. CODEN ICSPE5. ISSN 1057-7130 (print), 1558-125X (electronic).

**Wu:2001:NTB**

[479] Cheng-Shing Wu and An-Yeu Wu. A novel trellis-based searching scheme for EEAS-based CORDIC algorithm. In *2001 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No. 01CH37221)*, volume 2, pages 1229–1232. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Wu:2001:UDF**

[480] An-Yeu Wu and Cheng-Shing Wu. A unified design framework for vector rotational CORDIC family based on angle quantization process. In *2001 IEEE International Conference on Acoustics, Speech, and Signal Processing. Proceedings (Cat. No. 01CH37221)*, volume 2, pages 1233–1236. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Yang:2001:LCB**

[481] Yi Yang, Chunyan Wang, M. Omair Ahmad, and M. N. S. Swamy. An online CORDIC based 2-d IDCT implementation using distributed arithmetic. In *Proceedings of the Sixth International Symposium on Signal Processing and its Applications (Cat. No. 01EX467)*, volume 1, pages 296–299. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Yeary:2001:DCP**

[482] M. B. Yeary. Design of a CORDIC processor for mixed-signal A/D conversion. In *IMTC 2001. Proceedings of the 18th IEEE Instrumentation and Measurement Technology Conference. Rediscovering Measurement in the Age of Informatics (Cat. No. 01CH 37188)*, volume 2, pages 733–737. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2001.

**Euh:2002:CVI**

[483] Jeongseon Euh, J. Chittamuru, and W. Burleson. CORDIC vector interpolator for power-aware 3D computer graphics. In *IEEE Workshop on Signal Processing Systems*, pages 240–245. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Gisuthan:2002:PFC**

[484] Bimal Gisuthan and Thambipillai Srikanthan. Pipelining flat CORDIC based trigonometric function generators. *Microelectronics Journal*, 33 (1):77–89, 2002. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S0026269201001070`.

**Grass:2002:DMS**

[485] E. Grass, B. Sarker, and K. Maharatna. A dual-mode synchronous/asynchronous CORDIC processor. In *Proceedings Eighth International Symposium on Asynchronous Circuits and Systems*, pages 76–83. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Kang:2002:ACA**

[486] Chang Yong Kang and E. E. Swartzlander. An analysis of the CORDIC algorithm for direct digital frequency synthesis. In *Proceedings IEEE International Conference on Application- Specific Systems, Architectures, and Processors*, pages 111–119. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Kim:2002:DJE**

[487] Minseok Kim, K. Ichige, and H. Arai. Design of Jacobi EVD processor based on CORDIC for DOA estimation with MUSIC algorithm. In *The 13th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications*, volume 1, pages 120–124. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Kuhlmann:2002:PCP**

[488] Martin Kuhlmann and Keshab K. Parhi. P-CORDIC: a precomputation based rotation CORDIC algorithm. *EURASIP Journal on Advances in Signal Processing*, 2002(9):936–943, September 2002. ISSN 1687-6172 (print), 1687-6180 (electronic).

**Lund:2002:MUC**

[489] T. Lund, M. Aguirre, and A. Torralba. Making use of CORDICs and distributed arithmetic to produce a field-programmable fuzzy logic controller in an FPGA. In *IEEE 2002 28th Annual Conference of the Industrial Electronics Society. IECON 02*, volume 4, pages 3205–3208. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Mondwurf:2002:BCA**

[490] S. W. Mondwurf. Benefits of the CORDIC-algorithm in a versatile COFDM modulator/demodulator design. In *Proceedings of the Fourth IEEE International Caracas Conference on Devices, Circuits and Systems (Cat. No. 02TH8611)*, page T026. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Mondwurf:2002:VCD**

[491] S. W. Mondwurf. Versatile COFDM demodulator design based on the CORDIC-algorithm. *IEEE Transactions on Consumer Electronics*, 48 (3):718–723, 2002. CODEN ITCEDA. ISSN 0098-3063 (print), 1558-4127 (electronic).

**Mondwurf:2002:VCM**

[492] S. W. Mondwurf. Versatile COFDM modulator/demodulator design based on the CORDIC-algorithm. In *2002 Digest of Technical Papers. International Conference on Consumer Electronics (IEEE Cat. No. 02CH37300)*, pages 362–363. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Pineiro:2002:HRL**

[493] J.-A. Pineiro, Miloš D. Ercegovac, and J. D. Bruguera. High-radix logarithm with selection by rounding. In *The IEEE International Conference on Application-Specific Systems, Architectures and Processors, 2002. Proceedings. 17–19 July 2002, San Jose, CA, USA* , pages 101–110. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002. CODEN ???? ISBN 0-7695-1712-9. ISSN 2160-0511. URL `https://ieeexplore.ieee.org/document/1030708/`.

**Ravichandran:2002:IUC**

[494] S. Ravichandran and V. Asari. Implementation of unidirectional CORDIC algorithm using precomputed rotation bits. In *The 2002 45th Midwest Symposium on Circuits and Systems, 2002. MWSCAS-2002.*, volume 3, page III. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Shiraishi:2002:CEH**

[495] S. Shiraishi, M. Haseyama, and H. Kitajima. A cost-effective and high-precision architecture for CORDIC-based adaptive lattice filters. In *2002 IEEE International Symposium on Circuits and Systems. Proceedings (Cat. No. 02CH37353)*, volume 5, page V. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Srikanthan:2002:NTE**

[496] T. Srikanthan and B. Gisuthan. A novel technique for eliminating iterative based computation of polarity of micro-rotations in CORDIC based sine–cosine generators. *Microprocessors and Microsystems*, 26 (5):243–252, 2002. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933102000261`.

**Vadlamani:2002:CCA**

[497] S. Vadlamani and W. Mahmoud. Comparison of CORDIC algorithm implementations on FPGA families. In *Proceedings of the Thirty-Fourth Southeastern Symposium on System Theory (Cat. No. 02EX540)*, pages 192–196. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Valls:2002:ECA**

[498] Javier Valls, Martin Kuhlmann, and Keshab K. Parhi. Evaluation of CORDIC algorithms for FPGA design. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 32(3):207–222, November 2002. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Wu:2002:UVV**

[499] An-Yeu Wu and Cheng-Shing Wu. A unified view for vector rotational CORDIC algorithms and architectures based on angle quantization approach. *IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications*, 49(10):1442–1456, 2002. CODEN ITCAEX. ISSN 1057-7122 (print), 1558-1268 (electronic).

**Yang:2002:DAB**

[500] Yi Yang. A distributed arithmetic-based CORDIC algorithm and its use in the FPGA implementation of the 2-D IDCT. M.A.Sc. thesis, Concordia University, Montreal, QC, Canada, 2002. 90 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/distributed-arithmetic-based-cordic-algorithm-use/docview/305477205/se-2`.

**Yang:2002:FIL**

[501] Yi Yang, Chunyan Wang, M. Omai Ahmad, and M. N. S. Swamy. An FPGA implementation of an on-line radix-4 CORDIC 2-D IDCT core. In *2002 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, page IV. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Yeary:2002:DCP**

[502] M. B. Yeary, R. J. Fink, H. Sundaresan, and D. W. Guidry. Design of a CORDIC processor for mixed-signal A/D conversion. *IEEE Transactions on Instrumentation and Measurement*, 51(4):804–809, 2002. CODEN IEIMAO. ISSN 0018-9456 (print), 1557-9662 (electronic).

**Yu:2002:SDA**

[503] Sungwook Yu and E. E. Swartzlander. A scaled DCT architecture with the CORDIC algorithm. *IEEE Transactions on Signal Processing*, 50(1): 160–167, 2002. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Zhana:2002:IFO**

[504] H. Zhana, Z. Wang, and S. S. Chandra. Implementation of frequency offset correction using CORDIC algorithm for 5 GHz WLAN applications. In *The 8th International Conference on Communication Systems, 2002. ICCS 2002.*, volume 2, pages 983–987 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2002.

**Arrigo:2003:AMC**

[505] J. F. Arrigo and P. M. Chau. Accurate motion capture at high rotational rates using the CORDIC algorithm. In *The Thirty-Seventh Asilomar Conference on Signals, Systems & Computers, 2003*, volume 2, pages 2203–2207. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Cadenas:2003:PPG**

[506] O. Cadenas and G. Megson. Power performance with gated clocks of a pipelined CORDIC core. In *2003 5th International Conference on ASIC Proceedings*, volume 2, pages 1226–1230. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Chen:2003:ACA**

[507] Chuen-Yau Chen and Wen-Chih Liu. Architecture for CORDIC algorithm realization without ROM lookup tables. In *2003 IEEE International Symposium on Circuits and Systems (ISCAS)*, volume 4, page IV. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Chih:2003:FCA**

[508] Jen-Chuan Chih and Sau-Gee Chen. Fast CORDIC algorithm based on a new recoding scheme for rotation angles and variable scale factors. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 33(1–2):19–29, January 2003. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Jianchun:2003:SHS**

[509] Chen Jianchun, Yang Wanhai, and Xu Shaoying. Study on high-speed magnitude approximation for complex vectors. *Journal of Systems Engineering and Electronics*, 14(1):81–85, 2003.

**Kang:2003:CBH**

[510] Chang Yong Kang. *CORDIC-based high-speed direct digital frequency synthesis*. Ph.D. thesis, The University of Texas at Austin, Austin, TX, USA, 2003. 108 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-based-high-speed-direct-digital-frequency/docview/305301506/se-2`.

**Kebbati:2003:AEA**

[511] H. S. Kebbati, J. P. Blonde, and F. Braun. Area efficient and accurate CORDIC processor for motor control drive. In *10th IEEE International Conference on Electronics, Circuits and Systems, 2003. ICECS 2003. Proceedings of the 2003*, volume 1, pages 212–215. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Khayatzadeh:2003:SCD**

[512] A. Khayatzadeh, H. S. Shahhoseini, and M. Naderi. Systolic CORDIC DCT: an effective method for computing 2d-DCT. In *Seventh International Symposium on Signal Processing and Its Applications, 2003. Proceedings.*, volume 2, pages 193–196. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Lin:2003:MSR**

[513] Zhi-Xiu Lin and An-Yeu Wu. Mixed-scaling-rotation CORDIC (MSR-CORDIC) algorithm and architecture for scaling-free high-performance rotational operations. In *2003 IEEE International Conference on Acoustics, Speech, and Signal Processing, 2003. Proceedings. (ICASSP '03).*, volume 2, pages II–653. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Liu:2003:CBA**

[514] Z. Liu, K. Dickson, and J. V. McCanny. CORDIC based application specific instruction set processor for QRD/SVD. In *The Thirty-Seventh Asilomar Conference on Signals, Systems & Computers, 2003*, volume 2, pages 1456–1460 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Liu:2003:FPC**

[515] Z. Liu, K. Dickson, and J. V. McCanny. A floating-point CORDIC based SVD processor. In *Proceedings IEEE International Conference on Application-Specific Systems, Architectures, and Processors. ASAP 2003*, pages 194–203. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Mingqian:2003:CBQ**

[516] Tim Zhong Mingqian, A. S. Madhukumar, and François Chin. *CORDIC based QRD-RLS Adaptive Equalizer for CDMA Systems*, pages 249–256. Springer US, 2003. ISBN 0-387-35618-5.

**Park:2003:FPEa**

[517] Sang Yoon Park and Nam Ik Cho. Fixed point error analysis of CORDIC processor based on the variance propagation. In *2003 IEEE International Conference on Acoustics, Speech, and Signal Processing, 2003. Proceedings. (ICASSP '03).*, volume 2, pages II–565–II–568. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Park:2003:FPEb**

[518] Sang Yoon Park and Nam Ik Cho. Fixed point error analysis of CORDIC processor based on the variance propagation. In *2003 International Conference on Multimedia and Expo. ICME '03. Proceedings (Cat. No. 03TH8698)*, volume 2, pages II–833. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Pineiro:2003:HRI**

[519] J.-A. Piñeiro, Miloš D. Ercegovac, and J. D. Bruguera. High-radix iterative algorithm for powering computation. In Bajard and Schulte [1594], pages 204–211. ISBN 0-7695-1894-X. ISSN 1063-6889. LCCN QA76.6 .S919 2003. URL `http://www.acsel-lab.com/arithmetic/arith16/papers/ARITH16_Pineiro.pdf`. IEEE Computer Society order number PR01894. Selected papers republished in *IEEE Transactions on Computers*, **54**(3) (2005) [575].

**Ravichandran:2003:PCR**

[520] S. Ravichandran and V. Asari. Pre-computation of rotation bits in unidirectional CORDIC for trigonometric and hyperbolic computations. In *IEEE Computer Society Annual Symposium on VLSI, 2003. Proceedings.*, pages 215–216. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Shiraishi:2003:CAC**

[521] S. Shiraishi, M. Haseyama, and H. Kitajima. Convergence analysis of a CORDIC-based gradient adaptive lattice filter. In *Proceedings of the 2003 International Symposium on Circuits and Systems, 2003. ISCAS '03.*, volume 4, page IV. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Sidahao:2003:AFE**

[522] N. Sidahao, G. A. Constantinides, and P. Y. K. Chelrng. Architectures for function evaluation on FPGAs. In ????, editor, *International Symposium on Circuits & Systems. Bangkok*, pages 804–807. ????, ????, 2003.

**Singh:2003:CBC**

[523] Abhishek Singh, D. S. Phatak, T. Goff, M. Riggs, J. Plusquellic, and Chintan Patel. Comparison of branching CORDIC implementations. In *Proceedings IEEE International Conference on Application-Specific Systems, Architectures, and Processors. ASAP 2003*, pages 215–225. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Wu:2003:HPL**

[524] Cheng-Shing Wu, An-Yeu Wu, and Chih-Hsiu Lin. A high-performance/low-latency vector rotational CORDIC architecture based on extended elementary angle set and trellis-based searching schemes. *IEEE transactions on circuits and systems. 2, Analog and digital signal processing*, 50 (9):589–601, 2003. CODEN ICSPE5. ISSN 1057-7130 (print), 1558-125X (electronic).

**Yang:2003:DDF**

[525] Wang Yang Wang Yang, Zhu ke jia Zhu ke jia, and Min Hao Min Hao. A direct digital frequency synthesizer based on CORDIC algorithm implemented with FPGA. In *2003 5th International Conference on ASIC Proceedings*, volume 2, pages 832–835 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**ZuoRen:2003:DMC**

[526] Cheng ZuoRen Cheng ZuoRen, Gao Minglun Gao Minglun, Li Li Li Li, Zhang Duoli Zhang Duoli, and Song Yukun Song Yukun. A design of modified CORDIC-based cosine and sine generator. In *2003 5th International Conference on ASIC Proceedings*, volume 2, pages 765–768 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003.

**Arbaugh:2004:TLC**

[527] Jason Todd Arbaugh. *Table Look-up CORDIC: Effective rotations through angle partitioning.* Ph.D. thesis, The University of Texas at Austin, Austin, TX, USA, 2004. 231 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/table-look-up-cordic-effective-rotations-through/docview/305131572/se-2`.

**Boudabous:2004:IHF**

[528] A. Boudabous, F. Ghozzi, M. W. Kharrat, and N. Masmoudi. Implementation of hyperbolic functions using CORDIC algorithm. In *Proceedings. The 16th International Conference on Microelectronics, 2004. ICM 2004.*, pages 738–741. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Edwards:2004:CCH**

[529] Bruce H. Edwards and Jennifer Lieberman. The convergence of the CORDIC hyperbolic algorithm. In *HERCMA 2003. Proceedings of the 6th*

*Hellenic–European conference on computer mathematics and its applications, Athens, Greece, September 25–27, 2003*, pages 538–542. Athens: LEA, 2004. ISBN 960-87275-1-0; 960-87275-2-9; 960-87275-3-7.

**Ercegovac:2004:CAI**

[530] Miloš D. Ercegovac and Tomás Lang. CORDIC algorithm and implementations. In *Digital Arithmetic*, The Morgan Kaufmann Series in Computer Architecture and Design, chapter 11, pages 608–648. Morgan Kaufmann, San Francisco, 2004. ISSN 15459888. URL `https://www.sciencedirect.com/science/article/pii/B9781558607989500130`.

**Ercegovac:2004:DA**

[531] Miloš Dragutin Ercegovac and Tomás Lang. *Digital Arithmetic*. Morgan Kaufmann Publishers, Los Altos, CA 94022, USA, 2004. ISBN 1-55860-798-6. xxv + 709 pp. LCCN QA76.9.C62 E72 2004. URL `ftp://uiarchive.cso.uiuc.edu/pub/etext/gutenberg/; http://www.loc.gov/catdir/description/els031/2002114337.html; http://www.loc.gov/catdir/toc/els031/2002114337.html`.

**Heyne:2004:PCB**

[532] Benjamin Heyne and Jürgen Götze. A pure CORDIC based FFT for reconfigurable digital signal processing. In *2004 12th European Signal Processing Conference, 06–10 September 2004, Vienna, Austria*, pages 1513–1516. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004. ISBN 3-200-00165-8. URL `https://ieeexplore.ieee.org/document/7079730/`.

**Hormigo:2004:CPV**

[533] Javier Hormigo, Julio Villalba, and Emilio L. Zapata. CORDIC processor for variable-precision interval arithmetic. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 37(1):21–39, May 2004. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Hsiao:2004:MEH**

[534] Shen-Fu Hsiao, Yu-Hen Hu, and Tso-Bing Juang. A memory-efficient and high-speed sine/cosine generator based on parallel CORDIC rotations. *IEEE Signal Processing Letters*, 11(2):152–155, 2004. CODEN ISPLEM. ISSN 1070-9908 (print), 1558-2361 (electronic).

**Janiszewski:2004:FEH**

[535] Ireneusz Janiszewski, Hermann Meuth, and Berhard Hoppe. *FPGA-Efficient Hybrid LUT/CORDIC Architecture*, pages 933–937. Springer-

Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2004. ISBN 3-540-30117-8. ISSN 1611-3349.

**Juang:2004:CPC**

[536] Tso-Bing Juang, Shen-Fu Hsiao, and Ming-Yu Tsai. Para-CORDIC: parallel CORDIC rotation algorithm. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 51(8):1515–1524, 2004. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Lund:2004:FLC**

[537] T. Lund, M. Aguirre, and A. Torrala. Fuzzy logic control via an FPGA: a design using techniques from digital signal processing. In *2004 IEEE International Symposium on Industrial Electronics*, volume 1, pages 555–559 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Ma:2004:PCB**

[538] Jun Ma and K. K. Parhi. Pipelined CORDIC-based state-space orthogonal recursive digital filters using matrix look-ahead. *IEEE Transactions on Signal Processing*, 52(7):2102–2119, 2004. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Maharatna:2004:BCR**

[539] K. Maharatna, A. Troya, S. Banerjee, E. Grass, and M. Krstic. A 16-bit CORDIC rotator for high-speed wireless LAN. In *2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE Cat. No. 04TH8754)*, volume 3, pages 1747–1751 (vol. 3). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Maharatna:2004:CLP**

[540] K. Maharatna, A. Troya, M. Krstic, E. Grass, and U. Jagdhold. A CORDIC like processor for computation of arctangent and absolute magnitude of a vector. In *2004 IEEE International Symposium on Circuits and Systems (IEEE Cat. No. 04CH37512)*, volume 2, pages II–713. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Otte:2004:MSR**

[541] Marius Otte. *Matrixbasierte Signalverarbeitung auf rekonfigurierbaren CORDIC-Architekturen. (German) [Matrix-based signal processing on reconfigurable CORDIC architectures].* Ph.D. thesis, Universität Dortmund, Dortmund, Germany, 2004. URL `https:/`

/login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/matrixbasierte-signalverarbeitung-auf/docview/2343664056/se-2.

**Park:2004:FPE**

[542] Sang Yoon Park and Nam Ik Cho. Fixed-point error analysis of CORDIC processor based on the variance propagation formula. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 51(3):573–584, 2004. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Sarrigeorgidis:2004:ULP**

[543] Konstantinos Sarrigeorgidis and Jan Rabaey. Ultra low power CORDIC processor for wireless communication algorithms. *Journal of VLSI Signal Processing Systems for Signal, Image and Video Technology*, 38(2):115–130, September 2004. ISSN 1387-5485 (print), 1573-0506 (electronic).

**Shiraishi:2004:CAT**

[544] S. Shiraishi, M. Haseyama, and H. Kitajima. A convergence analysis technique for a CORDIC-based ARMA lattice filter. In *2004 IEEE Region 10 Conference TENCON 2004.*, volume A, pages 487–490 (vol. 1). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Shiraishi:2004:CMC**

[545] S. Shiraishi, M. Haseyama, and H. Kitajima. A convergence model for a CORDIC-based ARMA lattice filter. In *2004 IEEE International Symposium on Circuits and Systems (IEEE Cat. No. 04CH37512)*, volume 3, pages III–301. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Simon:2004:ISE**

[546] S. Simon, M. Muller, H. Gryska, A. Wortmann, and S. Buch. An instruction set for the efficient implementation of the CORDIC algorithm. In *2004 IEEE International Symposium on Circuits and Systems (IEEE Cat. No. 04CH37512)*, volume 2, pages II–357. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Subramaniam:2004:SFC**

[547] Meera Subramaniam. Studies on flat CORDIC implementation in field programmable gate arrays (FPGA). M.C.S. thesis, Universiti Malaya, Kuala Lumpur, Malaysia, 2004. 106 pp. URL https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.

com/dissertations-theses/studies-on-flat-cordic-implementation-field/docview/2877961284/se-2.

**Suchitra:2004:HTI**

[548] S. Suchitra, S. K. Lam, and T. Srikanthan. High-throughput image rotation using sign-prediction based redundant CORDIC algorithm. In *2004 International Conference on Image Processing, 2004. ICIP '04.*, volume 4, pages 2833–2836 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Williams:2004:CBS**

[549] L. V. Williams and J. H. Takala. CORDIC-based systolic adaptive equalizer architecture for high data rate CDMA receivers. In *SympoTIC '04. Joint 1st Workshop on Mobile Future & Symposium on Trends In Communications (IEEE Cat. No. 04EX877)*, pages 9–12. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Zaidi:2004:ATE**

[550] T. Zaidi, Q. Chaudry, and S. A. Khan. An area and time efficient collapsed modified CORDIC DDFS architecture for high rate digital receivers. In *8th International Multitopic Conference, 2004. Proceedings of INMIC 2004.*, pages 677–681. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Zhang:2004:MAWa**

[551] Guoping Zhang and F. Chin. Multi-antenna WCDMA receiver design with CORDIC. In *2004 IEEE 15th International Symposium on Personal, Indoor and Mobile Radio Communications (IEEE Cat. No. 04TH8754)*, volume 4, pages 2811–2814 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Zhang:2004:MAWb**

[552] Guoping Zhang and F. Chin. Multi-antenna WCDMA receiver design with CORDIC. In *The 2nd Annual IEEE Northeast Workshop on Circuits and Systems, 2004. NEWCAS 2004*, pages 105–108. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Zhang:2004:PFC**

[553] Guoping Zhang and F. Chen. Parallel FFT with CORDIC for ultra wide band. In *2004 IEEE 15th International Symposium on Personal,*

*Indoor and Mobile Radio Communications (IEEE Cat. No. 04TH8754)*, volume 2, pages 1173–1177 (vol. 2). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2004.

**Ali:2005:CNS**

[554] Usman Ali and Umair Ali Sheikh. CORDIC: Novel sequential and pipelined architectures and performance issues. In *2005 Pakistan Section Multitopic Conference*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Angarita:2005:EFI**

[555] F. Angarita, A. Perez-Pascual, T. Sansaloni, and J. Vails. Efficient FPGA implementation of CORDIC algorithm for circular and linear coordinates. In *International Conference on Field Programmable Logic and Applications, 2005.*, pages 535–538. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Antelo:2005:LLP**

[556] Elisardo Antelo and Julio Villalba. Low latency pipelined circular CORDIC. In Montuschi and Schwarz [1595], pages 280–287. ISBN 0-7695-2366-8. LCCN QA76.9.C62 .S95 2005. URL `http://arith17.polito.it/final/paper-132.pdf`.

**Chakraborty:2005:TFL**

[557] M. Chakraborty, A. S. Dhar, and Moon Ho Lee. A trigonometric formulation of the LMS algorithm for realization on pipelined CORDIC. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 52(9):530–534, 2005. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Chih:2005:CPE**

[558] J.-C. Chih, Kun-Lung Chen, and Sau-Gee Chen. A CORDIC processor with efficient table-lookup schemes for rotations and on-line scale factor compensations. In *2005 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 3315–3318 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Farivar:2005:CBP**

[559] R. Farivar, M. Fazeli, and H. Sarbazi-Azad. A CORDIC-based processor extension for scalar and vector processing. In *19th IEEE International Parallel and Distributed Processing Symposium*, pages 1–7 (??). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Fitzharris:2005:SPC**

[560] Michael Ryan Fitzharris. Super-pipelined CORDIC unit. M.S. thesis, Drexel University, Philadelphia, PA, USA, 2005. 105 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/super-pipelined-cordic-unit/docview/2874122636/se-2`.

**Gilbert:2005:ODP**

[561] G. Gilbert, D. Al-Khalili, and C. Rozon. Optimized distributed processing of scaling factor in CORDIC. In *The 3rd International IEEE-NEWCAS Conference, 2005.*, pages 35–38. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Heyne:2005:CBE**

[562] B. Heyne and Jürgen Götze. A CORDIC based equalizer for multiuser detection in WCDMA systems. In *IEEE Workshop on Signal Processing Systems Design and Implementation, 2005.*, pages 257–261. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Hsiao:2005:EVI**

[563] Shen-Fu Hsiao, Yu Hen Hu, T.-B. Juang, and Chung-Han Lee. Efficient VLSI implementations of fast multiplierless approximated DCT using parameterized hardware modules for silicon intellectual property design. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 52(8): 1568–1579, 2005. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Jiang:2005:FII**

[564] Xiao-Gang Jiang, Jian-Yang Zhou, Jiang-Hong Shi, and Hui-Huang Chen. FPGA implementation of image rotation using modified compensated CORDIC. In *2005 6th International Conference on ASIC*, volume 2, pages 752–756. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Karabernou:2005:RTF**

[565] Si Mahmoud Karabernou and Fayçal Terranti. Real-time FPGA implementation of Hough Transform using gradient and CORDIC algorithm. *Image and Vision Computing*, 23(11):1009–1017, 2005. CODEN IVCODK. ISSN 0262-8856 (print), 1872-8138 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0262885605000922`.

**Kosunen:2005:MQM**

[566] M. Kosunen, J. Vankka, M. Waltari, and K. A. I. Halonen. A multicarrier QAM modulator for WCDMA base-station with on-chip D/A converter. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 13 (2):181–190, 2005. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Lang:2005:HTC**

[567] Tomás Lang and E. Antelo. High-throughput CORDIC-based geometry operations for 3D computer graphics. *IEEE Transactions on Computers*, 54(3):347–361, March 2005. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Lin:2005:MSR**

[568] Chih-Hsiu Lin and An-Yeu Wu. Mixed-scaling-rotation CORDIC (MSR-CORDIC) algorithm and architecture for high-performance vector rotational DSP applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 52(11):2385–2396, 2005. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Liu:2005:ASI**

[569] Zhaohui Liu, K. Dickson, and J. V. McCanny. Application-specific instruction set processor for SoC implementation of modern signal processing algorithms. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 52(4):755–765, 2005. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Maharatna:2005:MVS**

[570] K. Maharatna, S. Banerjee, E. Grass, M. Krstic, and A. Troya. Modified virtually scaling-free adaptive CORDIC rotator algorithm and architecture. *IEEE Transactions on Circuits and Systems for Video Technology*, 15(11):1463–1474, 2005. CODEN ITCTEM. ISSN 1051-8215 (print), 1558-2205 (electronic).

**Molino:2005:NOC**

[571] Andrea Molino and Fabrizio Vacca. A novel, optimized CORDIC core for phase correlation motion estimation. In *2005 13th European Signal Processing Conference, 04–08 September 2005, Antalya, Turkey*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005. ISBN 1-60423-821-6. URL `https://ieeexplore.ieee.org/document/7078408/`.

**Molino:2005:OCC**

[572] A. Molino, F. Vacca, and G. Masera. Optimized CORDIC core for frequency-domain motion estimation. In *IEEE International Conference on Image Processing 2005*, volume 3, pages III–1072. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Park:2005:DPR**

[573] Sang Yoon Park and Nam Ik Cho. Design of perfect reconstruction QMF lattice with signed powers-of-two coefficients using CORDIC algorithm. In *Proceedings. (ICASSP '05). IEEE International Conference on Acoustics, Speech, and Signal Processing, 2005.*, volume 4, pages iv/565–iv/568 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Peng:2005:CBA**

[574] Chia-Sheng Peng, Yuan-Shin Chuang, and Kuei-Ann Wen. CORDIC-based architecture with channel state information for OFDM baseband receiver. *IEEE Transactions on Consumer Electronics*, 51(2):403–412, 2005. CODEN ITCEDA. ISSN 0098-3063 (print), 1558-4127 (electronic).

**Schulte:2005:GEI**

[575] Michael J. Schulte and Jean-Claude Bajard. Guest Editors' introduction: Special issue on computer arithmetic. *IEEE Transactions on Computers*, 54(3):241–242, March 2005. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic). URL `http://csdl.computer.org/comp/trans/tc/2005/03/t0241.pdf; http://csdl.computer.org/dl/trans/tc/2005/03/t0241.htm`.

**Shijie:2005:SSG**

[576] Chen Shijie and Houjun Wang. A study of signal generation based on CORDIC algorithm. In *Proceedings. 2005 International Conference on Communications, Circuits and Systems, 2005*, volume 2, page 1337. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Shiraishi:2005:SSA**

[577] Shin'ichi Shiraishi, Miki Haseyama, and Hideo Kitajima. A steady-state analysis of a CORDIC-based adaptive ARMA lattice filter. In *TENCON 2005 — 2005 IEEE Region 10 Conference*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Sima:2005:CAS**

[578] Mihai Sima, John Glossner, Daniel Iancu, Hua Ye, Andrei Iancu, and A. Joseph Hoane. *CORDIC-Augmented Sandbridge Processor for Channel Equalization*, pages 152–161. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 3-540-31664-7. ISSN 1611-3349.

**Sima:2005:CSK**

[579] M. Sima, M. McGuire, D. Iancu, and J. Glossner. CORDIC scenario for Kalman-based channel estimation. In *PACRIM. 2005 IEEE Pacific Rim Conference on Communications, Computers and signal Processing, 2005.*, pages 165–168. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Suchitra:2005:ESP**

[580] S. Suchitra, S. Sukthankar, T. Srikanthan, and C. T. Clarke. Elimination of sign precomputation in flat CORDIC. In *2005 IEEE International Symposium on Circuits and Systems*, pages 3319–3322 (vol. 4). IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005.

**Vankka:2005:CA**

[581] Jouko Vankka. *CORDIC Algorithm*, chapter 6, pages 81–95. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2005. ISBN 1-4020-3194-7.

**Anguita:2006:FFS**

[582] D. Anguita, S. Pischiutta, S. Ridella, and D. Sterpi. Feed-forward support vector machine without multipliers. *IEEE Transactions on Neural Networks*, 17(5):1328–1331, 2006. CODEN ITNNEP. ISSN 1045-9227 (print), 1941-0093 (electronic).

**Arrigo:2006:PAA**

[583] J. F. Arrigo and P. M. Chau. Power aware attitude computation during rapid rotational motion. *IEEE Transactions on Instrumentation and Measurement*, 55(1):63–69, 2006. CODEN IEIMAO. ISSN 0018-9456 (print), 1557-9662 (electronic).

**Chen:2006:HRA**

[584] Chuen yau Chen and Cheng yuan Lin. High-resolution architecture for CORDIC algorithm realization. In *2006 International Conference on Communications, Circuits and Systems*, volume 1, pages 579–582. IEEE

Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Cui:2006:CDP**

[585] Xiaoxin Cui, Dunshan Yu, Shimin Sheng, and Xiaole Cui. A CORDIC demodulator platform for Digital-IF receiver. In *2006 8th International Conference on Solid-State and Integrated Circuit Technology Proceedings*, pages 2025–2027. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Cui:2006:DIL**

[586] Xiaoxin Cui, Dunshan Yu, Shimin Sheng, and Xiaole Cui. Design and implementation of a 2-level FSK digital modems using CORDIC algorithm. In *APCCAS 2006 — 2006 IEEE Asia Pacific Conference on Circuits and Systems*, pages 1753–1756. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Feng:2006:RAE**

[587] Luo Feng, He Kun, and Wu Shunjun. Research of acquiring eigenvector of real symmetric matrix. In *2006 CIE International Conference on Radar*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Fons:2006:TCE**

[588] Francisco Fons, Mariano Fons, Enrique Cantó, and Mariano López. *Trigonometric Computing Embedded in a Dynamically Reconfigurable CORDIC System-on-Chip*, pages 122–127. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2006. ISBN 3-540-36863-9. ISSN 1611-3349.

**Fu:2006:TSA**

[589] Dengwei Fu and A. N. Willson. A two-stage angle-rotation architecture and its error analysis for efficient digital mixer implementation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 53(3):604–614, 2006. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Garcia:2006:PCD**

[590] Esteban O. Garcia, Rene Cumplido, and Miguel Arias. Pipelined CORDIC design on FPGA for a digital sine and cosine waves generator. In *2006 3rd International Conference on Electrical and Electronics Engineering*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Gilbert:2006:PHP**

[591] Guillaume Gilbert. Parameterized high performance CORDIC processor architectures for FPGAs. M.A.Sc. thesis, Royal Military College of Canada, Kingston, ON, Canada, 2006. 100 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/parameterized-high-performance-cordic-processor/docview/304922484/se-2`.

**Granado:2006:DEC**

[592] J. Granado, A. Torralba, J. Chavez, and V. Baena-Lecuyer. Design of an efficient CORDIC-based architecture for synchronization in OFDM. *IEEE Transactions on Consumer Electronics*, 52(3):774–782, 2006. CODEN ITCEDA. ISSN 0098-3063 (print), 1558-4127 (electronic).

**Hahanov:2006:CTC**

[593] Vladimir Hahanov, Olga Melnikova, Dmitriy Melnik, and Philat Levchenko. CAD tools for CORDIC IP cores generation. In *2006 International Conference — Modern Problems of Radio Engineering, Telecommunications, and Computer Science*, pages 375–378. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Heyne:2006:CEH**

[594] B. Heyne, C. C. Sun, J. Goetze, and S. J. Ruan. A computationally efficient high-quality CORDIC based DCT. In *2006 14th European Signal Processing Conference, 04–08 September 2006, Florence, Italy* , pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006. ISSN 2219-5491. URL `https://ieeexplore.ieee.org/document/7071034/`.

**Jianwen:2006:MIR**

[595] Luo Jianwen and Jong Ching Chuen. Matrix inversion on reconfigurable hardware using binary-coded z-path CORDIC. In *APCCAS 2006 — 2006 IEEE Asia Pacific Conference on Circuits and Systems*, pages 1176–1179. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Jolly:2006:MSA**

[596] E. K. Jolly and M. Fleury. Multi-sector algorithm for hardware acceleration of the general Hough transform. *Image and Vision Computing*, 24 (9):970–976, 2006. CODEN IVCODK. ISSN 0262-8856 (print), 1872-8138 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0262885606000989`.

**Juang:2006:ADE**

[597] Tso-Bing Juang. Area/delay efficient recoding methods for parallel CORDIC rotations. In *APCCAS 2006 — 2006 IEEE Asia Pacific Conference on Circuits and Systems*, pages 1539–1542. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Kang:2006:DPD**

[598] Chang Yong Kang and E. E. Swartzlander. Digit-pipelined direct digital frequency synthesis based on differential CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 53(5):1035–1044, 2006. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Khan:2006:AIM**

[599] Zahid Khan, Tughrul Arslan, John S. Thompson, and Ahmet T. Erdogan. Analysis and implementation of multiple input, multiple output VBLAST receiver from area and power efficiency perspective. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 14(11): 1281–1286, 2006. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**McLenegan:2006:CAA**

[600] Tim McLenegan. The CORDIC algorithm: an area-efficient technique for FPGA-based artificial neural networks: a thesis. M.S. thesis, California Polytechnic State University, San Luis Obispo, CA, USA, 2006. 96 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-algorithm-area-efficient-technique-fpga/docview/2581820886/se-2`.

**Muller:2006:CA**

[601] Jean-Michel Muller. The CORDIC algorithm. In *Elementary Functions: Algorithms and Implementation* [1596], pages 133–156. ISBN 0-8176-4372-9. LCCN QA331 .M866 2006. US$59.95. URL `http://perso.ens-lyon.fr/jean-michel.muller/SecondEdition.html; http://www.springer.com/sgw/cda/frontpage/0,,4-40109-22-72377986-0,00.html`.

**Nagayama:2006:PNF**

[602] S. Nagayama and T. Sasao. Programmable numerical function generators based on quadratic approximation. In ????, editor, *Proceedings of Asia South Pacific Design Automation Conference. Japan*, pages 378–383. ????, ????, 2006.

**Park:2006:DSP**

[603] Sang Yoon Park and Nam Ik Cho. Design of signed powers-of-two coefficient perfect reconstruction QMF bank using CORDIC algorithms. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 53(6): 1254–1265, 2006. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Qian:2006:ACA**

[604] Meng Qian. Application of CORDIC algorithm to neural networks VLSI design. In *The Proceedings of the Multiconference on "Computational Engineering in Systems Applications"*, volume 1, pages 504–508. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Rodrigues:2006:ACU**

[605] Terence K. Rodrigues and Earl E. Swartzlander. Adaptive CORDIC: Using parallel angle recoding to accelerate CORDIC rotations. In *2006 Fortieth Asilomar Conference on Signals, Systems and Computers*, pages 323–327. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Sun:2006:LPH**

[606] Chi chia Sun, Benjamin Heyne, Shanq jang Ruan, and Juergen Goetze. A low-power and high-quality CORDIC based Loeffler DCT. In *2006 International Symposium on VLSI Design, Automation and Test*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Sung:2006:HEL**

[607] Tze yun Sung, Yaw shih Shieh, Chun wang Yu, and Hsi chin Hsin. High-efficiency and low-power architectures for 2-D DCT and IDCT based on CORDIC rotation. In *2006 Seventh International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT'06)*, pages 191–196. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Sung:2006:HEV**

[608] Tze yun Sung, Yaw shih Shieh, Chun wang Yu, and Hsi chin Hsin. A high-efficiency vector interpolator using redundant CORDIC arithmetic in power-aware 3-d graphics rendering. In *2006 Seventh International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT'06)*, pages 44–49. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Valls:2006:UCS**

[609] J. Valls, T. Sansaloni, A. Perez-Pascual, V. Torres, and V. Almenar. The use of CORDIC in software defined radios: a tutorial. *IEEE Communications Magazine*, 44(9):46–50, 2006. CODEN ICOMD9. ISSN 0163-6804 (print), 1558-1896 (electronic).

**Wang:2006:HPF**

[610] Sicong Wang, Zhiping Wen, and Lixin Yu. High-performance fault-tolerant CORDIC processor for space applications. In *2006 1st International Symposium on Systems and Control in Aerospace and Astronautics*, pages 4 pp.–363. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Wang:2006:RAM**

[611] Hongzhi Wang, Pierre Leray, and Jacques Palicot. Reconfigurable architecture for MIMO systems based on CORDIC operators. *Comptes Rendus Physique*, 7(7):735–750, 2006. CODEN CRPOBN. ISSN 1631-0705 (print), 1878-1535 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1631070506001642`. Towards reconfigurable and cognitive communications.

**Wei:2006:NMR**

[612] Chen Wei, Yao Tianren, and Wang Hui. A new method for reduction of PAPR using CORDIC algorithm in WiMAX system. In *2006 International Conference on Communications, Circuits and Systems*, volume 2, pages 1193–1196. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Wei:2006:RPV**

[613] R. Wei, M. H. Jin, J. J. Xia, Z. W. Xie, and H. Liu. Reconfigurable parallel VLSI co-processor for space robot using FPGA. In *2006 IEEE International Conference on Robotics and Biomimetics*, pages 374–379. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Yu:2006:ECD**

[614] Cheng-Ying Yu, Sau-Gee Chen, and Jen-Chuan Chih. Efficient CORDIC designs for multi-mode OFDM FFT. In *2006 IEEE International Conference on Acoustics Speech and Signal Processing Proceedings*, volume 3, page III. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Yu:2006:LMC**

[615] Tzu-Hao Yu, Chi-Li Yu, Kai-Yuan Jheng, and An-Yeu Wu. On-line MSR-CORDIC VLSI architecture with applications to cost-efficient rotation-based adaptive filtering systems. In *2006 IEEE Workshop on Signal Processing Systems Design and Implementation*, pages 422–427. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Zhai:2006:CII**

[616] S. M. Zhai. The CORDIC iterative initial value selection strategy and its hardware implementation. *journal6 (??)*, 43(??):79–80, ???? 2006.

**Zhang:2006:LPC**

[617] Ruiqi Zhang, Jong Hun Han, A. T. Erdogan, and T. Arslan. Low power CORDIC IP core implementation. In *2006 IEEE International Conference on Acoustics Speech and Signal Processing Proceedings*, volume 3, page III. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2006.

**Abche:2007:FIH**

[618] Antoine B. Abche, Aldo Maalouf, Rafic Ayoubi, Elie Karam, and A. M. Alameddine. An FPGA implementation of a high resolution phase shift beamformer. In *2007 IEEE International Conference on Signal Processing and Communications*, pages 1319–1322. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Alexander:2007:IAA**

[619] S. W. Alexander, E. Pfann, and R. W. Stewart. An improved algorithm for assessing the overall quantisation error in FPGA based CORDIC systems computing a vector magnitude. *Microprocessors and Microsystems*, 31(2):87–93, 2007. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933106000408`. Special Issue on FPGA-based Reconfigurable Computing (2).

**Angarita:2007:EMC**

[620] F. Angarita, M. J. Canet, T. Sansaloni, A. Perez-Pascual, and J. Valls. Efficient mapping of CORDIC algorithm for OFDM-based WLAN. *Journal of Signal Processing Systems*, 52(2):181–191, November 2007. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Barrandon:2007:AHR**

[621] L. Barrandon, J. McCormack, T. S. Cooper, and R. Farrell. On the accuracy and hardware requirements of CORDIC-based phased array calibration. In *The Second European Conference on Antennas and Propagation, EuCAP 2007*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Bravo:2007:ESI**

[622] Ignacio Bravo, Pedro Jimenez, Manuel Mazo, Jose Luis Lazaro, Alfredo Gardel, and Marta Marron. Evaluation and selection of internal parameters of a CORDIC-unit for a specific application based on FPGAS. In *2007 IEEE International Symposium on Intelligent Signal Processing*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**DeCaro:2007:MDD**

[623] Davide De Caro, Nicola Petra, and Antonio Giuseppe Maria Strollo. A 380 MHz direct digital synthesizer/mixer with hybrid CORDIC architecture in 0.25 $\mu$ m CMOS. *IEEE Journal of Solid-State Circuits*, 42(1): 151–160, 2007. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**El-Nahas:2007:DIC**

[624] Sharaf El-Din El-Nahas, Ammar Mottie Al Hosainy, and Magdy M. Saeb. Design and implementation of cosine transforms employing a CORDIC processor. In *2007 National Radio Science Conference*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Garrido:2007:EMC**

[625] M. Garrido and J. Grajal. Efficient memoryless CORDIC for FFT computation. In *2007 IEEE International Conference on Acoustics, Speech and Signal Processing — ICASSP '07*, volume 2, pages II–113–II–116. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Gomes:2007:CBQ**

[626] João Gomes and Victor Barroso. A CORDIC-based QR-RLS multichannel lattice filter. In *2007 15th European Signal Processing Conference, 03–07 September 2007, Poznan, Poland*, pages 1043–1047. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007. ISBN 83-921340-4-4. URL `https://ieeexplore.ieee.org/document/7098963/`.

**Granado:2007:OCC**

[627] J. Granado, A. Torralba, J. Chávez, and V. Baena-Lecuyer. Optimization of CORDIC cells in the backward circular rotation mode. *AEU - International Journal of Electronics and Communications*, 61(5):337–340, 2007. ISSN 1434-8411. URL `https://www.sciencedirect.com/science/article/pii/S1434841106000732`.

**Heyne:2007:ECB**

[628] Benjamin Heyne and Jurgen Gotze. Efficient CORDIC based equalizer for STTD encoded MIMO CDMA systems. In *2007 IEEE International Symposium on Signal Processing and Information Technology*, pages 437–442. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Jablonski:2007:LLI**

[629] G. Jablonski and K. Przygoda. Low-latency implementation of coordinate conversion in virtex II pro FPGA. In *2007 14th International Conference on Mixed Design of Integrated Circuits and Systems*, pages 120–123. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Kandeepan:2007:CEB**

[630] Sithamparanathan Kandeepan, Omar Hashmi, and Qian Zheng. A complex-envelope based digital phase locked loop with an arctan phase detector implemented on FPGA and performance analysis. In *2007 6th International Conference on Information, Communications & Signal Processing*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Karabernou:2007:ERT**

[631] Si Mahmoud Karabernou, Lounis Kessal, and Fayçal Terranti. Erratum to "Real-time FPGA implementation of Hough Transform using gradient and CORDIC algorithm" [Image and Vision Computing 23 (2005) 1009–1017]. *Image and Vision Computing*, 25(6):1032, 2007. CODEN IVCODK. ISSN 0262-8856 (print), 1872-8138 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0262885606001831`.

**Kim:2007:LPC**

[632] Young Bok Kim, Yong-Bin Kim, and James T. Doyle. A low power CMOS CORDIC processor design for wireless telecommunication. In *2007 50th Midwest Symposium on Circuits and Systems*, pages 1336–1339. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Liu:2007:ADL**

[633] Guihua Liu and Quanyuan Feng. ASIC design of low-power reconfigurable FFT processor. In *2007 7th International Conference on ASIC*, pages 44–47. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Liu:2007:PFI**

[634] Jie Liu, Zhi Quan, and Yuriy Zakharov. Parallel FPGA implementation of DCD algorithm. In *2007 15th International Conference on Digital Signal Processing*, pages 331–334. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Perwaiz:2007:BSC**

[635] Aqib Perwaiz and Shoab A. Khan. Bit serial CORDIC DDFS design for serial digital down converter. In *2007 Australasian Telecommunication Networks and Applications Conference*, pages 298–302. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Rodrigues:2007:ACU**

[636] Terence Keith Rodrigues. *Adaptive CORDIC: Using parallel angle recoding to accelerate CORDIC rotations*. Ph.D. thesis, The University of Texas at Austin, Austin, TX, USA, 2007. 150 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/adaptive-cordic-using-parallel-angle-recoding/docview/304793675/se-2`.

**Sanchez:2007:CBA**

[637] Jose L. Sanchez, Antonio Jimeno, Higinio Mora, Jeronimo Mora, and Francisco Pujol. A CORDIC-based architecture for high performance decimal calculations. In *2007 IEEE International Symposium on Industrial Electronics*, pages 1951–1956. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Sansaloni:2007:FSA**

[638] Trini Sansaloni, Asun Perez-Pascual, Vicente Torres, VicenÇ Almenar, JosÉ F. Toledo, and Javier Valls. FFT spectrum analyzer project for teaching digital signal processing with FPGA devices. *IEEE Transactions on Education*, 50(3):229–235, 2007. CODEN IEEDAB. ISSN 0018-9359 (print), 1557-9638 (electronic).

**Sathyanarayana:2007:UCB**

[639] Suchitra Sathyanarayana, Ravi Kumar Satzoda, and Srikanthan Thambipillai. Unified CORDIC based processor for image processing. In *2007 15th International Conference on Digital Signal Processing*, pages 343–346. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Seetharaman:2007:SIW**

[640] G. Seetharaman and B. Venkataramani. SOC implementation of wave-pipelined circuits. In *2007 International Conference on Field-Programmable Technology*, pages 9–16. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Seki:2007:CBR**

[641] Katsutoshi Seki, Tomoyoshi Kobori, James Okello, and Masao Ikekawa. A CORDIC-based reconfigurable systolic array processor for MIMO-OFDM wireless communications. In *2007 IEEE Workshop on Signal Processing Systems*, pages 639–644. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Sima:2007:ERS**

[642] Mihai Sima and Michael McGuire. Embedded reconfigurable solution for OFDM detection over fast fading radio channels. In *2007 IEEE Workshop on Signal Processing Systems*, pages 13–18. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Sinha:2007:FPC**

[643] Pavel Sinha, M. N. S. Swamy, and P. K. Meher. Fully-pipelined CORDIC implementation of subspace-based speech enhancement. In *2007 50th Midwest Symposium on Circuits and Systems*, pages 97–100. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Stapenhurst:2007:HRZ**

[644] R. Stapenhurst, K. Maharatna, J. Mathew, J. L. Nunez-Yanez, and D. K. Pradhan. On the hardware reduction of z-datapath of vectoring CORDIC. In *2007 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 3002–3005. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Wei:2007:NCD**

[645] Xueming Wei and Shengyuan Zhou. A novel circuit design based CORDIC for QAM modulator. In *2007 International Conference on Communications, Circuits and Systems*, pages 1197–1199. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Xin:2007:AOD**

[646] Ru Xin, Xiao tong Zhang, Han Li, Qin Wang, and Zhan cai Li. An area optimized direct digital frequency synthesizer based on improved hybrid CORDIC algorithm. In *2007 3rd International Workshop on Signal Design and Its Applications in Communications*, pages 243–246. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Yu:2007:FPP**

[647] Chi-Li Yu, Tzu-Hao Yu, and An-Yeu Wu. On the fixed-point properties of mixed-scaling-rotation CORDIC algorithm. In *2007 IEEE Workshop on Signal Processing Systems*, pages 430–435. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Yutai:2007:ADB**

[648] Wang Yutai, Li Nianqiang, and Zhang Lu. Application of DDS based on DSP in rubidium atomic frequency standard. In *2007 8th International Conference on Electronic Measurement and Instruments*, pages 4–908–4–912. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2007.

**Alim:2008:FIO**

[649] Onsy Abdel Alim, Nemat Elboghdadly, Mahmoud A. Ashour, and Azza M. Elaskary. FPGA implementation for an optimized CORDIC module for OFDM system. In *2008 International Conference on Computer Engineering & Systems*, pages 21–26. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Amruta:2008:LLH**

[650] Gadgil Amruta, Parthe Yogita, Pathak Puja, and P. V. Sriniwas Shastry. Low latency and high accuracy architectures of CORDIC algorithm for cosine calculation on FPGA. In *2008 15th IEEE International Conference on Electronics, Circuits and Systems*, pages 478–481. IEEE Com-

puter Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Amudha:2008:FII**

[651] V. Amudha, B. Venkataramani, and J. Manikandan. FPGA implementation of isolated digit recognition system using modified back propagation algorithm. In *2008 International Conference on Electronic Design*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Antelo:2008:LLP**

[652] Elisardo Antelo, Julio Villalba, and Emilio L. Zapata. A low-latency pipelined 2D and 3D CORDIC processors. *IEEE Transactions on Computers*, 57(3):404–417, March 2008. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Augustine:2008:WNM**

[653] Jonathan James Augustine. *Weaving the net: Missional synergy through CORDIC connectivity*. D.Min. thesis, Drew University, Madison, NJ, USA, 2008. 150 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/weaving-net-missional-synergy-through-cordic/docview/304656458/se-2`.

**Bhattacharyya:2008:CTP**

[654] Kaushik Bhattacharyya and Swapna Banerjee. Computation of two $N$-point IDCT's via a single $N$-point IFFT using radix-4 algorithm & its proposed architecture. In *TENCON 2008 — 2008 IEEE Region 10 Conference*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Boher:2008:ACB**

[655] Laurent Boher, Rodrigue Rabineau, and Maryline Helard. Analysis of CORDIC-based triangularization for MIMO MMSE filtering. In *2008 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 948–951. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Bravo:2008:NHA**

[656] Ignacio Bravo, Manuel Mazo, JosÉ Luis Lazaro, Pedro Jimenez, Alfredo Gardel, and Marta Marron. Novel HW architecture based on FPGAs oriented to solve the eigen problem. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 16(12):1722–1725, 2008. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Coyne:2008:FBC**

[657] Jack Coyne, David Cyganski, and R. James Duckworth. FPGA-based co-processor for singular value array reconciliation tomography. In *2008 16th International Symposium on Field-Programmable Custom Computing Machines*, pages 163–172. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Dick:2008:CCA**

[658] Chris Dick. CORDIC architectures for FPGA computing. In Scott Hauck and André Dehon, editors, *Reconfigurable Computing*, Systems on Silicon, chapter 25, pages 513–537. Morgan Kaufmann, Burlington, 2008. ISSN 18759661. URL `https://www.sciencedirect.com/science/article/pii/B9780123705228500339`.

**Gan:2008:NCA**

[659] Xin biao Gan, Kui Dai, Li bo Huang, Li Shen, and Zhi ying Wang. A new CORDIC algorithm and software implementation based on synchronized data triggering architecture. In *2008 International Conference on Multimedia and Ubiquitous Engineering (mue 2008)*, pages 83–86. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Heyne:2008:ECB**

[660] Benjamin Heyne. *Efficient CORDIC based implementation of selected signal processing algorithms*. Ber. Inf.tech. Aachen: Shaker Verlag; Dortmund: Univ. Dortmund, Fakultät für Elektrotechnik und Informationstechnik (Diss.), 2008. ISBN 3-8322-7746-3. URL `www.shaker.de/de/content/catalogue/index.asp?lang=de&ID=8&ISBN=978-3-8322-7746-8`.

**Hsiao:2008:EDF**

[661] Shen-Fu Hsiao, Hsin-Mau Lee, Yen-Chun Cheng, and Ming-Yu Tsai. Efficient designs of floating-point CORDIC rotation and vectoring operations. In *APCCAS 2008 — 2008 IEEE Asia Pacific Conference on Circuits and Systems*, pages 1422–1425. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Jayshankar:2008:ECD**

[662] Jayshankar. Efficient computation of the DFT of a 2N — point real sequence using FFT with CORDIC based butterflies. In *TENCON 2008 — 2008 IEEE Region 10 Conference*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Jimeno:2008:BBA**

[663] Antonio Jimeno, Higinio Mora, Jose L. Sanchez, and Francisco Pujol. A BCD-based architecture for fast coordinate rotation. *Journal of Systems Architecture*, 54(8):829–840, 2008. CODEN JSARFB. ISSN 1383-7621 (print), 1873-6165 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1383762108000325`.

**Juang:2008:LLA**

[664] Tso-Bing Juang. Low latency angle recoding methods for the higher bit-width parallel CORDIC rotator implementations. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 55(11):1139–1143, 2008. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Kambalapally:2008:CIS**

[665] Prashanth Reddy Kambalapally and Donald S. Zinger. CORDIC implementation of space vector modulation. In *2008 IEEE Industry Applications Society Annual Meeting*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Lakshmi:2008:HSA**

[666] B. Lakshmi and A. S. Dhar. High speed architectural implementation of CORDIC algorithm. In *TENCON 2008 — 2008 IEEE Region 10 Conference*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Lakshmi:2008:LLV**

[667] B. Lakshmi and A. S. Dhar. Low latency VLSI architecture for the radix-4 CORDIC algorithm. In *2008 IEEE Region 10 and the Third international Conference on Industrial and Information Systems*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Laulainen:2008:CTC**

[668] Erkka Laulainen, Lauri Koskinen, Marko Kosunen, and Kari Halonen. Compass tilt compensation algorithm using CORDIC. In *2008 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1188–1191. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Maharatna:2008:RDC**

[669] Koushik Maharatna, Karim El-Shabrawy, and Bashir Al-Hashimi. Reduced $Z$-datapath CORDIC rotator. In *2008 IEEE International Sym-*

*posium on Circuits and Systems (ISCAS)*, pages 3374–3377. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Meena:2008:FBR**

[670] D. Meena and L. G. M. Prakasam. FPGA based real time solution for sensitivity time control. In *4th IEEE International Symposium on Electronic Design, Test and Applications (delta 2008)*, pages 244–248. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Miller:2008:TFS**

[671] Scott Miller, Mihai Sima, and Michael McGuire. Transcedental functions on a shift-enabled reconfigurable device: CORDIC as a case-study. In *2008 42nd Asilomar Conference on Signals, Systems and Computers*, pages 1795–1799. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Mingwei:2008:ASF**

[672] Li Mingwei, Mao Zhen, and Sui Yongsheng. Angular solution to FPGA-based high speed synchro. In *2008 Chinese Control and Decision Conference*, pages 1772–1776. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Naguil:2008:MHC**

[673] J. L. Naguil, E. N. Pereyra Toledo, and W. J. D. Cova. Measurement of the harmonic contents of electric signals using FPGA and switched capacitor filters. In *2008 IEEE/PES Transmission and Distribution Conference and Exposition: Latin America*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Palanisamy:2008:ERC**

[674] P. Palanisamy, R. Thilagavathy, M. Ratheesh Kumar, and A. Srihari. Efficient realization of CORDIC based LDPC decoder for WiMax system. In *2008 International Conference on Signal Processing, Communications and Networking*, pages 41–45. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Parfieniuk:2008:SCP**

[675] Marek Parfieniuk. Shortening the critical path in CORDIC-based approximations of the eight-point DCT. In *2008 International Conference*

*on Signals and Electronic Systems*, pages 405–408. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Sanchez:2008:AII**

[676] Jose-Luis Sanchez, Higinio Mora, Jeronimo Mora, and Antonio Jimeno. Architecture implementation of an improved decimal CORDIC method. In *2008 IEEE International Conference on Computer Design*, pages 95–100. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Shehata:2008:FBB**

[677] Khaled A. Shehata, Mohamed A. Aboul-Dahab, Salwa H. El Ramly, and Karim A. Hamouda. An FPGA based 1-bit all digital transmitter employing delta-sigma modulation with RF output for SDR. In *2008 2nd International Conference on Signals, Circuits and Systems*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Sima:2008:RAT**

[678] Mihai Sima, Michael McGuire, and Scott Miller. Reconfigurable array for transcendental functions calculation. In *Proceedings of the 2005 International Conference on Engineering of Reconfigurable Systems and Algorithms (ERSA 2005)*, pages 49–56. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, December 2008.

**Sumanasena:2008:SFC**

[679] M. G. Buddika Sumanasena. A scale factor correction scheme for the CORDIC algorithm. *IEEE Transactions on Computers*, 57(8):1148–1152, August 2008. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Terauds:2008:CFP**

[680] Maris Terauds, Gatis Valters, Uldis Derums, Nauris Vasilevskis, and Peteris Misans. Comparison of fixed-point arithmetic errors for the FPGA-based CRAIMOT basis function generators. In *2008 NORCHIP*, pages 108–113. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Troya:2008:LPV**

[681] Alfonso Troya, Koushik Maharatna, Milos Krstic, Eckhard Grass, Ulrich Jagdhold, and Rolf Kraemer. Low-power VLSI implementation of the

inner receiver for OFDM-based WLAN systems. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 55(2):672–686, 2008. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Tsai:2008:CAH**

[682] Tsung Han Tsai, Chia-Hao Yeh, and Yu-Jung Huang. CORDIC architecture for Hough Transform applications. In *APCCAS 2008 — 2008 IEEE Asia Pacific Conference on Circuits and Systems*, pages 442–445. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Yao:2008:RTI**

[683] Bin Yao, Haisen Li, Tian Zhou, Baowei Chen, and Haixin Yu. Real-time implementation of multiple sub-array beam-space MUSIC based on FPGA and DSP array. In *2008 Fifth IEEE International Symposium on Embedded Computing*, pages 186–191. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Yili:2008:KCD**

[684] Zheng Yili, Sun Hanxu, Jia Qingxuan, and Shi Guozhen. Kinematics control for a 6-DOF space manipulator based on ARM processor and FPGA co-processor. In *2008 6th IEEE International Conference on Industrial Informatics*, pages 129–134. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Zhou:2008:DCF**

[685] Jie Zhou, Yazhuo Dong, Yong Dou, and Yuanwu Lei. Dynamic configurable floating-point FFT pipelines and hybrid-mode CORDIC on FPGA. In *2008 International Conference on Embedded Software and Systems*, pages 616–620. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Zhou:2008:DPH**

[686] Jie Zhou, Yong Dou, Yuanwu Lei, Jinbo Xu, and Yazhuo Dong. Double precision hybrid-mode floating-point FPGA CORDIC co-processor. In *2008 10th IEEE International Conference on High Performance Computing and Communications*, pages 182–189. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Zhou:2008:HMF**

[687] Jie Zhou, Yong Dou, Yuanwu Lei, and Yazhuo Dong. Hybrid-mode floating-point FPGA CORDIC co-processor. In Woods et al. [1597], pages 256–261. ISBN 3-540-78610-4. ISSN 1611-3349.

**Zou:2008:AIB**

[688] Decai Zou, Xiaochun Lu, Haitao Wu, and Jinsong Xu. Application of IFFT based on CORDIC algorithms in OFDM-UWB system. In *2008 4th International Conference on Wireless Communications, Networking and Mobile Computing*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2008.

**Zou:2008:FIE**

[689] X. Zou. FPGA implementation of exponent function based on CORDIC. *Public Technology*, 10(??):36–37, 2008.

**Adiono:2009:SPC**

[690] Trio Adiono and Randy Saut Purba. Scalable pipelined CORDIC architecture design and implementation in FPGA. In *2009 International Conference on Electrical Engineering and Informatics*, volume 02, pages 646–649. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Arnold:2009:DPR**

[691] Mark G. Arnold and Sylvain Collange. A dual-purpose real/complex logarithmic number system ALU. In Bruguera et al. [1598], pages 15–24. ISBN 0-7695-3670-0, 1-4244-4329-6. ISSN 1063-6889. LCCN QA76.6 .S887 2009. URL `http://www.ac.usc.es/arith19/`.

**Barras:2009:LPB**

[692] David Barras, Robert Meyer-Piening, George von Bueren, Walter Hirt, and Heinz Jaeckel. A low-power baseband ASIC for an energy-collection IR-UWB receiver. *IEEE Journal of Solid-State Circuits*, 44(6):1721–1733, 2009. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Chaitanya:2009:ICB**

[693] K. S. Chaitanya, P. Muralidhar, and C. B. Rama Rao. Implementation of CORDIC based RAKE receiver architecture. In *2009 2nd IEEE International Conference on Computer Science and Information Technology*, pages 563–568. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Cortez:2009:LCD**

[694] Joaquin Cortez, Miguel Bazdresch, and Armando Garcia. Low complexity detector for STBC-VBLAST architecture based on SQRD decomposition. In *2009 IEEE 20th International Symposium on Personal, Indoor*

*and Mobile Radio Communications*, pages 2549–2553. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Dahab:2009:FPD**

[695] Mohamed A. Dahab, Khaled A. Shehata, Salwa H. El Ramly, and Karim A. Hamouda. FPGA prototyping of digital RF transmitter employing delta sigma modulation for SDR. In *2009 National Radio Science Conference, 17–19 March 2009, New Cairo, Egypt*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. ISBN 1-4244-4214-1. ISSN 1110-6980. URL `https://ieeexplore.ieee.org/document/5233994/`.

**DeCaro:2009:DSM**

[696] Davide De Caro, Nicola Petra, and Antonio G. M. Strollo. Digital synthesizer/mixer with hybrid CORDIC multiplier architecture: Error analysis and optimization. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 56(2):364–373, 2009. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Ganai:2009:EDP**

[697] Malay K. Ganai and Franjo Ivančić. Efficient decision procedure for nonlinear arithmetic constraints using CORDIC. In *2009 Formal Methods in Computer-Aided Design*, pages 61–68. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Gao:2009:CAR**

[698] Qiang Gao, Louise Crockett, and Robert Stewart. Coarse angle rotation mode CORDIC based single processing element QR-RLS processor. In *2009 17th European Signal Processing Conference, 24–28 August 2009, Glasgow, Scotland*, pages 1279–1283. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. URL `https://ieeexplore.ieee.org/document/7077607/`.

**Gestner:2009:VIE**

[699] Brian Gestner, Wei Zhang, Xiaoli Ma, and David V. Anderson. VLSI implementation of an effective lattice reduction algorithm with fixed-point considerations. In *2009 IEEE International Conference on Acoustics, Speech and Signal Processing*, pages 577–580. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Groling:2009:HPP**

[700] Ch. Groling, Y. Daaboul, M. Lux, T. Orlik, and W. Schumacher. High-performance position evaluation of optical encoders via a CORDIC algorithm and oversampling techniques on an FPGA. In *2009 13th European Conference on Power Electronics and Applications, 08–10 September 2009, Barcelona, Spain*, pages 1–9. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. URL `https://ieeexplore.ieee.org/document/5278984/`.

**Han:2009:RFO**

[701] Jae-Woong Han and Young-Beom Jang. A residual frequency offset synchronization scheme using a simplified CORDIC algorithm in OFDM systems. In *2009 Australian Communications Theory Workshop*, pages 67–70. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Hu:2009:OAD**

[702] Shuhua Hu, Hui Li, and Jiaqing Huang. An optimal algorithm for designing NCO circuit in mobile communication systems. In *2009 WRI International Conference on Communications and Mobile Computing*, volume 1, pages 372–376. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Khare:2009:HEA**

[703] Kavita Khare, Nilay Khare, and Supriya Aggarwal. Hardware efficient algorithm for complex arithmetic. In *2009 IEEE International Advance Computing Conference*, pages 209–213. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Lakshmi:2009:FIH**

[704] B. Lakshmi and A. S. Dhar. FPGA implementation of a high speed VLSI architecture for CORDIC. In *TENCON 2009 — 2009 IEEE Region 10 Conference*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Lin:2009:RSB**

[705] You-Rong Lin and Jeich Mar. Realization of subspace-based digital beamformer using CORDIC algorithm based on software defined radio architecture. In *2009 IEEE 20th International Symposium on Personal, Indoor and Mobile Radio Communications*, pages 798–802. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Meher:2009:YCA**

[706] Pramod K. Meher, Javier Valls, Tso-Bing Juang, K. Sridharan, and Koushik Maharatna. 50 years of CORDIC: Algorithms, architectures, and applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 56(9):1893–1907, 2009. ISSN 1549-8328 (print), 1558-0806 (electronic). URL `http://eprints.soton.ac.uk/267873/1/tcas1_cordic_review.pdf`.

**Murong:2009:CCA**

[707] Jiang Murong, Yang Jun, Guo Yuedong, Du Xiaogang, and Li Na. Combining CORDIC algorithm and FPGA to design dual core FFT processor. In *2009 International Conference on Industrial Mechatronics and Automation*, pages 68–71. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Narkhede:2009:FIL**

[708] Nitin P. Narkhede and Shyamkant S. Limaye. FPGA implementation of low phase noise oscillator. In *2009 International Conference on Advances in Computing, Control, and Telecommunication Technologies*, pages 244–247. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Nilsson:2009:CRU**

[709] Peter Nilsson. Complexity reductions in unrolled CORDIC architectures. In *2009 16th IEEE International Conference on Electronics, Circuits and Systems — (ICECS 2009)*, pages 868–871. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Park:2009:CBD**

[710] Jong Kang Park, Jong Tae Kim, and Myong-Chul Shin. A CORDIC-based digital protective relay and its architecture. *Microelectronics and Reliability*, 49(4):438–447, 2009. CODEN MCRLAS. ISSN 0026-2714 (print), 1872-941x (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0026271408004307`.

**Reddy:2009:PCA**

[711] P. Sudhakar Reddy and G. Ramachandra Reddy. Performance comparison of autocorrelation and CPRDIC algorithm implemented on FPGA for OFDM based WLAN. In *2009 International Conference on Communication Software and Networks*, pages 575–579. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Sanchez:2009:IMI**

[712] Jose-Luis Sanchez, Higinio Mora, Jeronimo Mora, Fco. Javier Ferrandez, and Antonio Jimeno. An iterative method for improving decimal calculations on computers. *Mathematical and Computer Modelling*, 50 (5):869–878, 2009. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0895717709001496`. Mathematical Models in Medicine & Engineering.

**Senthilvelan:2009:CIS**

[713] Murugappan Senthilvelan, Mihai Sima, Daniel Iancu, Javier Hormigo, and Michael Schulte. CORDIC instruction set extensions for matrix decompositions on software defined radio processors. In *2009 Conference Record of the Forty-Third Asilomar Conference on Signals, Systems and Computers*, pages 1792–1797. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Sharma:2009:ICA**

[714] Satish Sharma, P. N. Ravichandran, Sunil Kulkarni, M. Vanitha, and P. Lakshminarsimahan. Implementation of Para-CORDIC algorithm and its applications in satellite communication. In *2009 International Conference on Advances in Recent Technologies in Communication and Computing*, pages 266–270. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Shuqin:2009:LPD**

[715] Wan Shuqin, Huang Yiding, Zang Kaihong, and Yu Zongguang. A 200MHz low-power direct digital frequency synthesizer based on mixed structure of angle rotation. In *2009 IEEE 8th International Conference on ASIC*, pages 1177–1179. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Suchitra:2009:ACH**

[716] S. Suchitra, R. K. Satzoda, and T. Srikanthan. Accelerating CORDIC for Hough transform. In *Proceedings of the 2009 12th International Symposium on Integrated Circuits, 14–16 December 2009, Singapore*, pages 167–170. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. ISBN 981-08-2468-8. ISSN 2325-0631. URL `https://ieeexplore.ieee.org/document/5403892/`.

**Sugihara:2009:EPP**

[717] Takashi Sugihara, Kentaro Goto, Yoshiaki Konishi, and Takashi Mizuochi. Electronic predistortion by polar coordinate transformation

using the CORDIC algorithm. *Journal of Lightwave Technology*, 27(16): 3607–3613, 2009. CODEN JLTEDG. ISSN 0733-8724 (print), 1558-2213 (electronic).

**Sultan:2009:CHH**

[718] Alan Sultan. CORDIC: How hand calculators calculate. *College Mathematics Journal*, 40(2):87–92, March 2009. CODEN ???? ISSN 0746-8342 (print), 1931-1346 (electronic). URL `http://www.tandfonline.com/doi/abs/10.1080/07468342.2009.11922342`.

**Sun:2009:LCM**

[719] Chi-Chia Sun, Philipp Donner, and Jurgen Gotze. Low-complexity multipurpose IP core for quantized discrete cosine and integer transform. In *2009 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 3014–3017. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Sun:2009:VCD**

[720] Chi-Chia Sun and Jurgen Gotze. VLSI circuit design concept for parallel iterative algorithms in nanoscale. In *2009 9th International Symposium on Communications and Information Technology*, pages 688–692. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Sung:2009:LPH**

[721] Tze-Yun Sung, Lyu-Ting Ko, and Hsi-Chin Hsin. Low-power and high-SFDR direct digital frequency synthesizer based on hybrid CORDIC algorithm. In *2009 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 249–252. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Teichmann:2009:SPA**

[722] Philip Teichmann, Marius Vollmer, Jürgen Fischer, Benjamin Heyne, Jürgen Götze, and Doris Schmitt-Landsiedel. Saving potentials of adiab. logic on system level: a CORDIC-based adiabatic DCT. In *Proceedings of the 2009 12th International Symposium on Integrated Circuits, 14–16 December 2009, Singapore*, pages 105–108. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. ISBN 981-08-2468-8. ISSN 2325-0631. URL `https://ieeexplore.ieee.org/document/5403965/`.

**Vachhani:2009:ECA**

[723] Leena Vachhani, K. Sridharan, and Pramod K. Meher. Efficient CORDIC algorithms and architectures for low area and high throughput implementation. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 56(1):61–65, 2009. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Vachhani:2009:EFR**

[724] Leena Vachhani, K. Sridharan, and Pramod Kumar Meher. Efficient FPGA realization of CORDIC with application to robotic exploration. *IEEE Transactions on Industrial Electronics*, 56(12):4915–4929, 2009. CODEN ITIED6. ISSN 0278-0046 (print), 1557-9948 (electronic).

**Valters:2009:FIE**

[725] Gatis Valters and Peteris Misans. FPGA implementation of elementary generalized unitary rotation. In *2009 NORCHIP*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Vazquez:2009:CDT**

[726] Álvaro Vazquez, Julio Villalba, and Elisardo Antelo. Computation of decimal transcendental functions using the CORDIC algorithm. In *2009 19th IEEE Symposium on Computer Arithmetic*, pages 179–186. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Wang:2009:PDS**

[727] Han Wang, Yousi Zheng, and Xiaokang Lin. A parallel double-step CORDIC algorithm for digital down converter. In *2009 Seventh Annual Communication Networks and Services Research Conference*, pages 257–261. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Wei:2009:NID**

[728] Cui Wei and Wu Siliang. A new implementation of dedicated circuit for CORDIC algorithm. *Chinese Journal of Electronics*, 18(1):69–73, 2009.

**Wen:2009:DIC**

[729] Jing Yuan Wen. Design and implement of CORDIC based high performance FFT. Master's thesis, Nankai University, Tianjin, People's Republic of China, 2009. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/design-`

implement-cordic-based-high-performance/docview/1869947130/se-2.

**Wu:2009:ISD**

[730] Zhigang Wu, Jin Sha, Zhongfeng Wang, Li Li, and Minglun Gao. An improved scaled DCT architecture. *IEEE Transactions on Consumer Electronics*, 55(2):685–689, 2009. CODEN ITCEDA. ISSN 0098-3063 (print), 1558-4127 (electronic).

**Yang:2009:CAB**

[731] Zhihuai Yang, Xiaojun Jin, Huilian Ma, and Zhonghe Jin. CORDIC algorithm based digital detection technique applied in resonator fiber optic gyroscope. *Optical Fiber Technology*, 15(3):328–331, 2009. ISSN 1068-5200. URL https://www.sciencedirect.com/science/article/pii/S1068520009000194.

**Yu:2009:DCD**

[732] Jinshan Yu, Ruitao Zhang, YuJing Li, Dongbing Fu, RuZhang Li, Yafeng Yao, and Tun Li. Digital circuit design for a high-speed direct digital frequency synthesizer. In *2009 IEEE International Conference of Electron Devices and Solid-State Circuits (EDSSC)*, pages 162–165. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009.

**Abdulla:2010:HSR**

[733] Shakeel S. Abdulla, Haewoon Nam, Earl E. Swartzlander, and Jacob A. Abraham. High speed recursion-free CORDIC architecture. In *23rd IEEE International SOC Conference*, pages 65–70. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Akhter:2010:ITLa**

[734] Nasrin Akhter, Kaniz Fatema, Lilatul Fersouse, and Faria Khandaker. Implementation of the trigonometric LMS algorithm using original CORDIC rotation, 2010.

**Akhter:2010:ITLb**

[735] Nasrin Akhter, Kaniz Fatema, Lilatul Fersouse, and Faria Khandaker. Implementation of the trigonometric LMS algorithm using original CORDIC rotation. *International journal of Computer Networks & Communications*, 2(4):84–95, July 2010. ISSN 0974-9322 (print), 0975-2293 (electronic). URL https://doi.org/10.5121/ijcnc.2010.2408.

**Aytore:2010:HAR**

[736] Emrah Aytöre and Ali Ziya Alkar. Highly accurate reduced iteration CORDIC processor algorithm. *International Journal of Electronics Theoretical & Experimental*, 97(2):163–176, February 2010. CODEN IJELA2. ISSN 1362-3060.

**Bhakthavatchalu:2010:CPP**

[737] Ramesh Bhakthavatchalu, M. S. Sinith, Parvathi Nair, and K. Jismi. A comparison of pipelined parallel and iterative CORDIC design on FPGA. In *2010 5th International Conference on Industrial and Information Systems*, pages 239–243. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Bhuria:2010:FIS**

[738] Shoaib Bhuria and P. Muralidhar. FPGA implementation of sine and cosine value generators using CORDIC algorithm for satellite attitude determination and calculators. In *2010 International Conference on Power, Control and Embedded Systems*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Biswal:2010:IKA**

[739] Pradyut Biswal and Swapna Banerjee. Implementation of katsevich algorithm for helical cone-beam computed tomography using CORDIC. In *2010 International Conference on Systems in Medicine and Biology*, pages 313–317. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Chouba:2010:ASD**

[740] Nabil Chouba and Laroussi Bouzaida. A BIST architecture for sigma delta ADC testing based on embedded NOEB self-test and CORDIC algorithm. In *5th International Conference on Design & Technology of Integrated Systems in Nanoscale Era*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**El-Hariry:2010:MCM**

[741] Yassmeen M. El-Hariry and Ahmed H. Madian. MOS current mode logic realization of digital arithmetic circuits. In *2010 International Conference on Microelectronics*, pages 128–131. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Fang:2010:DFP**

[742] Zhao Fang. The design of FFT processor based on CORDIC arithmetic. Master's thesis, Beijing Institute of Technology, Beijing (People's Republic of China), 2010. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/design-fft-processor-based-on-cordic-arithmetic/docview/1868432799/se-2`.

**Glascott-Jones:2010:OEU**

[743] Andrew Glascott-Jones, Philippe Kuntz, Thierry Masson, P. A. Pinconcely, B. Diasparra, A. Tatat, Franck Berny, F. Salvi, M. Fadlallah, and David Kerr-Munslow. *Optimising Efficiency using Hardware Co-Processing for the CORDIC Algorithm*, pages 325–335. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2010. ISBN 3-642-16362-9.

**Gutierrez:2010:FIB**

[744] R. Gutierrez, V. Torres, and J. Valls. FPGA-implementation of $\arctan(Y/X)$ based on logarithmic transformation and LUT-based techniques. *Journal of Systems Architecture*, 56(11):588–596, 2010. CODEN JSARFB. ISSN 1383-7621 (print), 1873-6165 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1383762110000883`. Design Flows and System Architectures for Adaptive Computing on Reconfigurable Platforms.

**He:2010:AIL**

[745] Yuheng He, Rainer Martin, and Attila Michael Bilgic. Approximate iterative least squares algorithms for GPS positioning. In *The 10th IEEE International Symposium on Signal Processing and Information Technology*, pages 231–236. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Hsiao:2010:IFP**

[746] Shen-Fu Hsiao, Chia-Shen Wen, and Hsin-Mau Lee. Implementation of floating-point CORDIC rotation and vectoring based on look up tables and multipliers. In *2010 International Symposium on Next Generation Electronics*, pages 44–47. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Huang:2010:CIR**

[747] Yen-Chang Huang, Pei-Ju Lin, Yu-Jung Huang, and Ming-Dou Ker. CORDIC implementation of RSSI localization method. In *2010 Asia Pacific Conference on Postgraduate Research in Microelectronics and Elec-*

*tronics (PrimeAsia)*, pages 295–298. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Huang:2010:HIT**

[748] Yen-Chang Huang, Chien-Chang Lai, and Yu-Jung Huang. Hardware implementation of triangulation method based on CORDIC algorithm. In *2010 International Symposium on Next Generation Electronics*, pages 128–132. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Huang:2010:RNS**

[749] Pengda Huang and Yiming Pi. Research on novel structure of GPS signal acquisition based on software receiver. In *2010 International Symposium on Intelligent Signal Processing and Communication Systems*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Ismail:2010:EHS**

[750] Yasser Ismail and Magdy A. Bayoumi. Efficient high speed lattice-CORDIC IFFT architecture for DMT transmitter. In *2010 IEEE Workshop On Signal Processing Systems*, pages 151–155. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Ismail:2010:FDT**

[751] Yasser Ismail, Jason McNeely, Mohsen Shaaban, Mayssaa Al Najjar, and Magdy A. Bayoumi. A fast discrete transform architecture for frequency domain motion estimation. In *2010 IEEE International Conference on Image Processing*, pages 1249–1252. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Jaime:2010:ESF**

[752] Francisco J. Jaime, Miguel A. Sánchez, Javier Hormigo, Julio Villalba, and Emilio L. Zapata. Enhanced scaling-free CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 57(7):1654–1662, 2010. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Lakshmi:2010:CAS**

[753] B. Lakshmi and A. S. Dhar. CORDIC architectures: a survey. *VLSI Design*, 2010(1):1–19, 2010. ISSN 1065-514X, 1563-5171. URL `https://onlinelibrary.wiley.com/doi/abs/10.1155/2010/794891`.

**Lakshmi:2010:HSV**

[754] B. Lakshmi. *High speed VLSI CORDIC architectures*. Ph.D. thesis, Indian Institute of Technology, Kharagpur, India, 2010. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/high-speed-vlsi-cordic-architectures/docview/885231323/se-2`.

**Li:2010:CBA**

[755] Xu Li and Wang Qin. CORDIC based algorithm for frequency offset estimation. In *2010 IEEE 12th International Conference on Communication Technology*, pages 817–820. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Li:2010:MCA**

[756] Huan Li and Yan Xin. Modified CORDIC algorithm and its implementation based on FPGA. In *2010 Third International Conference on Intelligent Networks and Intelligent Systems*, pages 618–621. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Liang:2010:DIB**

[757] Lu Liang, Zhang Chun, and Wang Jing Chao. A digital IF based UHF RFID reader transmitter. In *2010 IEEE Asia Pacific Conference on Circuits and Systems*, pages 963–966. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Lin:2010:ICL**

[758] Pei-Ju Lin, Yeng-Chang Huang, Yu-Jung Huang, and Ming-Dou Ker. Implementation of the cosine law for location awareness system. In *2010 Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia)*, pages 255–258. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Liu:2010:DDF**

[759] Pei-Lin Liu, Yi-Ding Huang, Yue Huang, and Shu-Qin Wan. A 300MHz direct digital frequency synthesizer based on improved redundant prediction CORDIC in 0.35um CMOS. In *2010 10th IEEE International Conference on Solid-State and Integrated Circuit Technology*, pages 351–353. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Liu:2010:DII**

[760] Bo Liu. Design and implementation of IP core generator of CORDIC. Master's thesis, Wuhan University of Technology, Wuhan, People's Republic of China, 2010. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/design-implementation-ip-core-generator-cordic/docview/1868720935/se-2`.

**Lofgren:2010:BSC**

[761] Johan Löfgren and Peter Nilsson. Bit-serial CORDIC: Architecture and implementation improvements. In *2010 53rd IEEE International Midwest Symposium on Circuits and Systems*, pages 65–68. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Mandal:2010:ICR**

[762] Amritakar Mandal, Brajesh Kumar Kaushik, K. C. Tyagi, R. P. Agarwal, and Anuj Kumar. Implementation of coordinate rotation algorithm for digital phase locked loop system in in-phase and quadrature channel signal processing. In *2010 3rd International Conference on Emerging Trends in Engineering and Technology*, pages 721–725. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Mandal:2010:VAD**

[763] Amritakar Mandal, K. C. Tyagi, and Brajesh Kumar Kaushik. VLSI architecture design and implementation for application specific CORDIC processor. In *2010 International Conference on Advances in Recent Technologies in Communication and Computing*, pages 191–193. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Mar:2010:SSB**

[764] Jeich Mar, Chi-Cheng Kuo, and Shih-Hao Chou. SDR structure based CFO estimation and compensation circuit for OFDM systems using reconfigurable CORDIC FPGA modules. In *2010 IEEE Asia Pacific Conference on Circuits and Systems*, pages 352–355. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Munoz:2010:FBF**

[765] Daniel M. Muñoz, Diego F. Sanchez, Carlos H. Llanos, and Mauricio Ayala-Rincón. FPGA based floating-point library for CORDIC algo-

rithms. In *2010 VI Southern Programmable Logic Conference (SPL)*, pages 55–60. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Prasad:2010:FID**

[766] M. V. N. V. Prasad, K. C. Ray, and A. S. Dhar. FPGA implementation of discrete fractional Fourier transform. In *2010 International Conference on Signal Processing and Communications (SPCOM)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Prasad:2010:SBB**

[767] Durga Prasad Prasad. SIMD based baseband processor for CORDIC algorithms. M.S. thesis, The University of Texas at Dallas, Dallas, TX, USA, 2010. 114 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/simd-based-baseband-processor-cordic-algorithms/docview/734200378/se-2`.

**Qi:2010:CIP**

[768] Zhenyu Qi, Adam C. Cabe, Robert T. Jones, and Mircea R. Stan. CORDIC implementation with parameterizable ASIC/SoC flow. In *Proceedings of the IEEE SoutheastCon 2010 (SoutheastCon)*, pages 13–16. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Ray:2010:CBV**

[769] Kailash Chandra Ray, Rohit Shukla, and Anindya Sundar Dhar. CORDIC-based VLSI architecture for implementing log polar transformation for real time applications. In *2010 Second International conference on Computing, Communication and Networking Technologies*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Reddy:2010:VIA**

[770] P. Sudhakar Reddy and G. Ramachandra Reddy. VLSI implementation of autocorrelator and CORDIC algorithm for OFDM based WLAN. In *2010 Second International Conference on Communication Software and Networks*, pages 525–531. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Rodrigues:2010:ACU**

[771] Terence K. Rodrigues and Earl E. Swartzlander, Jr. Adaptive CORDIC: Using parallel angle recoding to accelerate rotations. *IEEE Transactions*

*on Computers*, 59(4):522–531, April 2010. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Rongi:2010:CSP**

[772] M. A. Rongi, A. Saparon, and N. H. Marzuki. A CORDIC-Sinusoidal pulse width modulation using silterra 0.18 $\mu$ m CMOS technology. In *2010 International Conference on Electronic Devices, Systems and Applications*, pages 76–81. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Rongi:2010:SPW**

[773] M. A. Rongi, A. Saparon, and M. K. Hamzah. Sinusoidal pulse width modulation using CORDIC algorithm for single phase matrix converter. In *2010 5th IEEE Conference on Industrial Electronics and Applications*, pages 1088–1093. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Schaumont:2010:CC**

[774] Patrick R. Schaumont. *CORDIC Coprocessor*, pages 369–388. Springer US, 2010. ISBN 1-4419-6000-7.

**Senthilvelan:2010:CBL**

[775] Murugappan Senthilvelan, Javier Hormigo, Joon Hwa Chun, Mihai Sima, Daniel Iancu, Michael Schulte, and John Glossner. CORDIC-based LMMSE equalizer for software defined radio. In *2010 International Conference on Embedded Computer Systems: Architectures, Modeling and Simulation*, pages 301–308. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Senthilvelan:2010:CIS**

[776] Murugappan Senthilvelan. *CORDIC instructions for software defined radio*. Ph.D. thesis, The University of Wisconsin — Madison, Madison, WI, USA, 2010. 224 pp. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/cordic-instructions-software-defined-radio/docview/820660550/se-2`.

**Sun:2010:CIC**

[777] Chi-Chia Sun, Ce Zhang, and Juergen Goetze. A configurable IP core for inverse quantized discrete cosine and integer transforms with arbitrary accuracy. In *2010 IEEE Asia Pacific Conference on Circuits and Systems*, pages 915–918. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Szecowka:2010:CSI**

[778] Przemysław M. Szecówka and Piotr Malinowski. CORDIC and SVD implementation in digital hardware. In *Proceedings of the 17th International Conference Mixed Design of Integrated Circuits and Systems — MIXDES 2010, 24–26 June 2010, Wrocław, Poland*, pages 237–242. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010. URL `https://ieeexplore.ieee.org/document/5551655/`.

**Viteri:2010:DCF**

[779] Alejandro Viteri, Amir Zjajo, Thijmen Hamoen, and Nick van der Meijs. Digital Cartesian feedback linearization of switched mode power amplifiers. In *2010 17th IEEE International Conference on Electronics, Circuits and Systems*, pages 890–893. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Wang:2010:HEA**

[780] Tao Wang and Ping Wei. Hardware efficient architectures of improved Jacobi method to solve the eigenproblem. In *2010 2nd International Conference on Computer Engineering and Technology*, volume 6, pages V6–22–V6–25. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Wang:2010:ISA**

[781] Qing Wang, Ziming Zhong, and Xiang Lin. An improved SCS algorithm based on LINC transmitter. In *2010 3rd International Conference on Computer Science and Information Technology*, volume 9, pages 789–792. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Wang:2010:MEF**

[782] Hongzhi Wang, Yves Louët, Jacques Palicot, Laurent Alaus, and Dominique Noguet. Memory-efficient FFT architecture using R-LFSR based CORDIC common operator. In *2010 2nd International Workshop on Cognitive Information Processing*, pages 162–167. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Wawryn:2010:IFI**

[783] Krzysztof Wawryn, Robert T. Wirski, and Bogdan Strzeszewski. Implementation of finite impulse response systems using rotation structures.

In *2010 International Symposium On Information Theory & Its Applications*, pages 606–610. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Wu:2010:NCA**

[784] Peng Wu, Chun He, and Zhu lin Zong. A novel correlation architecture of acquisition for GNSS satellite navigation system receiver based on CORDIC algorithm. In *International Conference on Computational Problem-Solving, 03–05 December 2010, Li Jiang, China*, pages 115–121. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010. URL `https://ieeexplore.ieee.org/document/5696045/`.

**Xiao:2010:RMA**

[785] Xin Xiao, Erdal Oruklu, and Jafar Saniie. Reduced memory architecture for CORDIC-based FFT. In *Proceedings of 2010 IEEE International Symposium on Circuits and Systems*, pages 2690–2693. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Ye:2010:FIC**

[786] Min Ye, Taijun Liu, Yan Ye, Gaoming Xu, and Tiefeng Xu. FPGA implementation of CORDIC-based square root operation for parameter extraction of digital pre-distortion for power amplifiers. In *2010 6th International Conference on Wireless Communications Networking and Mobile Computing (WiCOM)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Yong:2010:RIL**

[787] Jiao Yong, Wang Lu-ya, and Chen Yue-yue. The research and implementation of line anti-aliasing algorithm based on coordinate system rotation. In *2010 International Conference on Audio, Language and Image Processing*, pages 180–184. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, November 2010.

**Yuan:2010:RDB**

[788] Lei Yuan. The realization of DDS based on CORDIC algorithm. Master's thesis, Beijing Institute of Technology, Beijing (People's Republic of China), 2010. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/realization-dds-based-on-cordic-algorithm/docview/1868432812/se-2`.

**Zhu:2010:IFI**

[789] Xiaoping Zhu and Yaowu Chen. Improved FPGA implementation of probabilistic neural network for neural decoding. In *The 2010 International Conference on Apperceiving Computing and Intelligence Analysis Proceeding*, pages 198–202. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2010.

**Acharyya:2011:CRB**

[790] Amit Acharyya, Koushik Maharatna, Bashir M. Al-Hashimi, and Jeff Reeve. Coordinate rotation based low complexity N-D FastICA algorithm and architecture. *IEEE Transactions on Signal Processing*, 59(8): 3997–4011, 2011. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Bhakthavatchalu:2011:CRF**

[791] Ramesh Bhakthavatchalu, Nisha Abdul Kareem, and J. Arya. Comparison of reconfigurable FFT processor implementation using CORDIC and multipliers. In *2011 IEEE Recent Advances in Intelligent Computational Systems*, pages 343–347. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Bhakthavatchalu:2011:LPD**

[792] Ramesh Bhakthavatchalu and Parvathi Nair. Low power design techniques applied to pipelined parallel and iterative CORDIC design. In *2011 3rd International Conference on Electronics Computer Technology*, volume 5, pages 336–340. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Bi:2011:DDF**

[793] Zhuo Bi and Yijun Dai. Datapath design and full custom implementation of radix-2 CORDIC processor. *Procedia Engineering*, 15:3848–3853, 2011. ISSN 1877-7058. URL `https://www.sciencedirect.com/science/article/pii/S1877705811022211`. CEIS 2011.

**Cao:2011:RLD**

[794] Yi-Jiang Cao, Yang Wang, and Tze-Yun Sung. A ROM-less direct digital frequency synthesizer based on a scaling-free CORDIC algorithm. In *Proceedings of 2011 6th International Forum on Strategic Technology*, volume 2, pages 1186–1189. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Chadha:2011:DSBa**

[795] Aman Chadha, Divya Jyoti, and M. G. Bhatia. Design and simulation of an 8-bit dedicated processor for calculating the sine and cosine of an angle using the CORDIC algorithm, 2011. URL `https://arxiv.org/abs/1111.1086`.

**Chadha:2011:DSBb**

[796] Aman Chadha, Divya Jyoti, and M. G. Bhatia. Design and simulation of an 8-bit dedicated processor for calculating the sine and cosine of an angle using the CORDIC algorithm. In ????, editor, *Proceedings of the 2011 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC)*, page ?? IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011. ISBN 1-61284-694-7, 1-61284-766-8.

**Chandrakanth:2011:LLH**

[797] Y. Chandrakanth and M. Praveen Kumar. Low latency & high precision CORDIC architecture using improved parallel angle recoding. In *2011 International Conference on Signal Processing, Communication, Computing and Networking Technologies*, pages 498–501. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Chen:2011:FPC**

[798] Dongdong Chen and Mihai Sima. Fixed-point CORDIC-based $QR$ decomposition by Givens rotations on FPGA. In *2011 International Conference on Reconfigurable Computing and FPGAs*, pages 327–332. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Choudhary:2011:CBI**

[799] Pooja Choudhary and Abhijit Karmakar. CORDIC based implementation of Fast Fourier Transform. In *2011 2nd International Conference on Computer and Communication Technology (ICCCT-2011)*, pages 550–555. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Dai:2011:CAB**

[800] Yi jun Dai and Zhuo Bi. CORDIC algorithm based on FPGA. *Journal of Shanghai University (English Edition)*, 15(4):304–309, August 2011. ISSN 1863-236X.

**Gautam:2011:HED**

[801] Vinay Gautam, Kailash Chandra Ray, and Pauline Haddow. Hardware efficient design of variable length FFT processor. In *14th IEEE International Symposium on Design and Diagnostics of Electronic Circuits and Systems*, pages 309–312. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Gebali:2011:FPA**

[802] Fayez Gebali. Floating-point adaptive CORDIC (FPA-CORDIC) algorithm for elementary function calculation. In *Proceedings of the 2011 IEEE National Aerospace and Electronics Conference (NAECON)*, pages 46–50. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Gong:2011:FIC**

[803] Ren-Xi Gong, Jiong-Quan Wei, Dan Sun, Ling-Ling Xie, Peng-Fei Shu, and Xiao-Bi Meng. FPGA implementation of a CORDIC-based radix-4 FFT processor for real-time harmonic analyzer. In *2011 Seventh International Conference on Natural Computation*, volume 4, pages 1832–1835. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Gonzalez-Espin:2011:ECA**

[804] Fran González-Espín, Emilio Figueres, Gabriel Garcerá, and Iván Patrao. An efficient CORDIC arithmetic unit for 3-phase voltage grid synchronization. In *2011 IEEE International Symposium on Industrial Electronics*, pages 125–130. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Gopikiran:2011:FIF**

[805] G. Gopikiran and R. Thilagavathy. FPGA implementation of floating-point rotation mode CORDIC algorithm. In *2011 International Conference on Signal Processing, Communication, Computing and Networking Technologies*, pages 506–508. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Guan:2011:HIW**

[806] Xin Guan, Henry Zmuda, Jian Li, Lin Du, and Mark Sheplak. Hardware implementation of wideband time domain robust capon beamforming. In *2011 IEEE International Symposium on Antennas and Propagation (APSURSI)*, pages 2849–2852. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Guo:2011:ARV**

[807] Zi wei Guo, Ling juan Miao, and Jun Shen. The analysis on rotation vector algorithm of atypical conic motion in pseudo orthogonal coordinate. In *2011 International Conference on Electronics, Communications and Control (ICECC)*, pages 514–518. IEEE, September 2011.

**Hatai:2011:AIP**

[808] Indranil Hatai, Rakesh Biswas, and Swapna Banerjee. ASIC implementation of a 512-point FFT/IFFT processor for 2D CT image reconstruction algorithm. In *IEEE Technology Students' Symposium*, pages 220–225. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Hsiao:2011:DAR**

[809] Shen-Fu Hsiao, Cheng-Han Lee, Yen-Chun Cheng, and Andrew Lee. Designs of angle-rotation in digital frequency synthesizer/mixer using multi-stage architectures. In *2011 Conference Record of the Forty Fifth Asilomar Conference on Signals, Systems and Computers (ASILOMAR)*, pages 2181–2185. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Huang:2011:FIN**

[810] J.-M. Huang, Z. Chen, H. Guo, and K. Han. *FPGA Implementation of a Novel Type DDS Based on CORDIC Algorithm*, pages 183–188. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2011. ISBN 3-642-23756-8. ISSN 1867-5670.

**Jie:2011:FOR**

[811] Lijun Jie, Shan Ouyang, Qihong Liu, and Liangnian Jin. A fast optimization realization algorithm of through-the-wall radar imaging. In *2011 6th IEEE Conference on Industrial Electronics and Applications*, pages 2227–2230. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Juntao:2011:IGC**

[812] Zhang Juntao and Ma Wenbo. Implementation of general CORDIC IP core based on FPGA. In *2011 IEEE International Conference on Computer Science and Automation Engineering*, volume 3, pages 606–608. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Kaivani:2011:DCR**

[813] Amir Kaivani and Ghassem Jaberipur. Decimal CORDIC rotation based on selection by rounding: Algorithm and architecture. *The Computer Journal*, 54(11):1798–1809, 2011. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic).

**Kao:2011:HPC**

[814] Chi-Chou Kao. High-performance CORDIC rotation algorithm based on look-ahead techniques. *International Journal of Electronics Theoretical & Experimental*, 98(8):1075–1089, August 2011. CODEN IJELA2. ISSN 1362-3060.

**Kim:2011:PCT**

[815] Sunho Kim, Jino Oh, and Sungbin Im. Performance comparison of Taylor series approximation and CORDIC algorithm for open-loop polar transmitters. In *2011 IEEE International Conference on Consumer Electronics (ICCE)*, pages 425–426. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Lakshmi:2011:PCL**

[816] B. Lakshmi and A. S. Dhar. Parallel CORDIC-like architecture: For fast rotation implementation. In *TENCON 2011 — 2011 IEEE Region 10 Conference*, pages 701–705. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Lakshmi:2011:VAL**

[817] B. Lakshmi and A. S. Dhar. VLSI architecture for low latency radix-4 CORDIC. *Computers and Electrical Engineering*, 37(6):1032–1042, 2011. CODEN CPEEBQ. ISSN 0045-7906 (print), 1879-0755 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0045790611001133`.

**Li:2011:DAI**

[818] YuJing Li, LinTao Liu, Xu Huang, RuiTao Zhang, and RuZhang Li. Design and ASIC implementation of high-speed DDC. In *2011 Second International Conference on Digital Manufacturing & Automation*, pages 365–368. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Li:2011:HSD**

[819] Nan Li, Hui Xu, Wei Wang, and Weida Zhang. High-speed digital-controlled variable voltage source with current monitor for EIT application. In *2011 4th International Conference on Biomedical Engineering*

*and Informatics (BMEI)*, volume 2, pages 1110–1113. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Li:2011:IIP**

[820] Xiuliang Li, Hongsheng Li, and Bo Yang. The implementation of improved phase projection method in FPGA. In *2011 International Conference on Electrical and Control Engineering*, pages 4146–4149. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Liao:2011:CBI**

[821] Wei-Ting Liao, W.-C. Chou, Wen-Yen Lin, Kin Fong Lei, Wen-Wei Tsai, and Ming-Yih Lee. CORDIC-based inclination sensing algorithm using three-axis accelerometer-based inertial sensors. In *2011 4th International Conference on Biomedical Engineering and Informatics (BMEI)*, volume 2, pages 708–712. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Mandai:2011:DIC**

[822] Amritakar Mandai, B. K. Kaushik, Brijesh Kumar, and R. P. Agarwal. Design and implementation of CORDIC processor for complex DPLL. In *India International Conference on Power Electronics 2010 (IICPE2010)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Mandal:2011:LAB**

[823] Amritakar Mandal, B. K. Kaushik, Brijesh Kumar, K. C. Tyagi, and R. P. Agarwal. LMS algorithm based error correction technique in inphase and quadrature channel signal processing. In *2011 International Conference on Emerging Trends in Networks and Computer Communications (ETNCC)*, pages 226–229. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Martin:2011:WHS**

[824] Grant Martin. Will hardware and software be codesigned? [Review of *A Practical Introduction to Hardware/Software Codesign* (Schaumont, P.R.; 2010)]. *IEEE Design & Test of Computers*, 28(2):70–73, 2011. ISSN 0740-7475 (print), 1558-1918 (electronic).

**Neji:2011:AFI**

[825] Nihel Neji, Anis Boudabous, Wajdi Kharrat, and Nouri Masmoudi. Architecture and FPGA implementation of the CORDIC algorithm for fin-

gerprints recognition systems. In *Eighth International Multi-Conference on Systems, Signals & Devices*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Nilsson:2011:PRU**

[826] Peter Nilsson and Syed Nadeemuddin. Power reductions in unrolled CORDIC architectures. In *2011 20th European Conference on Circuit Theory and Design (ECCTD)*, pages 705–708. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Oruklu:2011:RML**

[827] Erdal Oruklu, Xin Xiao, and Jafar Saniie. Reduced memory and low power architectures for CORDIC-based FFT processors. *Journal of Signal Processing Systems*, 66(2):129–134, April 2011. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Penubolu:2011:VIS**

[828] Sudhakara Reddy Penubolu and Ramachandra Reddy Gudheti. VLSI implementation of synchronizer and pipelined CORDIC in OFDM receiver for fourth generation wireless LAN applications. In *2011 IEEE 3rd International Conference on Communication Software and Networks*, pages 312–315. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Pouyan:2011:VIL**

[829] Peyman Pouyan, Erik Hertz, and Peter Nilsson. A VLSI implementation of logarithmic and exponential functions using a novel parabolic synthesis methodology compared to the CORDIC algorithm. In *2011 20th European Conference on Circuit Theory and Design (ECCTD)*, pages 709–712. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Qu:2011:DDB**

[830] Xiujie Qu, He Chen, Yubin Zhang, and Yingtao Ding. Design of DDS based on hybrid-CORDIC architecture. *International Journal of Computational Intelligence Systems*, 4(3):306–313, May 2011. ISSN 1875-6883.

**Roegel:2011:RTB**

[831] Denis Roegel. A reconstruction of the tables of Briggs' *Arithmetica logarithmica* (1624). Report ????, LORIA/INRIA Lorraine, Bâtiment A, Technopôle de Nancy-Brabois, 615 rue du jardin botanique, F-54602

Villers-lès-Nancy Cedex, France, January 11, 2011. 334 pp. URL `https://locomat.loria.fr/briggs1624/briggs1624doc.pdf`. Revised 30 November 2014. See [1].

**Ross:2011:DRI**

[832] Dian-Marie Ross, Scott Miller, Mihai Sima, and Curran Crawford. Design rules for implementing CORDIC on FPGAs. In *Proceedings of 2011 IEEE Pacific Rim Conference on Communications, Computers and Signal Processing*, pages 797–802. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Ross:2011:ESP**

[833] Dian-Marie Ross, Scott Miller, Mihai Sima, and Michael McGuire. Exploration of sign precomputation-based CORDIC in reconfigurable systems. In *2011 Conference Record of the Forty Fifth Asilomar Conference on Signals, Systems and Computers (ASILOMAR)*, pages 2186–2191. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Samman:2011:RSP**

[834] Faizal A. Samman, Pongyupinpanich Surapong, and Manfred Glesner. Reconfigurable streaming processor core with interconnected floating-point arithmetic units for multicore adaptive signal processing systems. In *6th International Workshop on Reconfigurable Communication-Centric Systems-on-Chip (ReCoSoC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Sanchez-Romero:2011:FAD**

[835] Jose-Luis Sanchez-Romero, Higinio Mora-Mora, Jeronimo Mora-Pascual, and Antonio Jimeno-Morenilla. Function approximation on decimal operands. *Digital Signal Processing*, 21(2):354–366, 2011. CODEN DSPREJ. ISSN 1051-2004 (print), 1095-4333 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1051200410001557`.

**Sarbishei:2011:FPA**

[836] Omid Sarbishei and Katarzyna Radecka. On the fixed-point accuracy analysis and optimization of FFT units with CORDIC multipliers. In *2011 IEEE 20th Symposium on Computer Arithmetic*, pages 62–69. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Senthilvelan:2011:CIL**

[837] Murugappan Senthilvelan, Meng Yu, Daniel Iancu, Mihai Sima, and Michael Schulte. CORDIC instructions for LDPC decoding on SDR platforms. *Analog Integrated Circuits and Signal Processing*, 69(2–3): 191–206, July 2011. ISSN 1573-1979.

**Sharma:2011:DFS**

[838] Anita Sharma and R. D. Daruwala. Digital frequency(sinusoidal) synthesizer using CORDIC algorithm. In *2011 IEEE 3rd International Conference on Communication Software and Networks*, pages 521–524. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Sun:2011:RRD**

[839] Pan Pan Sun. The research and realization of DDS based on improved CORDIC algorithm. Master's thesis, Beijing Institute of Technology, Beijing (People's Republic of China), 2011. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/research-realization-dds-based-on-improved-cordic/docview/1874930333/se-2`.

**Surapong:2011:PFP**

[840] Pongyupinpanich Surapong and Manfred Glesner. Pipelined floating-point architecture for a phase and magnitude detector based on CORDIC. In *2011 21st International Conference on Field Programmable Logic and Applications*, pages 382–384. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Vashkevich:2011:FIS**

[841] Maxim Vashkevich, Marek Parfieniuk, and Alexander Petrovsky. FPGA implementation of short critical path CORDIC-based approximation of the eight-point DCT, 2011. URL `https://arxiv.org/abs/1110.6865`.

**Yang:2011:CMD**

[842] Yu Chen Yang. C model design and verification of floating-point CORDIC for hardware implementation. Master's thesis, Xian Jiaotong University, Xian, People's Republic of China, 2011. URL `https://login.ezproxy.lib.utah.edu/login?url=https://www.proquest.com/dissertations-theses/c-model-design-verification-floating-point-cordic/docview/1874930256/se-2`.

**Younis:2011:CBA**

[843] S. Younis, A. Al-Dweik, C. C. Tsimenidis, B. S. Sharif, and A. Hazmi. CORDIC based architecture for blind CFO estimation in OFDM systems. In *2011 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)*, pages 359–362. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Zeng:2011:ERB**

[844] Peng Zeng, Fanshui Lu, and Xingqun Zhao. The efficient realization of B mode ultrasonic digital scan conversion based on radix-4 CORDIC algorithm. In *2011 4th International Congress on Image and Signal Processing*, volume 5, pages 2683–2686. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Zhang:2011:DCI**

[845] YanJia Zhang, WeiTao Du, and YaHui Hou. Design of CORDIC IP compiler. In *2011 International Conference on Electric Information and Control Engineering*, pages 4100–4102. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Zhang:2011:DDB**

[846] Yubin Zhang, He Chen, Yingtao Ding, and Xiujie Qu. Design of DDS based on Hybird-CORDIC architecture. *International Journal of Computational Intelligence Systems*, 4(3):306, 2011. ISSN 1875-6883.

**Zhao:2011:PBD**

[847] Zhanxiang Zhao, Tian Xiang, Ming Gao, Chenghao He, Xin Zhang, and Xi Jin. A pipelined beamforming delay calculation architecture in ultrasound imaging system. In *2011 IEEE International Conference on Computer Science and Automation Engineering*, volume 1, pages 162–166. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Zhao:2011:PHP**

[848] Zhanxiang Zhao, Xi Jin, and Xin Zhang. Pipelined high precision beamforming delay calculator for ultrasound imaging. In *2011 International Conference on Field-Programmable Technology*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Zhihua:2011:DNB**

[849] Lei Zhihua and Wang Weilian. The design of NCO based on CORDIC algorithm and implementation in FPGA. In *2011 International Conference on Electronics, Communications and Control (ICECC)*, pages 2902–2905. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2011.

**Aggarwal:2012:ATE**

[850] Supriya Aggarwal, Pramod K. Meher, and Kavita Khare. Area-time efficient scaling-free CORDIC using generalized micro-rotation selection. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 20 (8):1542–1546, 2012. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Aggarwal:2012:DTT**

[851] Supriya Aggarwal and Kavita Khare. Design techniques targeting low-area power-delay product in hyperbolic CORDIC algorithm. *The Computer Journal*, 55(5):616–628, 2012. CODEN CMPJA6. ISSN 0010-4620 (print), 1460-2067 (electronic).

**Aggarwal:2012:HEA**

[852] Supriya Aggarwal and Kavita Khare. Hardware efficient architecture for generating sine/cosine waves. In *2012 25th International Conference on VLSI Design*, pages 57–61. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Aggarwal:2012:LCV**

[853] Supriya Aggarwal and Kavita Khare. Low complexity VLSI implementation of CORDIC-based exponent calculation for neural networks. *International Journal of Electronics Theoretical & Experimental*, 99(11): 1471–1488, November 2012. CODEN IJELA2. ISSN 1362-3060.

**Aggarwal:2012:LOD**

[854] Supriya Aggarwal and Kavita Khare. Leading one detection hyperbolic CORDIC with enhanced range of convergence. *Journal of Signal Processing Systems*, 70(1):49–57, February 2012. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Aggarwal:2012:RSF**

[855] Supriya Aggarwal and Kavita Khare. Redesigned-scale-free CORDIC algorithm based FPGA implementation of window functions to minimize area and latency. *International Journal of Reconfigurable Computing*,

2012(1):185784, 2012. URL `https://onlinelibrary.wiley.com/doi/abs/10.1155/2012/185784`.

**Alim:2012:MCH**

[856] F. Ferhat taleb Alim, K. Messaoudi, S. Seddiki, and O. Kerdjidj. Modified circular Hough transform using FPGA. In *2012 24th International Conference on Microelectronics (ICM)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**An:2012:TFA**

[857] Ting An, Matteo Causo, Lirida Alves de Barros Naviner, and Philippe Matherat. Transient fault analysis of CORDIC processor. In *2012 19th IEEE International Conference on Electronics, Circuits, and Systems (ICECS 2012)*, pages 757–760. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Banerjee:2012:PVA**

[858] Ayan Banerjee and Anindya Sundar Dhar. Pipelined VLSI architecture using CORDIC for transform domain equalizer. *Journal of Signal Processing Systems*, 70(1):39–48, February 2012. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Bi:2012:FCD**

[859] Zhuo Bi and Yijun Dai. Full custom datapath of 16-bit CORDIC. In *2012 IEEE Fifth International Conference on Advanced Computational Intelligence (ICACI)*, pages 993–998. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Brahmachari:2012:LPG**

[860] Amrita Brahmachari and Roy P. Paily. Low power 2.4 GHz RF transmitter for satellite subsystem using CORDIC based frequency translator. In *2012 Ninth International Conference on Wireless and Optical Communications Networks (WOCN)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Canet:2012:FIO**

[861] María José Canet, Javier Valls, Vicenç Almenar, and José Marín-Roig. FPGA implementation of an OFDM-based WLAN receiver. *Microprocessors and Microsystems*, 36(3):232–244, 2012. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933112000142`.

**Causo:2012:PSF**

[862] Matteo Causo, Ting An, and Lirida Alves de Barros Naviner. Parallel scaling-free and area-time efficient CORDIC algorithm. In *2012 19th IEEE International Conference on Electronics, Circuits, and Systems (ICECS 2012)*, pages 149–152. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Chen:2012:IDF**

[863] Dongdong Chen, Liu Han, Younhee Choi, and Seok-Bum Ko. Improved decimal floating-point logarithmic converter based on selection by rounding. *IEEE Transactions on Computers*, 61(5):607–621, May 2012. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Das:2012:DIF**

[864] Abhishek Das, Suraj Dash, A. K. Sahoo, and B. Chitti Babu. Design and implementation of FPGA based linear all digital phase-locked loop. In *2012 Annual IEEE India Conference (INDICON)*, pages 280–285. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Das:2012:NPD**

[865] Abhishek Das, Suraj Dash, B. Chitti Babu, and Ajit Kumar Sahoo. A novel phase detection system for linear all-digital phase locked loop. In *2012 Students Conference on Engineering and Systems*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**deLima:2012:IRA**

[866] E. R. de Lima, T. Barros, G. S. Teles, V. Pimenta, M. A. J. Perez, J. P. S. Vermeeren, and J. E. Bertuzzo. ISDB-T receiver architecture and VLSI implementation in 65 nm CMOS, for fixed-reception high definition digital television. In *2012 IEEE Second International Conference on Consumer Electronics — Berlin (ICCE-Berlin)*, pages 116–120. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Dong:2012:ISP**

[867] Chen Dong, Chen He, Sun Xing, and Pang Long. Implementation of single-precision floating-point trigonometric functions with small area. In *2012 International Conference on Control Engineering and Communication Technology*, pages 589–592. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Gao:2012:DDC**

[868] Li-Peng Gao and Jian Liu. Design of dual-channel AIS digital receiver. In *2012 Second International Conference on Instrumentation, Measurement, Computer, Communication and Control*, pages 238–242. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Gazeau:2012:NLM**

[869] Ivan Gazeau, Dale Miller, and Catuscia Palamidessi. A non-local method for robustness analysis of floating point programs. *arXiv.org*, ??(??):??, February 3, 2012. CODEN ???? ISSN ???? URL `http://arxiv.org/abs/1202.0693`.

**Giannakopoulou:2012:HPA**

[870] Vasiliki Giannakopoulou and Kostas Masselos. Hardware performance analysis of a parametric CORDIC IP. In *2012 International Conference on Signals and Electronic Systems (ICSES)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Hsiao:2012:LCD**

[871] Shen-Fu Hsiao, Chia-Sheng Wen, Cheng-Han Lee, and Andrew Lee. Low-cost designs of rectangular to polar coordinate converters for digital communication. In *2012 IEEE Asia Pacific Conference on Circuits and Systems*, pages 511–514. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Huang:2012:DDC**

[872] Hai Huang, Liyi Xiao, and Zhiwei Liu. Data dependent compression based on reconfigurable DCT using JND algorithm. In *2012 5th International Congress on Image and Signal Processing*, pages 1224–1228. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Jain:2012:NAH**

[873] Rohit Kumar Jain, V. K. Sharma, and K. K. Mahapatra. A new approach for high performance and efficient design of CORDIC processor. In *2012 1st International Conference on Recent Advances in Information Technology (RAIT)*, pages 756–760. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Joseph:2012:FIR**

[874] Edwin Joseph, A. Rajagopal, and K. Karibasappa. FPGA implementation of radix-2 FFT processor based on radix-4 CORDIC. In *2012 Nirma University International Conference on Engineering (NUiCONE)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Juang:2012:OIS**

[875] Ying-Shen Juang, Lu-Ting Ko, Jwu-E. Chen, Tze-Yun Sung, and Hsi-Chin Hsin. Optimization and implementation of scaling-free CORDIC-based direct digital frequency synthesizer for body care area network systems. *Computational and Mathematical Methods in Medicine*, 2012:1–9, 2012. ISSN 1748-670X (print), 1748-6718 (electronic). Id/No 651564.

**Jung:2012:CLP**

[876] In-Seok Jung and Yong-Bin Kim. A CMOS low-power digital polar modulator system integration for WCDMA transmitter. *IEEE Transactions on Industrial Electronics*, 59(2):1154–1160, 2012. CODEN ITIED6. ISSN 0278-0046 (print), 1557-9948 (electronic).

**Li:2012:DIF**

[877] L. S. Li. Design and implementation of floating-point exponential function. *Microelectronics*, 42(??):703–709, ???? 2012.

**Ma:2012:AVP**

[878] Shiyu Ma, Xiaoya Fan, Meng Zhang, and Lichao Sun. An adaptive vector parallel supported transcendental function unit for stream processor. In *2012 9th International Conference on Fuzzy Systems and Knowledge Discovery*, pages 1140–1144. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Madheswaran:2012:IDD**

[879] M. Madheswaran and T. Menakadevi. An improved direct digital synthesizer using hybrid wave pipelining and CORDIC algorithm for software defined radio. *Circuits, systems, and signal processing: CSSP*, 32(3): 1219–1238, October 2012. CODEN CSSPEH. ISSN 1531-5878.

**Mahapatra:2012:FIS**

[880] Chinmaya Mahapatra, Saad Mahboob, Victor C. M. Leung, and Thanos Stouraitis. Fast inverse square root based matrix inverse for MIMO-LTE systems. In *2012 International Conference on Control Engineering and Communication Technology*, pages 321–324. IEEE Computer Society

Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Markovi:2012:CDS**

[881] Dejan Markovi and Robert W. Brodersen. *CORDIC, Divider, Square Root*, pages 91–110. Springer US, 2012. ISBN 1-4419-9660-5.

**Misans:2012:FIE**

[882] Peteris Misans, Uldis Derums, and Vents Kanders. FPGA implementation of elementary generalized unitary rotation with CORDIC based architecture. In *NORCHIP 2012*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Mishra:2012:CRA**

[883] Rajesh Mishra and Amritakar Mandal. Coordinate rotation algorithm based non-linear adaptive decision feedback equalizer. In *International Multi-Conference on Systems, Signals & Devices*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Nakahara:2012:WFF**

[884] Hiroki Nakahara, Hiroyuki Nakanishi, and Tsutomu Sasao. On a wideband Fast Fourier Transform for a radio telescope. *ACM SIGARCH Computer Architecture News*, 40(5):46–51, December 2012. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic). HEART '12 conference proceedings.

**Panda:2012:PEG**

[885] Smruti Ranjan Panda and B. Chitti Babu. Phase estimation for grid synchronization using CORDIC algorithm with SRF-PLL. In *2012 IEEE Students' Conference on Electrical, Electronics and Computer Science*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Park:2012:FPA**

[886] Sang Yoon Park and Ya Jun Yu. Fixed-point analysis and parameter selections of MSR-CORDIC with applications to FFT designs. *IEEE Transactions on Signal Processing*, 60(12):6245–6256, 2012. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Petrovsky:2012:CIL**

[887] Nicolai A. Petrovsky and Marek Parfieniuk. The CORDIC-inside-lifting architecture for constant-coefficient hardware quaternion multipliers. In

*2012 International Conference on Signals and Electronic Systems (ICSES)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Pongyupinpanich:2012:DEF**

[888] S. Pongyupinpanich, F. A. Samman, M. Glesner, and S. Singhaniyom. Design and evaluation of a floating-point division operator based on CORDIC algorithm. In *2012 9th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Prasad:2012:DEA**

[889] N Prasad, Ayas Kanta Swain, and K. K. Mahapatra. Design and error analysis of a scale free CORDIC unit with corrected scale factor. In *2012 Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics*, pages 7–12. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Raajan:2012:CBM**

[890] N. R. Raajan, B. Monisha, K. Vinoth, R. Niranjan, and D. Diwakar Padmanabhan. CORDIC based modified OFDM for pipelined data process. *Procedia Engineering*, 38:3300–3307, 2012. ISSN 1877-7058. URL `https://www.sciencedirect.com/science/article/pii/S1877705812022953`. INTERNATIONAL CONFERENCE ON MODELLING OPTIMIZATION AND COMPUTING.

**Raj:2012:RLC**

[891] Krishna Raj, Praveen Kumar Singh, and Rajkumar Tomar. A review of low cost multiplier using CORDIC subsystem. In *2012 2nd International Conference on Power, Control and Embedded Systems*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Revathi:2012:ADF**

[892] P. Revathi, M. V. Nageswara Rao, and G. R. Locharla. Architecture design and FPGA implementation of CORDIC algorithm for fingerprint recognition applications. *Procedia Technology*, 6:371–378, 2012. ISSN 2212-0173. URL `https://www.sciencedirect.com/science/article/pii/S2212017312005890`. 2nd International Conference on Communication, Computing & Security [ICCCS-2012].

**Ristovic:2012:ICA**

[893] Milica Ristovic, Slobodan Lubura, and Dejan Jokic. Implementation of CORDIC algorithm on FPGA Altera Cyclone. In *2012 20th Telecommunications Forum (TELFOR)*, pages 875–878. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Samman:2012:SSP**

[894] Faizal Arya Samman and Pongyupinpanich Surapong. SPECTRON: Streaming processor specific for adaptronic and biomeditronic applications. In *The 5th 2012 Biomedical Engineering International Conference*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Sanaa:2012:DMS**

[895] W. Sanaa, N. Delaunay, B. Le Gal, D. Dallet, C. Rebai, N. Deltimple, D. Belot, and E. Kerherve. Design of a mixed-signal cartesian feedback loop for a low power zero-IF WCDMA transmitter. In *2012 IEEE 3rd Latin American Symposium on Circuits and Systems (LASCAS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Sanaa:2012:NDP**

[896] W. Sanaa, B. Le Gal, D. Dallet, C. Rebai, N. Deltimple, D. Belot, and E. Kerherve. New digital predistortion design based on mixed-signal Cartesian feedback training for 3G homodyne transmitter. In *10th IEEE International NEWCAS Conference*, pages 93–96. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Sarbishei:2012:FPA**

[897] O. Sarbishei and K. Radecka. Fixed-point accuracy analysis of datapaths with mixed CORDIC and polynomial computations. In *17th Asia and South Pacific Design Automation Conference*, pages 789–794. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Sarkar:2012:VAD**

[898] Sumantra Sarkar and Anindya Sundar Dhar. VLSI architectural design of zoomable real time spectrum analyzer. In *2012 Annual IEEE India Conference (INDICON)*, pages 065–069. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Schaumont:2012:CCP**

[899] Patrick R. Schaumont. *CORDIC Co-processor*, pages 435–455. Springer US, October 2012. ISBN 1-4614-3737-7.

**Shang:2012:IIC**

[900] Yalei Shang. Implementation of IP core of fast sine and cosine operation through FPGA. *Energy Procedia*, 16:1253–1258, 2012. ISSN 1876-6102. URL `https://www.sciencedirect.com/science/article/pii/S187661021200210X`. 2012 International Conference on Future Energy, Environment, and Materials.

**Shi:2012:DPM**

[901] Jiangyi Shi, Mingxing Wang, Yinghui Tian, and Zhe Yang. Design of plural-multiplier based on CORDIC algorithm for FFT application. In *2012 Second International Conference on Intelligent System Design and Engineering Application*, pages 1220–1223. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Shi:2012:NDP**

[902] Jiangyi Shi, Yinghui Tian, Mingxing Wang, and Zhe Yang. A novel design of 1024-point pipelined FFT processor based on CORDIC algorithm. In *2012 Second International Conference on Intelligent System Design and Engineering Application*, pages 80–83. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Shi:2012:NFS**

[903] Dongyuan Shi and Zishu He. A new frequency source based on sigma delta and CORDIC. In *2012 2nd International Conference on Consumer Electronics, Communications and Networks (CECNet)*, pages 2288–2291. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Shreyas:2012:AER**

[904] S. G. Shreyas and Leena Vachhani. Area efficient reconfigurable architecture for current control loop of a servo controller. In *2012 IEEE 7th International Conference on Industrial and Information Systems (ICIIS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Sudha:2012:NMC**

[905] J. Sudha, M. C. Hanumantharaju, V. Venkateswarulu, and Jayalaxmi H. A novel method for computing exponential function using CORDIC algorithm. *Procedia Engineering*, 30:519–528, 2012. ISSN 1877-7058. URL `https://www.sciencedirect.com/science/article/pii/S1877705812009034`. International Conference on Communication Technology and System Design 2011.

**Sun:2012:CIC**

[906] Chi-Chia Sun, Chun-Ying Lin, and Gene-Eu Jan. A configurable IP core for arbitrary inverse quantized transforms with dynamic video resolutions. In *2012 International Symposium on Intelligent Signal Processing and Communications Systems*, pages 640–643. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Vazquez:2012:RFP**

[907] Álvaro Vázquez, Julio Villalba-Moreno, Elisardo Antelo, and Emilio L. Zapata. Redundant floating-point decimal CORDIC algorithm. *IEEE Transactions on Computers*, 61(11):1551–1562, November 2012. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Vinoth:2012:DID**

[908] S. Vinoth, M. SathishKumar, and L. Vanitha. Design and implementation of demodulation technique with complex DPLL using CORDIC algorithm. In *2012 International Conference on Devices, Circuits and Systems (ICDCS)*, pages 384–388. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Vishnoi:2012:AQO**

[909] Upasna Vishnoi, Michael Meixner, and Tobias G. Noll. An approach for quantitative optimization of highly efficient dedicated CORDIC macros as SoC building blocks. In *2012 IEEE International SOC Conference*, pages 242–247. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Wang:2012:HPD**

[910] Xiaochu Wang and Qiujun Mei. High-precision design of DDS based on FPGA. In *2012 Third Global Congress on Intelligent Systems*, pages 386–389. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Xiao:2012:NCB**

[911] Liyi Xiao and Hai Huang. A novel CORDIC based unified architecture for DCT and IDCT. In *2012 International Conference on Optoelectronics and Microelectronics*, pages 496–500. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Xu:2012:FPD**

[912] Qi Xu and ZheMing Duan. A fixed point of DFT/FFT for FPGA platform. In *2012 IEEE International Conference on Computer Science and Automation Engineering (CSAE)*, volume 1, pages 279–282. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Yang:2012:CDS**

[913] Bohan Yang, Dong Wang, and Leibo Liu. Complex division and square-root using CORDIC. In *2012 2nd International Conference on Consumer Electronics, Communications and Networks (CECNet)*, pages 2464–2468. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Yao:2012:DRT**

[914] Xu Yao, Guangmin Sun, Wen-Yen Lin, and Wen-Cheng Chou. The design of a real-time accelerometer-based sleeping position monitoring system and its application on obstructive sleep apnea syndrome. In *2012 International Conference on Systems and Informatics (ICSAI2012)*, pages 1061–1066. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Yu:2012:CBD**

[915] Ji yang Yu, Dan Huang, Nan Pei, Siyang Zhao, Jian Guo, and Yong Xu. CORDIC-based design of matched filter weighted algorithm for pulse compression system. In *2012 IEEE 11th International Conference on Signal Processing*, volume 3, pages 1953–1956. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Zheng:2012:ACC**

[916] Dezhi Zheng, Shaobo Zhang, Yuming Zhang, and Chen Fan. Application of CORDIC in capacitive rotary encoder signal demodulation. In *2012 8th IEEE International Symposium on Instrumentation and Control Technology (ISICT) Proceedings*, pages 61–65. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2012.

**Abubeker:2013:SPI**

[917] K. M. Abubeker, Sabana Backer, and Abey Mathew Varghese. Serial and parallel implementation of CORDIC architecture: a comparative approach. In *2013 Annual International Conference on Emerging Research Areas and 2013 International Conference on Microelectronics, Communications and Renewable Energy*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Agarwal:2013:FMF**

[918] Ashok Agarwal, Lakshmi Boppana, and Ravi Kishore Kodali. A factorization method for FPGA implementation of sample rate converter for a multi-standard radio communications. In *IEEE 2013 Tencon — Spring*, pages 530–534. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Aggarwal:2013:CBW**

[919] Supriya Aggarwal and Kavita Khare. CORDIC-based window implementation to minimise area and pipeline depth. *IET Signal Processing*, 7(5):427–435, 2013. ISSN 1751-9675 (print), 1751-9683 (electronic). URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/iet-spr.2012.0021`.

**Aggarwal:2013:EWA**

[920] Supriya Aggarwal and Kavita Khare. Efficient window-architecture design using completely scaling-free CORDIC pipeline. In *2013 26th International Conference on VLSI Design and 2013 12th International Conference on Embedded Systems*, pages 60–65. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Aggarwal:2013:SFH**

[921] Supriya Aggarwal, Pramod Kumar Meher, and Kavita Khare. Scale-free hyperbolic CORDIC processor and its application to waveform generation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 60 (2):314–326, 2013. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Ahin:2013:CNF**

[922] Suhap Ahin, Adnan Kavak, and Mehmet Ali Çavu Lu. Comparison of number formats on FPGA-based OFDM modem architecture. In *2013 21st Signal Processing and Communications Applications Conference (SIU)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Aulery:2013:SAN**

[923] A. Aulery, D. Dallet, B. Le Gal, N. Deltimple, D. Belot, and E. Kerherve. Study and analysis of a new implementation of a mixed-signal Cartesian feedback for a low power zero-IF WCDMA transmitter. In *2013 IEEE 11th International New Circuits and Systems Conference (NEWCAS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Bangqiang:2013:BLI**

[924] Liu Bangqiang, He Ling, and Yan Xiao. Base-$N$ logarithm implementation on FPGA for the data with random decimal point positions. In *2013 IEEE 9th International Colloquium on Signal Processing and its Applications*, pages 17–20. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Cervantes-Lozano:2013:VAD**

[925] Pedro Cervantes-Lozano, Luis F. Gonzalez-Perez, and Andres D. Garcia-Garcia. A VLSI architecture for the $QR$ decomposition based on the MCGR algorithm. In *2013 International Conference on Reconfigurable Computing and FPGAs (ReConFig)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Chen:2013:CTG**

[926] Wei-Da Chen and Yin-Tsung Hwang. A constant throughput geometric mean decomposition scheme design for wireless MIMO precoding. *IEEE Transactions on Vehicular Technology*, 62(5):2080–2090, 2013. CODEN ITUTA6. ISSN 0018-9545 (print), 1939-9359 (electronic).

**Congiu:2013:SHC**

[927] Andrea Congiu, Andrea Picciau, Massimo Barbaro, and Emanuele Bodano. Scalable hybrid CORDIC-LUT architectures for CG-FFT processors. In *Proceedings of the 2013 9th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*, pages 105–108. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**deDinechin:2013:FPT**

[928] Florent de Dinechin, Matei Istoan, and Guillaume Sergent. Fixed-point trigonometric functions on FPGAs. *ACM SIGARCH Computer Architecture News*, 41(5):83–88, December 2013. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

**Ferhat-Taleb:2013:CID**

[929] F. Alim. Ferhat-Taleb, K. Messaoudi, L. Ait Mohamed, O. Kerdjidj, and S. Seddiki. CORDIC IP description with Handel-C and VHDL languages. In *2013 Signal Processing: Algorithms, Architectures, Arrangements, and Applications (SPA), 26–28 September 2013, Poznan, Poland*, pages 332–336. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013. ISBN 83-62065-17-6. URL `https://ieeexplore.ieee.org/document/6754324/`.

**Geetha:2013:SRB**

[930] K. S. Geetha, Gayathri Jeyaram, and A. Bhagyashree. *Selective Rotation-Based CORDIC Architecture for High-Speed Applications*, pages 317–323. Springer India, 2013. ISBN 81-322-1524-9. ISSN 1876-1119.

**Guerrero-Ramirez:2013:HDE**

[931] Jorge E. Guerrero-Ramírez, Jaime Velasco-Medina, and Julio C. Arce-Clavijo. Hardware design of an eigensolver based on the $QR$ method. In *2013 IEEE 4th Latin American Symposium on Circuits and Systems (LASCAS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Han:2013:FID**

[932] Bing Han, Zengli Yang, and Yahong Rosa Zheng. FPGA implementation of $QR$ decomposition for MIMO-OFDM using four CORDIC cores. In *2013 IEEE International Conference on Communications (ICC)*, pages 4556–4560. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Huang:2013:CBF**

[933] Hai Huang and Liyi Xiao. CORDIC based fast radix-2 DCT algorithm. *IEEE Signal Processing Letters*, 20(5):483–486, 2013. CODEN ISPLEM. ISSN 1070-9908 (print), 1558-2361 (electronic).

**Huang:2013:CBU**

[934] Hai Huang, Liyi Xiao, and Jiaming Liu. CORDIC-based unified architectures for computation of DCT/IDCT/DST/IDST. *Circuits, systems, and signal processing: CSSP*, 33(3):799–814, October 2013. CODEN CSSPEH. ISSN 1531-5878.

**Ibrahim:2013:HIM**

[935] Muhammad Nasir Ibrahim, Chen Kean Tack, Mariani Idroas, Siti Noormaya Bilmas, and Zuraimi Yahya. Hardware implementation of math

module based on CORDIC algorithm using FPGA. In *2013 International Conference on Parallel and Distributed Systems*, pages 628–632. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Jain:2013:CAB**

[936] Anita Jain and Kavita Khare. *3D CORDIC Algorithm Based Cartesian to Spherical Coordinate Converter*, pages 337–344. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 3-642-42024-9. ISSN 1865-0937.

**Kalyani:2013:RFU**

[937] K. Kalyani, D. Sellathambi, and S. Rajaram. Reconfigurable FFT using CORDIC based architecture for MIMO-OFDM receivers. In *2013 International Conference on Information Communication and Embedded Systems (ICICES)*, pages 670–675. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Kamboh:2013:CFP**

[938] Hamid Mehmood Allah Ditta Kamboh and Shoab Ahmed Khan. IS-CORDIC: a fixed-point inverse recoded single iteration CORDIC architecture. *International Journal of Electronics Theoretical & Experimental*, 101(6):789–807, June 2013. CODEN IJELA2. ISSN 1362-3060.

**Kir:2013:FBI**

[939] Burcu Kir, Mehmet Ali Altuncu, and Şuhap Sahin. FPGA based implementation of CORDIC using different number format. In *2013 The International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE)*, pages 444–448. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**KumarM:2013:HPH**

[940] Shanmuga Kumar M., Mohamed Asan Basiri M., and Noor Mahammad Sk. High precision and high speed handheld scientific calculator design using hardware based CORDIC algorithm. *Procedia Engineering*, 64: 56–64, 2013. ISSN 1877-7058. URL `https://www.sciencedirect.com/science/article/pii/S1877705813015907`. International Conference on Design and Manufacturing (IConDM2013).

**Lakshmi:2013:VAP**

[941] B. Lakshmi and A. S. Dhar. VLSI architecture for parallel radix-4 CORDIC. *Microprocessors and Microsystems*, 37(1):79–86, 2013. CODEN

MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933112001925`.

**Liao:2013:PEP**

[942] Wei-Ting Liao, Wen-Yen Lin, Wen-Cheng Cheng, Kin Fong Lei, and Ming-Yih Lee. Precision enhancement and performance evaluation of a CORDIC-based tilting angle identification algorithm for three-axis accelerometers. In *2013 International Symposium on Biometrics and Security Technologies*, pages 187–192. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Lin:2013:ITC**

[943] Kuan Jen Lin and Chien Chih Hou. Implementation of trigonometric custom functions hardware on embedded processor. In *2013 IEEE 2nd Global Conference on Consumer Electronics (GCCE)*, pages 155–157. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Liu:2013:DCL**

[944] Yuxian Liu, Chunhua He, Dachuan Liu, Zhenchuan Yang, and Guizhen Yan. Digital closed-loop driver design of micromechanical gyroscopes based on coordinated rotation digital computer algorithm. In *The 8th Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems*, pages 1145–1148. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Liu:2013:MCF**

[945] Yidong Liu, Lihang Fan, and Tieying Ma. A modified CORDIC FPGA implementation for wave generation. *Circuits, systems, and signal processing: CSSP*, 33(1):321–329, August 2013. CODEN CSSPEH. ISSN 1531-5878.

**Lu:2013:CTL**

[946] Xinying Lu, Yu Zhang, and Zhengqi Zheng. Carrier tracking loop improvement in a new indoor positioning system. In *2013 International Conference on Computational and Information Sciences*, pages 1388–1391. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Malashri:2013:LPM**

[947] A. Malashri and C. Paramasivam. Low power and memory efficient FFT architecture using modified CORDIC algorithm. In *2013 International Conference on Information Communication and Embedded Sys-*

*tems (ICICES)*, pages 1041–1046. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Malik:2013:UCB**

[948] Jamshaid Sarwar Malik, Ahmed Hemani, and N. D. Gohar. Unifying CORDIC and Box–Muller algorithms: an accurate and efficient Gaussian Random Number generator. In *2013 IEEE 24th International Conference on Application-Specific Systems, Architectures and Processors*, pages 277–280. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Manica:2013:PAA**

[949] Jennifer Manica, Roberto Passerone, and Luca Rizzon. Power-aware architectural exploration of the CORDIC algorithm. In *Proceedings of the 2013 9th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*, pages 333–336. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Meher:2013:CDF**

[950] Pramod Kumar Meher and Sang Yoon Park. CORDIC designs for fixed angle of rotation. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 21(2):217–228, 2013. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Moroz:2013:ISF**

[951] Leonid Moroz, Taras Mykytiv, and Martyn Herasym. Improved scaling-free CORDIC algorithm. In *East-West Design & Test Symposium (EWDTS 2013)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Naresh:2013:AEM**

[952] V. Naresh, B. Venkataramani, and R. Raja. An area efficient multiplexer based CORDIC. In *2013 International Conference on Computer Communication and Informatics*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Neji:2013:FIC**

[953] Nihel Neji, Anis Boudabous, Wajdi Kharrat, and Nouri Masmoudi. FPGA implementation of the CORDIC algorithm for fingerprints recognition systems. *International Journal of Computer Applications*, 63(??): 39–45, February 2013. CODEN ???? ISSN 0975-8887. URL `https://www.ijcaonline.org/archives/volume63/number6/10473-5204/`.

**Prasad:2013:FIP**

[954] N Prasad, Ayas Kanta Swain, and K. K. Mahapatra. FPGA implementation of pipelined CORDIC based quadrature direct digital synthesizer with improved SFDR. In *2013 International Conference on Circuits, Power and Computing Technologies (ICCPCT)*, pages 756–760. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Ray:2013:CBV**

[955] Kailash Chandra Ray and Anindya Sundar Dhar. CORDIC-based VLSI architecture for implementing Kaiser–Bessel window in real time spectral analysis. *Journal of Signal Processing Systems*, 74(2):235–244, June 2013. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Sanchez-Romero:2013:AAS**

[956] Jose-Luis Sanchez-Romero, Antonio Jimeno-Morenilla, Rafael Molina-Carmona, and Jose Perez-Martinez. An approach to the application of shift-and-add algorithms on engineering and industrial processes. *Mathematical and Computer Modelling*, 57(7):1800–1806, 2013. CODEN MCMOEG. ISSN 0895-7177 (print), 1872-9479 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0895717711007473`. Public Key Services and Infrastructures EUROPKI-2010-Mathematical Modelling in Engineering & Human Behaviour 2011.

**Saravanan:2013:SCG**

[957] P. Saravanan and S. Ramasamy. Sine/cos generator for direct digital frequency synthesizer using pipelined CORDIC processor. In *2013 Fourth International Conference on Computing, Communications and Networking Technologies (ICCCNT)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Singh:2013:CQS**

[958] Narendra Bahadur Singh, Rupesh Kumar Dutta, and Prashant Singh. CORDIC for QAM and AM signal generation. In *2013 International Conference on Advanced Electronic Systems (ICAES)*, pages 175–179. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Sun:2013:FIP**

[959] Chi-Chia Sun and Juergen Goetze. FPGA implementation of parallel unitary-rotation Jacobi EVD method based on network-on-chip. In *2013*

*International Symposium on Intelligent Signal Processing and Communication Systems*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Sunny:2013:QDM**

[960] Sona Sunny, Jaison Varghese John, and T. J. Apen. Quadrature detection methods for FM demodulation. In *2013 Third International Conference on Advances in Computing and Communications*, pages 433–436. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Tolmachev:2013:MFP**

[961] Alex Tolmachev, Igor Tselniker, Maxim Meltsin, Itzik Sigron, David Dahan, Aviv Shalom, and Moshe Nazarathy. Multiplier-free phase recovery with polar-domain multisymbol-delay-detector. *Journal of Lightwave Technology*, 31(23):3638–3650, 2013. CODEN JLTEDG. ISSN 0733-8724 (print), 1558-2213 (electronic).

**Wong:2013:FRI**

[962] C. C. Wong and C. C. Liu. FPGA realisation of inverse kinematics for biped robot based on CORDIC. *Electronics Letters*, 49(5):332–334, 2013. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic). URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/el.2012.4280`.

**Yao:2013:RHP**

[963] Rui Yao, Shenghua Dai, and Zhengjiao Li. Research of 25 Hz phase sensitive track circuit signal based on CORDIC algorithm. In *2013 IEEE International Conference on Intelligent Rail Transportation Proceedings*, pages 159–162. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Yasodai:2013:EIR**

[964] A. Yasodai and A. V. Ramprasad. An efficient implementation of rotational radix-4 CORDIC based FFT processor. In *2013 IEEE Recent Advances in Intelligent Computational Systems (RAICS)*, pages 37–42. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Yu:2013:NDC**

[965] Wei-Han Yu, Chak-Fong Cheang, Pui-In Mak, Weng-Fai Cheng, Ka-Fai Un, U-Wai Lok, and Rui P. Martins. A nonrecursive digital calibration technique for joint elimination of transmitter and receiver I/Q imbalances

with minimized add-on hardware. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 60(8):462–466, 2013. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Zhang:2013:DIN**

[966] Jianfeng Zhang, Wei Ding, and Hengzhu Liu. *Design and Implementation of a Novel Entirely Covered K 2 CORDIC*, pages 1–8. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2013. ISBN 3-642-41635-7. ISSN 1865-0937.

**Zhou:2013:NMG**

[967] Jinglong Zhou. A new method to generate twiddle factor using CORDIC based radix-4 FFT butterfly. In *2013 International Conference on Communications, Circuits and Systems (ICCCAS)*, volume 2, pages 505–508. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2013.

**Aggarwal:2014:RCA**

[968] Supriya Aggarwal and Pramod K. Meher. Reconfigurable CORDIC architectures for multi-mode and multi-trajectory operations. In *2014 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 2490–2494. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Andreev:2014:EHI**

[969] Andrey Andreev, Evgueni Doukhnitch, Vitaly Egunov, Dmitriy Zharikov, Oleg Shapovalov, and Sergey Artuh. *Evaluation of Hardware Implementations of CORDIC-Like Algorithms in FPGA Using OpenCL Kernels*, pages 228–242. Springer International Publishing, 2014. ISBN 3-319-11854-4. ISSN 1865-0937.

**Bag:2014:DDM**

[970] Joyashree Bag, Subhashis Roy, P. K. Dutta, and Subir Kumar Sarkar. Design of a DPSK modem using CORDIC algorithm and its FPGA implementation. *IETE Journal of Research*, 60(5):355–363, September 2014. ISSN 0974-780X.

**Bansal:2014:MER**

[971] Puneet Bansal, B. S. Dhaliwal, and S. S. Gill. Memory-efficient radix-2 FFT processor using CORDIC algorithm. In *2014 International Conference on Green Computing Communication and Electrical Engineering (ICGCCEE)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Chinnathambi:2014:FIF**

[972] M. Chinnathambi, N. Bharanidharan, and S. Rajaram. FPGA implementation of fast and area efficient CORDIC algorithm. In *2014 International Conference on Communication and Network Technologies*, pages 228–232. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Chu:2014:ESI**

[973] Chun-Yuan Chu, I-Wei Lai, Yi-Yao Lan, and Tzi-Dar Chiueh. Efficient sequential integer CFO and sector identity detection for LTE cell search. *IEEE Wireless Communications Letters*, 3(4):389–392, 2014.

**Clapa:2014:FDC**

[974] Jakub Cłapa, Henryk Błasiński, Kamil Grabowski, and Przemysław Sękalski. A fisheye distortion correction algorithm optimized for hardware implementations. In *2014 Proceedings of the 21st International Conference Mixed Design of Integrated Circuits and Systems (MIXDES)*, pages 415–419. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Deng:2014:LLH**

[975] Lingxuan Deng and Junshe An. A low latency high-throughput elementary function generator based on enhanced double rotation CORDIC. In *2014 IEEE Symposium on Computer Applications and Communications*, pages 125–130. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**El-Motaz:2014:CFF**

[976] Mohammed A. El-Motaz, Omar A. Nasr, and Karim Osama. A CORDIC-friendly FFT architecture. In *2014 International Wireless Communications and Mobile Computing Conference (IWCMC)*, pages 1087–1092. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Exel:2014:TIC**

[977] Reinhard Exel, Thomas Bigler, Thilo Sauter, Paolo Ferrari, Mattia Rizzi, and Alessandra Flammini. Timestamping of IEEE 802.15.4 CSS by CORDIC-based chirp interpolation. In *2014 IEEE International Instrumentation and Measurement Technology Conference (I2MTC) Proceedings*, pages 604–609. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Fu:2014:MMC**

[978] Qimua Fu, Dong Wang, and Xiaoming Ding. Multi-mode CORDIC processor on a dynamically reconfigurable array. In *2014 12th International Conference on Signal Processing (ICSP)*, pages 419–424. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**G:2014:CBH**

[979] Esakkirajan G and Annadurai C. CORDIC based high speed DCT algorithm. In *2014 International Conference on Communication and Signal Processing*, pages 1649–1652. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Huang:2014:CBFa**

[980] Hai Huang, Bo Wu, Weidong Wang, and Tianyang Gao. CORDIC-based fast radix-2 DST algorithms. In *International Conference on Software Intelligence Technologies and Applications & International Conference on Frontiers of Internet of Things 2014*, pages 246–249. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Huang:2014:CBFb**

[981] Hai Huang and Liyi Xiao. CORDIC based fast algorithm for power-of-two point DCT and its efficient VLSI implementation. *Microelectronics Journal*, 45(11):1480–1488, 2014. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S0026269214002201`.

**Huang:2014:CSE**

[982] Yanxiang Huang, Meng Li, Chunshu Li, Peter Debacker, and Liesbet Van der Perre. Computation-skip error resilient scheme for recursive CORDIC. In *2014 IEEE Workshop on Signal Processing Systems (SiPS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Huang:2014:NML**

[983] Shen-Jui Huang and Sau-Gee Chen. A new memoryless and low-latency FFT rotator architecture. In *2014 International Symposium on Integrated Circuits (ISIC)*, pages 180–183. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Hwang:2014:LCG**

[984] Yin-Tsung Hwang, Wei-Da Chen, and Cheng-Ru Hong. A low complexity geometric mean decomposition computing scheme and its high throughput VLSI implementation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 61(4):1170–1182, 2014. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Kalra:2014:CBB**

[985] Parichay Kalra, Anand Kukde, and B. Venkataramani. CORDIC based BPSK modulator. In *2014 International Conference on Computer and Communication Technology (ICCCT)*, pages 335–339. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Kalra:2014:CBU**

[986] Lt. Parichay Kalra, Naresh Vemishetty, and B. Venkatramani. CORDIC based universal modulator. In *2014 Recent Advances in Engineering and Computational Sciences (RAECS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Kapoor:2014:CBR**

[987] Rajan Kapoor, S. Shyam Sundar, and Preetam Kumar. CORDIC based reconfigurable architecture for DS-CDMA/CI transmitter. In *Proceedings of the 2014 IEEE Students' Technology Symposium*, pages 126–131. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Kasap:2014:NFP**

[988] Server Kasap and Soydan Redif. Novel field-programmable gate array architecture for computing the eigenvalue decomposition of para-Hermitian polynomial matrices. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 22(3):522–536, 2014. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Kasliwal:2014:HRD**

[989] Prabha S. Kasliwal, Gaurav Bhand, and B. P. Patil. Hardware realization of discrete convolution using CORDIC and Vedic multiplier. In *2014 Science and Information Conference*, pages 850–854. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Khurshid:2014:HRA**

[990] Burhan Khurshid, Roohie Naz Mir, Animesh Kumar, and Shatish Kumar. A hybrid-radix approach for efficient implementation of unfolded CORDIC architectures for FPGA platforms. In *2014 International Conference on Signal Processing and Integrated Networks (SPIN)*, pages 453–457. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Kosovets:2014:CDM**

[991] M. Kosovets and O. Pavlov. CORDIC differential model of characteristic functions of 3D teragertz FMCW radar. In *2014 24th International Crimean Conference Microwave & Telecommunication Technology*, pages 1017–1018. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Kumar:2014:OTI**

[992] K. A. Arun Kumar. An OFDM transmitter implementation using CORDIC based partially reconfigurable IFFT module. In *2014 3rd International Conference on Eco-friendly Computing and Communication Systems*, pages 266–270. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Leavline:2014:CIB**

[993] E. Jebamalar Leavline, S. Megala, and D. Asir Antony Gnana Singh. CORDIC iterations based architecture for low power and high quality DCT. In *2014 International Conference on Recent Trends in Information Technology*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Lee:2014:MRF**

[994] Jae-Ho Lee, Dong-Joon Choi, Nam-Ho Hur, and Whan-Woo Kim. Measurement results of frequency offset in DVB-C2 receiver. In *16th International Conference on Advanced Communication Technology*, pages 989–993. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Lee:2014:RCB**

[995] Min-Woo Lee, Ji-Hwan Yoon, and Jongsun Park. Reconfigurable CORDIC-based low-power DCT architecture based on data priority. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 22 (5):1060–1068, 2014. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Lin:2014:CAF**

[996] Sun-Ting Lin, Tzu-Hao Wang, Shou-Sheu Lin, and Yan-Bang Li. *CORDIC Algorithm for FPGA Implementation*, pages 57–62. Springer International Publishing, 2014. ISBN 3-319-04573-3. ISSN 1876-1119.

**Liu:2014:BWD**

[997] Tsung-Hsien Liu, Chun-Ning Chiu, Pei-Yu Liu, and Yuan-Sun Chu. Block-wise $QR$-decomposition for the layered and hybrid Alamouti STBC MIMO systems: Algorithms and hardware architectures. *IEEE Transactions on Signal Processing*, 62(18):4737–4747, 2014. CODEN ITPRED. ISSN 1053-587X (print), 1941-0476 (electronic).

**Mane:2014:IDU**

[998] Mansi Mane, Dhanshree Patil, Mukul S. Sutaone, and Akshay Sadalage. Implementation of DCT using variable iterations CORDIC algorithm on FPGA. In *2014 First International Conference on Computational Systems and Communications (ICCSC)*, pages 379–383. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Manikandan:2014:ATE**

[999] M. Manikandan and C. Paramasivam. Area and time efficient hardwired pre-shifted bi-rotation CORDIC design. In *2014 International Conference on Communication and Signal Processing*, pages 1874–1879. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Martinez-Corral:2014:SPA**

[1000] Unai Martinez-Corral, Koldo Basterretxea, and Raul Finker. Scalable parallel architecture for singular value decomposition of large matrices. In *2014 24th International Conference on Field Programmable Logic and Applications (FPL)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Masram:2014:HPA**

[1001] B. Y. Masram and P. T. Karule. High performance analysis of a CORDIC architectures based on FPGA: a comparative approach. In *2014 IEEE International Conference on Advanced Communications, Control and Computing Technologies*, pages 569–574. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Mohanty:2014:DPA**

[1002] Ramanarayan Mohanty, Gonnabhaktula Anirudh, Tapan Pradhan, Bibek Kabi, and Aurobinda Routray. Design and performance analysis of fixed-point Jacobi SVD algorithm on reconfigurable system. *IERI Procedia*, 7:21–27, 2014. ISSN 2212-6678. URL `https://www.sciencedirect.com/science/article/pii/S2212667814000240`. International Conference on Applied Computing, Computer Science, and Computer Engineering (ICACC 2013).

**Moroz:2014:SHS**

[1003] Leonid Moroz, Shinobu Nagayama, Taras Mykytiv, Ihor Kirenko, and Taras Boretskyy. Simple hybrid scaling-free CORDIC solution for FPGAs. *International Journal of Reconfigurable Computing*, 2014(1): 615472, 2014. URL `https://onlinelibrary.wiley.com/doi/abs/10.1155/2014/615472`.

**Neelam:2014:HEF**

[1004] Sapta Girish Neelam. Hardware-efficient FPGA implementation of symbol & carrier synchronization for 16-QAM. In *2014 International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pages 630–634. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Patil:2014:DIF**

[1005] Anupama Patil and Ritu Saini. Design and implementation of FPGA based linear all digital phase-locked loop. In *2014 International Conference on Green Computing Communication and Electrical Engineering (ICGCCEE)*, page 1. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Prasad:2014:EVI**

[1006] N. Prasad, Manas Ranjan Tripathy, Ansuman DiptiSankar Das, Nihar Ranjan Behera, and Ayaskanta Swain. *Efficient VLSI Implementation of CORDIC-Based Direct Digital Synthesizer*, pages 597–603. Springer India, August 2014. ISBN 81-322-2012-9. ISSN 2194-5365.

**Roy:2014:DVI**

[1007] Subhashis Roy, Joyashree Bag, and Subir Kumar Sarkar. Design and VLSI implementation of a robot navigation processor deploying CORDIC based anti-collision algorithm with RFID technology. In *2014 Annual IEEE India Conference (INDICON)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Rupanagudi:2014:DLP**

[1008] Sudhir Rao Rupanagudi, Varsha G. Bhat, S. G. Hemalatha, N. Bhavana, M. Archana, B. V. Chandrika, R. Ashwini, Keerti G. Torvi, S. R. Darshan, B. G. Abhilash, K. S. Anil, and Vinayak Swamy K. M. Design of a low power digital down converter for 802.16m — 4G WiMAX on FPGA. In *2014 International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pages 2303–2308. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**S:2014:EFP**

[1009] Shymna Nizar N S and Abhila R. Krishna. An efficient folded pipelined architecture for Fast Fourier Transform using CORDIC algorithm. In *2014 IEEE International Conference on Advanced Communications, Control and Computing Technologies*, pages 462–467. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Shukla:2014:LLH**

[1010] Rohit Shukla and Kailash Chandra Ray. Low latency hybrid CORDIC algorithm. *IEEE Transactions on Computers*, 63(12):3066–3078, December 2014. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Sileshi:2014:AHG**

[1011] B. G. Sileshi, C. Ferrer, and J. Oliver. Accelerating hardware Gaussian random number generation using Ziggurat and CORDIC algorithms. In *IEEE SENSORS, 2014*, pages 2122–2125. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Sovets:2014:CIM**

[1012] M. Sovets and O. Pavlov. CORDIC integral model of characteristic functions of 3D teragertz FMCW radar. In *2014 24th International Crimean Conference Microwave & Telecommunication Technology*, pages 1023–1024. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Thabet:2014:RDC**

[1013] Jihen Thabet, Rim Barrak, Najeh Kamoun, Nadia Khouja, and Adel Ghazel. A reconfigurable digital down converter architecture for multistandard GNSS receiver. In *2014 14th International Symposium on Communications and Information Technologies (ISCIT)*, pages 404–408.

IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Turrillas:2014:AER**

[1014] M. Turrillas, A. Cortés, I. Vélez, J. F. Sevillano, and A. Irizar. An area-efficient radix 28 FFT algorithm for DVB-T2 receivers. *Microelectronics Journal*, 45(10):1311–1318, 2014. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S0026269213002565`. DCIS'12 Special Issue.

**Wang:2014:DFS**

[1015] Long Wang, Qiancheng Zhao, Minghao Nie, Dachuan Liu, Yuxian Liu, Junjie Yan, Zhenchuan Yang, and Guizhen Yan. Digital fast startup procedure for micro-machined vibratory gyroscopes using optimized fuzzy control strategy. In *The 9th IEEE International Conference on Nano/Micro Engineered and Molecular Systems (NEMS)*, pages 208–211. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Wang:2014:NHG**

[1016] Yuting Wang and Zhisong Bie. A novel hardware Gaussian noise generator using Box–Muller and CORDIC. In *2014 Sixth International Conference on Wireless Communications and Signal Processing (WCSP)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Wu:2014:CBO**

[1017] Chih-Feng Wu and Muh-Tian Shiue. CORDIC-based OFDM baseband receiver design. In *2014 6th International Symposium on Communications, Control and Signal Processing (ISCCSP)*, pages 352–355. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Wu:2014:FPC**

[1018] Chih-Feng Wu and Muh-Tian Shiue. FPGA prototyping for CORDIC-based OFDM baseband receiver. In *2014 IEEE International Conference on Electron Devices and Solid-State Circuits*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Xu:2014:OFI**

[1019] Rui Xu, Zhanpeng Jiang, Hai Huang, and Changchun Dong. Optimization and FPGA implementation of a CORDIC algorithm. In *In-*

*ternational Conference on Software Intelligence Technologies and Applications & International Conference on Frontiers of Internet of Things 2014*, pages 232–236. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Zhang:2014:DIH**

[1020] Chaozhu Zhang, Jinan Han, and Ke Li. Design and implementation of hybrid CORDIC algorithm based on phase rotation estimation for NCO. *The Scientific World Journal*, 2014(1):897381, 2014. URL `https://onlinelibrary.wiley.com/doi/abs/10.1155/2014/897381`.

**Zhang:2014:EFI**

[1021] Jianfeng Zhang, Paul Chow, and Hengzhu Liu. An efficient FPGA implementation of $QR$ decomposition using a novel systolic array architecture based on enhanced vectoring CORDIC. In *2014 International Conference on Field-Programmable Technology (FPT)*, pages 123–130. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2014.

**Adiono:2015:CTB**

[1022] Trio Adiono, Vincentius Timothy, Nur Ahmadi, Aditya Candra, and Khafit Mufadli. CORDIC and Taylor based FPGA music synthesizer. In *TENCON 2015 — 2015 IEEE Region 10 Conference*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Adiono:2015:PCA**

[1023] Trio Adiono, Nur Ahmadi, Antonius P. Renardy, Ashbir A. Fadila, and Naufal Shidqi. A pipelined CORDIC architecture and its implementation in all-digital FM modulator-demodulator. In *2015 6th Asia Symposium on Quality Electronic Design (ASQED)*, pages 37–42. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Benhaoues:2015:VDA**

[1024] A. Benhaoues, S. Toumi, C. Tanougast, E. Bourennane, K. Messaoudi, and H. Mayache. Versatile digital architecture for mobile terminal. *Microprocessors and Microsystems*, 39(6):405–417, 2015. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933115000605`.

**Bhairannawar:2015:EVA**

[1025] Satish S. Bhairannawar, Sayantam Sarkar, K. B. Raja, and K. R. Venugopal. An efficient VLSI architecture for fingerprint recognition using O2D-DWT architecture and modified CORDIC-FFT. In *2015 IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Bhaisare:2015:CAB**

[1026] Sayali R. Bhaisare, Aniket V. Gokhale, and Pravin K. Dakhole. CORDIC architecture based 2-d DCT and IDCT for image compression. In *2015 International Conference on Communications and Signal Processing (ICCSP)*, pages 1473–1477. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Biswas:2015:CBL**

[1027] Dwaipayan Biswas and Koushik Maharatna. A CORDIC-based low-power statistical feature computation engine for WSN applications. *Circuits, systems, and signal processing: CSSP*, 34(12):4011–4028, April 2015. CODEN CSSPEH. ISSN 1531-5878.

**Chen:2015:CDI**

[1028] Zhe Chen, Liyuan Liu, and Nanjian Wu. Calculating depth image with pixel-parallel processor for a TOF image sensing system. In *2015 IEEE SENSORS*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Chung:2015:FPC**

[1029] Rih-Lung Chung, Yi-Qin Zhang, and Shih-Lun Chen. Fully pipelined CORDIC-based inverse kinematic FPGA design for biped robots. *Electronics Letters*, 51(16):1241–1243, 2015. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic). URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/el.2015.1604`.

**deDinechin:2015:HIF**

[1030] Florent de Dinechin and Matei Istoan. Hardware implementations of fixed-point Atan2. In Muller et al. [1599], pages 34–41. ISBN 1-4799-8665-8, 1-4799-8663-1. ISSN 1063-6889. LCCN QA76.9.C62 S95 2015. URL `https://ieeexplore.ieee.org/servlet/opac?punumber=7193754`.

**El-Motaz:2015:HSV**

[1031] Mohammed A. El-Motaz, M. Wagih Ismail, Mohsen Raafat, Ali S. Faried, Mohammed A. Raghieb, Nassr M. Ismail, Sherif A. Hafez, Ahmed H. El-Kady, Esmaail A. El-Sayed, Mohamed A. Sharaf, Ibrahim Shazly, Wael E. Abd El-Kawi, Chadi M. Mohamed, Mohamed N. Elhidery, Karim Mohammed, and Omar A. Nasr. A highly scalable vector oriented ASIP-based multi-standard digital receiver. In *2015 IEEE International Conference on Electronics, Circuits, and Systems (ICECS)*, pages 466–469. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**El-Shafiey:2015:TSO**

[1032] Ahmed M. El-Shafiey, Mohamed E. Farag, Mohammed A. El-Motaz, Omar A. Nasr, and Hossam A. H. Fahmy. Two-stage optimization of CORDIC-friendly FFT. In *2015 IEEE International Conference on Electronics, Circuits, and Systems (ICECS)*, pages 408–411. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**ElHajjouji:2015:RTL**

[1033] I. El Hajjouji, A. El Mourabit, Z. Asrih, B. Bernoussi, and S. Mars. Real-time lane detection in different illumination conditions. In *2015 27th International Conference on Microelectronics (ICM)*, pages 63–66. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Fiala:2015:HEC**

[1034] Pavel Fiala and Richard Linhart. High efficient carrier phase synchronization for SDR using CORDIC implemented on an FPGA. In *2015 23rd Telecommunications Forum Telfor (TELFOR)*, pages 512–515. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Gupta:2015:VAE**

[1035] Shradha Gupta, Sumeet Saurav, Sanjay Singh, Anil K. Saini, and Ravi Saini. VLSI architecture of exponential block for non-linear SVM classification. In *2015 International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pages 528–532. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Hanindhito:2015:USB**

[1036] Bagus Hanindhito, Hafez Hogantara, Annisa I. Rahmah, Nur Ahmadi, and Trio Adiono. Ultrasonic sensor based contactless theremin using pipeline CORDIC as tone generator. In *2015 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS)*, pages 268–273. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Ibrahim:2015:AFI**

[1037] Ali Ibrahim, Maurizio Valle, Luca Noli, and Hussein Chible. Assessment of FPGA implementations of one sided Jacobi algorithm for singular value decomposition. In *2015 IEEE Computer Society Annual Symposium on VLSI*, pages 56–61. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Ibrahim:2015:FIF**

[1038] Ali Ibrahim, Maurizio Valle, Luca Noli, and Hussein Chible. FPGA implementation of fixed point CORDIC-SVD for e-skin systems. In *2015 11th Conference on Ph.D. Research in Microelectronics and Electronics (PRIME)*, pages 318–321. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Jain:2015:CCS**

[1039] Nupur Jain and Biswajit Mishra. CORDIC on a configurable serial architecture for biomedical signal processing applications. In *2015 19th International Symposium on VLSI Design and Test*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Jain:2015:DCN**

[1040] Nupur Jain and Biswajit Mishra. DCT and CORDIC on a novel configurable hardware. In *2015 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia)*, pages 51–56. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Jarray:2015:LCE**

[1041] N. Jarray, M. Elhaji, and A. Zitouni. Low complexity and efficient architecture of 1D-DCT based CORDIC–Loeffler for wireless endoscopy capsule. In *2015 IEEE 12th International Multi-Conference on Systems, Signals & Devices (SSD15)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Juang:2015:NRM**

[1042] Tso-Bing Juang and Chin-Chieh Chiu. New recoding methods for fully pipelined parallel CORDIC rotations. In *2015 International SoC Design Conference (ISOCC)*, pages 291–292. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Katkar:2015:RCA**

[1043] Prajakta J. Katkar and Yogesh S. Angal. Realization of CORDIC algorithm in DDS: Novel approch towards digital modulators in MATLAB and VHDL. In *2015 International Conference on Information Processing (ICIP)*, pages 355–359. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Khurshid:2015:PEI**

[1044] Burhan Khurshid and Roohie Naaz Mir. Power efficient implementation of bit-parallel unrolled CORDIC structures for FPGA platforms. In *2015 International Conference on VLSI Systems, Architecture, Technology and Applications (VLSI-SATA)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Kislal:2015:ISD**

[1045] A. Oguz Kislal, Arda Demiray, Osman Ceylan, and H. Bulent Yagci. Implementation of a software defined FM mixed demodulator on FPGA. In *2015 23rd Telecommunications Forum Telfor (TELFOR)*, pages 333–336. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Kumar:2015:AFO**

[1046] Vinay Kumar M, David Selvakumar A, and Sobha P M. Area and frequency optimized 1024 point radix-2 FFT processor on FPGA. In *2015 International Conference on VLSI Systems, Architecture, Technology and Applications (VLSI-SATA)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Kusumah:2015:CBD**

[1047] Rizky Kusumah, Dicky Cahyadi, Gandhika Kumara, and Trio Adiono. CORDIC-based digital sound synthesizer. In *TENCON 2015 — 2015 IEEE Region 10 Conference*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Lin:2015:LCH**

[1048] Jing-Shiun Lin, Yin-Tsung Hwang, Shih-Hao Fang, Po-Han Chu, and Ming-Der Shieh. Low-complexity high-throughput $QR$ decomposition design for MIMO systems. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 23(10):2342–2346, 2015. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Liu:2015:IFC**

[1049] Xiaoning Liu, Yizhuang Xie, He Chen, and Bingyi Li. Implementation on FPGA for CORDIC-based computation of arcsine and arccosine. In *IET International Radar Conference 2015*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Mack:2015:FPC**

[1050] Joshua Mack, Sam Bellestri, and Daniel Llamocca. Floating point CORDIC-based architecture for powering computation. In *2015 International Conference on ReConFigurable Computing and FPGAs (ReConFig)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Mal:2015:VBT**

[1051] Arindam Mal, Jayanta Laha, Tanisha Bhatia, Subhalakshmi K, and Shwetha Kanawalli. Vision based terrain relative navigation sensor. In *2015 International Conference on Trends in Automation, Communications and Computing Technology (I-TACT-15)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Mishra:2015:SCG**

[1052] Ansuman Mishra, S. Sivanantham, and K. Sivasankaran. Sine and cosine generator using CORDIC algorithm implemented in ASIC. In *2015 Online International Conference on Green Engineering and Technologies (IC-GET)*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Muchahary:2015:CBD**

[1053] Deboraj Muchahary, Abir J. Mondal, and Alak Majumder. A CORDIC based design technique for efficient computation of DCT. In *2015 International Conference on Communications and Signal Processing (ICCSP)*, pages 0484–0489. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Muchahary:2015:SDA**

[1054] Deboraj Muchahary, Abir J. Mondal, Rajesh Singh Parmar, Amlan Deep Borah, and Alak Majumder. A simplified design approach for efficient computation of DCT. In *2015 Fifth International Conference on Communication Systems and Network Technologies*, pages 483–487. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Munoz:2015:HTF**

[1055] Sergio D. Muñoz and Javier Hormigo. High-throughput FPGA implementation of $QR$ decomposition. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 62(9):861–865, 2015. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Munoz:2015:IFP**

[1056] Sergio D. Muñoz and Javier Hormigo. Improving fixed-point implementation of $QR$ decomposition by rounding-to-nearest. In *2015 International Symposium on Consumer Electronics (ISCE)*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Nguyen:2015:LRL**

[1057] Hong-Thu Nguyen, Xuan-Thuan Nguyen, Cong-Kha Pham, Trong-Thuc Hoang, and Duc-Hung Le. A low-resource low-latency hybrid adaptive CORDIC in 180-nm CMOS technology. In *TENCON 2015 — 2015 IEEE Region 10 Conference*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Nilsson:2015:LPU**

[1058] Peter Nilsson, Yuhang Sun, Rakesh Gangarajaiah, and Erik Hertz. Low power unrolled CORDIC architectures. In *2015 Nordic Circuits and Systems Conference (NORCAS): NORCHIP & International Symposium on System-on-Chip (SoC)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Nolting:2015:EDR**

[1059] Stephan Nolting, Guillermo Payá-Vayá, Florian Giesemann, and Holger Blume. *Exploring Dynamic Reconfigurable CORDIC Co-Processors Tightly Coupled with a VLIW-SIMD Soft-Processor Architecture*, pages 401–410. Springer International Publishing, 2015. ISBN 3-319-16214-4. ISSN 1611-3349.

**Oza:2015:PIH**

[1060] Saharsh Samir Oza, Ankit Parag Shah, Tarun Thokala, and Sumam David. Pipelined implementation of high radix adaptive CORDIC as a coprocessor. In *2015 International Conference on Computing and Network Communications (CoCoNet)*, pages 333–342. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Petrovsky:2015:CLF**

[1061] Nick Petrovsky, Andrew Stankevich, and Alexander Petrovsky. CORDIC-lifting factorization of paraunitary filter banks based on the quaternionic multipliers for lossless image coding. *Multidimensional Systems and Signal Processing*, 27(3):667–695, March 2015. ISSN 1573-0824.

**Priyantini:2015:EIG**

[1062] Dwi Teguh Priyantini, Yulistiyan Wardhana, Machmud Roby Alhamidi, Dwi M. J. Purnomo, Aprinaldi, Petrus Mursanto, and Wisnu Jatmiko. An efficient implementation of generalized extreme Studentized deviate (GESD) on field programmable gate array (FPGA). In *2015 International Conference on Computers, Communications, and Systems (ICCCS)*, pages 14–18. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Ranganathan:2015:LCF**

[1063] Senthilkumar Ranganathan, H. S. Sriharsha, and Ravi Kumar Krishnan. Low cost FPGA implementation of SPWM using dynamically configurable switching frequency for three phase voltage source inverter. In *2015 IEEE International Conference on Computational Intelligence and Computing Research (ICCIC)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Renardy:2015:FIC**

[1064] Antonius P. Renardy, Nur Ahmadi, Ashbir A. Fadila, Naufal Shidqi, and Trio Adiono. FPGA implementation of CORDIC algorithms for sine and cosine generator. In *2015 International Conference on Electrical Engineering and Informatics (ICEEI)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**S:2015:DEU**

[1065] Vaishnavi S, Titiksha B, Vinay RJ, and J. Manikandan. Design and evaluation of universal modulators. In *2015 Annual IEEE India Confer-*

*ence (INDICON)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Sarode:2015:MRC**

[1066] Namrata Sarode, Rajeev Atluri, and P. K. Dakhole. Mixed-radix and CORDIC algorithm for implementation of FFT. In *2015 International Conference on Communications and Signal Processing (ICCSP)*, pages 1628–1634. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Shinde:2015:TFG**

[1067] Suraj N. Shinde. Twiddle factor generation using CORDIC processor for fingerprint application. In *2015 International Conference on Computer, Communication and Control (IC4)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Singh:2015:DIQ**

[1068] Arun Kumar Singh, Madhav Kumar Singh, and Kailash Chandra Ray. Design and implementation of quadruple floating-point CORDIC. In *2015 IEEE International Symposium on Nanoelectronic and Information Systems*, pages 286–290. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Singh:2015:MWC**

[1069] Ashish Kumar Singh and Yong Hoon Kim. Methods of wideband chirp signal generation using FPGA. In *International Conference on Computing, Communication & Automation*, pages 1243–1247. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**T:2015:IHC**

[1070] Yamunadevi T. and Parmasivam C. Implementation of hyperbolic CORDIC-based VLSI architecture for Kaiser–Bessel window techniques in spectral analysis. In *2015 International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Tiwari:2015:HIN**

[1071] Vipin Tiwari and Nilay Khare. Hardware implementation of neural network with sigmoidal activation functions using CORDIC. *Microprocessors and Microsystems*, 39(6):373–381, 2015. CODEN MIMID5.

ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933115000642`.

**Venkaiah:2015:IDD**

[1072] Papanaboina Venkaiah and T. Laxmi Pradeep Kumar. Implementation of DPSK demodulation using quadrants method in FPGA for IFF MKXII digital receiver. In *2015 IEEE MTT-S International Microwave and RF Conference (IMaRC)*, pages 96–98. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Wawryn:2015:FID**

[1073] Krzysztof Wawryn, Pawe Poczekajło, and Robert Wirski. FPGA implementation of 3-d separable Gauss filter using pipeline rotation structures. In *2015 22nd International Conference Mixed Design of Integrated Circuits & Systems (MIXDES)*, pages 589–594. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Wong:2015:CBF**

[1074] Ching-Chang Wong, Chi-Tai Cheng, Chih-Cheng Liu, and Yueh-Yang Hu. CORDIC-based FPGA hardware design method for biped walking gait. *Journal of the Chinese Institute of Engineers = Chung-kuo kung ch'eng hsueh kan*, 38(5):610–620, February 2015. CODEN CKCKDZ. ISSN 2158-7299.

**Wu:2015:RIC**

[1075] Caipeng Wu, Binquan Zhou, and Jiancheng Fang. Research on improved CORDIC algorithm for high accuracy DDS signal source. In *2015 4th International Conference on Computer Science and Network Technology (ICCSNT)*, volume 01, pages 1351–1355. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Wu:2015:SSS**

[1076] Caipeng Wu, Binquan Zhou, and Jiancheng Fang. Study on spurious suppression method of high accuracy DDS. In *2015 IEEE International Conference on Progress in Informatics and Computing (PIC)*, pages 516–520. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Yasodai:2015:NDS**

[1077] A. Yasodai and A. V. Ramprasad. Noise degradation system using Wiener filter and CORDIC based FFT/IFFT processor. *Journal of Central South University*, 22(10):3849–3859, October 2015. ISSN 2227-5223.

**Yin:2015:NRT**

[1078] Hongxu Yin, Bah Hwee Gwee, Zhiping Lin, Anil Kumar, Sirajudeen Gulam Razul, and Chong Meng Samson See. Novel real-time system design for floating-point sub-nyquist multi-coset signal blind reconstruction. In *2015 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 954–957. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Zhang:2015:EAR**

[1079] Jianfeng Zhang, Paul Chow, and Hengzhu Liu. An enhanced adaptive recoding rotation CORDIC. *ACM Transactions on Reconfigurable Technology and Systems*, 9(1):4:1–4:??, November 2015. CODEN ???? ISSN 1936-7406 (print), 1936-7414 (electronic).

**Zhang:2015:FIL**

[1080] Jianfeng Zhang, Paul Chow, and Hengzhu Liu. FPGA implementation of low-power and high-PSNR DCT/IDCT architecture based on adaptive recoding CORDIC. In *2015 International Conference on Field Programmable Technology (FPT)*, pages 128–135. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Zhang:2015:LPH**

[1081] Jianfeng Zhang and Hengzhu Liu. A low-power and high-SFDR direct digital frequency synthesizer based on adaptive recoding CORDIC. In *2015 IEEE 16th Annual Wireless and Microwave Technology Conference (WAMICON)*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015.

**Aggarwal:2016:CDI**

[1082] Supriya Aggarwal, Pramod K. Meher, and Kavita Khare. Concept, design, and implementation of reconfigurable CORDIC. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 24(4):1588–1592, 2016. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Alcin:2016:HDI**

[1083] Murat Alçın, İhsan Pehlivan, and İsmail Koyuncu. Hardware design and implementation of a novel ANN-based chaotic generator in FPGA. *Optik*, 127(13):5500–5505, 2016. CODEN OTIKAJ. ISSN 0030-4026 (print), 1618-1336 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0030402616302108`.

**Babu:2016:IMB**

[1084] M. Madhu Babu and K. Rama Naidu. Implementation of multiplexers based pipelined CORDIC for OFDM systems. In *2016 IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)*, pages 1089–1093. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Bhardwaj:2016:LCS**

[1085] Swati Bhardwaj, Adapa Bhagyaraja, R. Shashank, Pranit Jadhav, Dwaipayan Biswas, Amit Acharyya, and Ganesh R. Naik. Low complexity single channel ICA architecture design methodology for pervasive healthcare applications. In *2016 IEEE International Workshop on Signal Processing Systems (SiPS)*, pages 39–44. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**BuenodeCarvalho:2016:AOC**

[1086] Paulo Roberto Bueno de Carvalho, José Alejandro Amaya Palacio, and Wilhelmus Van Noije. Area optimized CORDIC-based numerically controlled oscillator for electrical bio-impedance spectroscopy. In *2016 IEEE International Frequency Control Symposium (IFCS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Camarda:2016:IDP**

[1087] Federico D. Camarda, Octavio Alpago, Nicolás Alvarez, Federico Zacchigna, and Ariel Lutenberg. Implementation of a $QR$ decomposition processor using walke mapping on FPGA. In *2016 IEEE Biennial Congress of Argentina (ARGENCON)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Cervantes:2016:IOC**

[1088] Adrian Cervantes, Francis Lopez, Jeffry Quiros, Diego Rodriguez, Carlos Salazar-Garcia, Carlos Meza, and Alfonso Chacon-Rodriguez. Implementation of an open core IEEE 754-based FPU with non-linear arithmetic support. In *2016 IEEE 36th Central American and Panama Convention (CONCAPAN XXXVI)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Chen:2016:CFP**

[1089] Jiyang Chen, Yuanwu Lei, Yuanxi Peng, Tingting He, and Ziye Deng. Configurable floating-point FFT accelerator on FPGA based multiple-rotation CORDIC. *Chinese Journal of Electronics*, 25(6):1063–1070,

2016. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/cje.2016.08.002`.

**Chen:2016:DIL**

[1090] Wei-Yang Chen, Daniel Guenther, Chung-An Shen, and Gerd Ascheid. Design and implementation of a low-latency, high-throughput sorted $QR$ decomposition circuit for MIMO communications. In *2016 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)*, pages 277–280. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Chen:2016:FPA**

[1091] Linbin Chen, Fabrizio Lombardi, Jie Han, and Weiqiang Liu. A fully parallel approximate CORDIC design. In *2016 IEEE/ACM International Symposium on Nanoscale Architectures (NANOARCH)*, pages 197–202. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Chinnaaiah:2016:UAR**

[1092] M. C. Chinnaaiah, Saikiran Ambati, Shaheen Begum, Vamsi Thota, and L. Mounika. An unveiling angle of repose with CORDIC based etymology using minimal hardware scheme. In *2016 International Conference on Research Advances in Integrated Navigation Systems (RAINS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Chinnaiah:2016:VPP**

[1093] M. C. Chinnaiah, Sanjay Dubey, K. Anusha, J. Vani, and G. Divya Vani. A versatile path planning algorithm with behavioural control using FPGA based robots. In *2016 10th International Conference on Intelligent Systems and Control (ISCO)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Dubey:2016:NAC**

[1094] Soumitr Sanjay Dubey, Rahul Shrestha, and Shubhajit Roy Chowdhury. A novel architecture for computing eigenvalues of matrix for high speed applications. In *2016 IEEE Annual India Conference (INDICON)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Dwiputra:2016:DSS**

[1095] Agung Nuza Dwiputra, Riko Hasiando Goknipasu Nainggolan, and Muhammad Arief Ma'ruf Nasution. 3 dimension sound source localiza-

tion with cross-correlation and CORDIC algorithm on FPGA. In *2016 International Symposium on Electronics and Smart Devices (ISESD)*, pages 365–370. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**ElHajjouji:2016:FBR**

[1096] I. El Hajjouji, A. El Mourabit, Z. Asrih, S. Mars, and B. Bernoussi. FPGA based real-time lane detection and tracking implementation. In *2016 International Conference on Electrical and Information Technologies (ICEIT)*, pages 186–190. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Gao:2016:RTP**

[1097] Xingshun Gao, Lei Zhao, Jinxin Liu, Zouyi Jiang, Xiaofang Hu, Shubin Liu, and Qi An. Real-time phase correction based on FPGA in the beam position and phase measurement system. *IEEE Transactions on Nuclear Science*, 63(6):2903–2908, 2016. CODEN IRNSAM. ISSN 0018-9499 (print), 1558-1578 (electronic).

**Garrido:2016:CIN**

[1098] Mario Garrido, Petter Källström, Martin Kumm, and Oscar Gustafsson. CORDIC II: a new improved CORDIC algorithm. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 63(2):186–190, February 2016. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Garrido:2016:MUG**

[1099] Mario Garrido, Rikard Andersson, Fahad Qureshi, and Oscar Gustafsson. Multiplierless unity-gain SDF FFTs. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 24(9):3003–3007, 2016. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Hachachi:2016:EMC**

[1100] Yassine Hachaïchi and Younes Lahbib. An efficient mathematically correct scale free CORDIC, 2016. URL `https://arxiv.org/abs/1606.02468`.

**Heidarpour:2016:CBD**

[1101] Moslem Heidarpour, Arash Ahmadi, and Rashid Rashidzadeh. A CORDIC based digital hardware for adaptive exponential integrate and fire neuron. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 63(11):1986–1996, 2016. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Hoang:2016:HAC**

[1102] Trong-Thuc Hoang, Duc-Hung Le, Hong-Thu Nguyen, Xuan-Thuan Nguyen, and Cong-Kha Pham. A hybrid adaptive CORDIC in 65nm SOTB CMOS process. In *2016 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 2158–2161. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Hoang:2016:HPD**

[1103] Trong-Thuc Hoang, Hong-Thu Nguyen, Xuan-Thuan Nguyen, Cong-Kha Pham, and Duc-Hung Le. High-performance DCT architecture based on angle recoding CORDIC and scale-free factor. In *2016 IEEE Sixth International Conference on Communications and Electronics (ICCE)*, pages 199–204. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Jacoby:2016:DFP**

[1104] Andres Jacoby and Daniel Llamocca. Dual fixed-point CORDIC processor: Architecture and FPGA implementation. In *2016 International Conference on ReConFigurable Computing and FPGAs (ReConFig)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Jung:2016:CMM**

[1105] Gihoon Jung, Kyungrak Choi, and Jongsun Park. A compact multimode CORDIC with global-shifting-sum (GSS) method. In *2016 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)*, pages 180–183. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Kermani:2016:EED**

[1106] Mehran Mozaffari Kermani, Rajkumar Ramadoss, and Reza Azarderakhsh. Efficient error detection architectures for CORDIC through recomputing with encoded operands. In *2016 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 2154–2157. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Kumar:2016:CBV**

[1107] Vikas Kumar, Kailash Chandra Ray, and Preetam Kumar. CORDIC-based VLSI architecture for implementing CI-OFDM and its FPGA prototype. In *2016 International Conference on VLSI Systems, Architectures, Technology and Applications (VLSI-SATA)*, pages 1–5. IEEE

Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Kumar:2016:LCC**

[1108] Vikas Kumar, Kailash Chandra Ray, and Preetam Kumar. Low-complexity CORDIC-based VLSI design and FPGA prototype of CI-OFDMA system for next-generation. In *2016 IEEE 12th International Colloquium on Signal Processing & Its Applications (CSPA)*, pages 22–27. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Kumar:2016:VDF**

[1109] Lalit Kumar, Deepak Kumar Mittal, and Rahul Shrestha. VLSI-design and FPGA-implementation of GMSK-demodulator architecture using CORDIC engine for low-power application. In *2016 IEEE Annual India Conference (INDICON)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Lakshmi:2016:LLP**

[1110] B. Lakshmi and A. S. Dhar. Low latency pipelined CORDIC-like rotator architecture. *International Journal of Electronics Theoretical & Experimental*, 104(1):64–78, July 2016. CODEN IJELA2. ISSN 1362-3060.

**Lavanya:2016:HSF**

[1111] Lavanya M and Kalaiselvi A. High speed FIR adaptive filter for RADAR applications. In *2016 International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET)*, pages 2118–2122. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Li:2016:SCA**

[1112] Junwei Li, Jiandong Fang, Bajin Li, and Yudong Zhao. Study of CORDIC algorithm based on FPGA. In *2016 Chinese Control and Decision Conference (CCDC)*, pages 4338–4343. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Long:2016:DND**

[1113] Xitian Long, Zhe Zheng, Xueping Jiang, Jinghong Guo, Guanghua Wu, Yanyi Meng, Hong Chen, and Yuxuan Liu. Design of novel digital GFSK modulation and demodulation system for short-range wireless communication application. In *2016 IEEE International Conference on Electron*

*Devices and Solid-State Circuits (EDSSC)*, pages 299–302. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Mehta:2016:EMS**

[1114] Jaina M. Mehta and Pratik Trivedi. An enhanced mixed-scaling-rotation CORDIC algorithm with weighted amplifying factor. In *2016 IEEE International Conference on Digital Signal Processing (DSP)*, pages 527–531. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Meinl:2016:HAM**

[1115] Frank Meinl, Martin Kunert, and Holger Blume. Hardware acceleration of maximum-likelihood angle estimation for automotive MIMO radars. In *2016 Conference on Design and Architectures for Signal and Image Processing (DASIP)*, pages 168–175. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Muller:2016:CA**

[1116] Jean-Michel Muller. *The CORDIC Algorithm*, pages 165–184. Birkhäuser Boston Inc., Cambridge, MA, USA, 2016. ISBN 1-4899-7983-2.

**Muller:2016:EFA**

[1117] Jean-Michel Muller. *Elementary Functions: Algorithms and Implementation*. Birkhäuser Boston Inc., Cambridge, MA, USA, third edition, 2016. ISBN 1-4899-7981-6 (print), 1-4899-7983-2 (e-book). xxv + 283 pp. LCCN QA331 .M866 2016.

**Nawandar:2016:RLP**

[1118] Neha K. Nawandar, Bharat Garg, and G. K. Sharma. RICO: a low power repetitive iteration CORDIC for DSP applications in portable devices. *Journal of Systems Architecture*, 70:82–92, 2016. CODEN JSARFB. ISSN 1383-7621 (print), 1873-6165 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1383762116300273`. High Performance Computing, Communication and Embedded Software/Systems.

**Nguyen:2016:PPC**

[1119] Hong-Thu Nguyen, Xuan-Thuan Nguyen, Cong-Kha Pham, Trong-Thuc Hoang, and Duc-Hung Le. A parallel pipeline CORDIC based on adaptive angle selection. In *2016 International Conference on Electronics, Information, and Communications (ICEIC)*, pages 1–4. IEEE Computer

Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Parfieniuk:2016:SIC**

[1120] Marek Parfieniuk and Sang Yoon Park. Sparse-iteration 4D CORDIC algorithms for multiplying quaternions. *IEEE Transactions on Computers*, 65(9):2859–2871, September 2016. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Parfieniuk:2016:VQM**

[1121] Marek Parfieniuk and Sang Yoon Park. A versatile quaternion multiplier based on sparse-iteration 4D CORDIC. In *2016 14th IEEE International New Circuits and Systems Conference (NEWCAS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Petrovsky:2016:CLF**

[1122] Nick Petrovsky, Andrew Stankevich, and Alexander Petrovsky. CORDIC-lifting factorization of paraunitary filter banks based on the quaternionic multipliers for lossless image coding. *Multidimensional Syst. Signal Process.*, 27(3):667–695, 2016. ISSN 0923-6082.

**Pivezhandi:2016:ADT**

[1123] Mohammad Pivezhandi and Mohammad Eshghi. ASIP design for two dimensional CORDIC based DFT and DCT algorithms. In *2016 6th International Conference on Computer and Knowledge Engineering (ICCKE)*, pages 269–273. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Pramanik:2016:LLH**

[1124] Sayantan Pramanik, Sayak Chakraborty, Rishav Saha, Rupkatha Basu, Ritam De, Sulagna Chatterjee, and Ritam Banerjee. Low latency high throughput CORDIC based Fourier analysis. In *2016 IEEE 7th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Ranji:2016:AEV**

[1125] Aarti Ranji, Nashrah Fatima, and Paresh Rawat. Area efficient VLSI architecture for DCT using modified CORDIC algorithm. In *2016 International Conference on Emerging Technological Trends (ICETT)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Ray:2016:CBP**

[1126] Kailash Chandra Ray and Anindya Sundar Dhar. CORDIC-based parallel architecture for one dimensional discrete Mellin transform. In *2016 IEEE Region 10 Conference (TENCON)*, pages 1638–1643. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Ruifeng:2016:MID**

[1127] Yang Ruifeng, Guo Chenxia, and Zhang Peng. The method on improving digital decoding accuracy of the resolver. In *2016 Sixth International Conference on Instrumentation & Measurement, Computer, Communication and Control (IMCCC)*, pages 745–751. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Saad:2016:GPA**

[1128] Imen Ben Saad, Younes Lahbib, Yassine Hachaïchi, Sonia Mami, and Abdelkader Mami. Generic-precision algorithm for DCT-Cordic architectures, 2016. URL `https://arxiv.org/abs/1606.02424`.

**Satpute:2016:CBN**

[1129] Vishal R. Satpute and Neha K. Nawandar. CORDIC based novel energy-efficient approximate DCT architecture for error-resilient applications. In *2016 11th International Conference on Industrial and Information Systems (ICIIS)*, pages 655–660. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Simmonds:2016:CBA**

[1130] Nia Simmonds, Joshua Mack, Sam Bellestri, and Daniel Llamocca. CORDIC-based architecture for powering computation in fixed-point arithmetic, 2016. URL `https://arxiv.org/abs/1605.03229`.

**Smekalov:2016:CRF**

[1131] Anton I. Smekalov and Victor I. Djigan. CORDIC rotator for frequency translation. In *2016 IEEE East-West Design & Test Symposium (EWDTS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Supe:2016:SCA**

[1132] Tushar Supe and David Anderson. Super-CORDIC: an approximation based parallel and redundant CORDIC algorithm. In *2016 International Symposium on Intelligent Signal Processing and Communication Systems*

*(ISPACS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Syed:2016:HST**

[1133] Azhar Syed and R. Mary Lourde. Hardware security threats to DSP applications in an IoT network. In *2016 IEEE International Symposium on Nanoelectronic and Information Systems (iNIS)*, pages 62–66. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Tan:2016:SBA**

[1134] Wen Tan, Kai Liu, and Jia Liao. Study of s-band antenna tracking algorithm based on FPGA. In *2016 IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Tang:2016:CBF**

[1135] Aimei Tang, Li Yu, Fangjian Han, and Zhiqiang Zhang. CORDIC-based FFT real-time processing design and FPGA implementation. In *2016 IEEE 12th International Colloquium on Signal Processing & Its Applications (CSPA)*, pages 233–236. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Tiwari:2016:IFH**

[1136] Bhawna Tiwari and Nidhi Goel. Implementation of a fast hybrid CORDIC architecture. In *2016 Second International Conference on Computational Intelligence & Communication Technology (CICT)*, pages 702–706. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Torun:2016:FGC**

[1137] Mustafa U. Torun, Onur Yilmaz, and Ali N. Akansu. FPGA, GPU, and CPU implementations of Jacobi algorithm for eigenanalysis. *Journal of Parallel and Distributed Computing*, 96:172–180, 2016. CODEN JPDCER. ISSN 0743-7315 (print), 1096-0848 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0743731516300508`.

**Vyas:2016:CBA**

[1138] Pranjal Vyas, Leena Vachhani, K. Sridharan, and Vikramkumar Pudi. CORDIC-based azimuth calculation and obstacle tracing via optimal sensor placement on a mobile robot. *IEEE/ASME Transactions on Mechatronics*, 21(5):2317–2329, 2016.

**Wang:2016:CUR**

[1139] Siyang Wang, Jia Yu, Kui-Ting Chen, and Takaaki Baba. A CORDIC with unified rotation strategy. In *2016 IEEE International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData)*, pages 744–749. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Yan:2016:IDB**

[1140] Jihong Yan, Yuqing Ma, and Zishu He. An implementation design of broadband and high resolution spectrum analysis based on FPGA. In *2016 2nd IEEE International Conference on Computer and Communications (ICCC)*, pages 2995–2999. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Zhang:2016:CBE**

[1141] Jianfeng Zhang, Paul Chow, and Hengzhu Liu. CORDIC-based enhanced systolic array architecture for $QR$ decomposition. *ACM Transactions on Reconfigurable Technology and Systems*, 9(2):9:1–9:??, February 2016. CODEN ???? ISSN 1936-7406 (print), 1936-7414 (electronic).

**Zhu:2016:CBI**

[1142] Huijie Zhu and Yizhou Ge. CORDIC-based implementation architectures for the second-harmonic excitation of a micro-gyroscope. In *2016 IEEE 11th Conference on Industrial Electronics and Applications (ICIEA)*, pages 2107–2110. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Zhu:2016:MCA**

[1143] Huijie Zhu, Yizhou Ge, and Bin Jiang. Modified CORDIC algorithm for computation of arctangent with variable iterations. In *2016 IEEE 13th International Conference on Signal Processing (ICSP)*, pages 261–264. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2016.

**Adapa:2017:CRB**

[1144] Bhagyaraja Adapa, Dwaipayan Biswas, Swati Bhardwaj, Shashank Raghuraman, Amit Acharyya, and Koushik Maharatna. Coordinate rotation-based low complexity $K$-means clustering architecture. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 25(4): 1568–1572, 2017. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Anas:2017:ICA**

[1145] M. M. Anas, R. Sikha Padiyar, and Alisiya Sara Boban. Implementation of CORDIC algorithm and design of high speed CORDIC algorithm. In *2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS)*, pages 1278–1281. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Arasu:2017:VIL**

[1146] S. P. Valan Arasu, S. Baulkani, and S. P. Brightlin Rhoda. VLSI implementation of low power micro CORDIC processor for real time antenna array applications. In *2017 International Conference on Innovations in Information, Embedded and Communication Systems (ICIIECS)*, pages 1–9. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Bhairannawar:2017:IFB**

[1147] Satish S. Bhairannawar, Sayantam Sarkar, K. B. Raja, and K. R. Venugopal. Implementation of fingerprint based biometric system using optimized 5/3 DWT architecture and modified CORDIC based FFT. *Circuits, systems, and signal processing: CSSP*, 37(1):342–366, May 2017. CODEN CSSPEH. ISSN 1531-5878.

**Bhardwaj:2017:CRV**

[1148] Swati Bhardwaj, Shashank Raghuraman, and Amit Acharyya. Coordinate rotation and vector cross product based hardware accelerator for nD FastICA. In *2017 European Conference on Circuit Theory and Design (ECCTD)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Bhardwaj:2017:LCH**

[1149] Swati Bhardwaj, Shashank Raghuraman, and Amit Acharyya. Low complexity hardware accelerator for nD FastICA based on coordinate rotation. In *2017 IEEE International Workshop on Signal Processing Systems (SiPS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Bisina:2017:OEP**

[1150] K. V. Bisina and Maleeha Abdul Azeez. Optimized estimation of power spectral density. In *2017 International Conference on Intelligent Computing and Control Systems (ICICCS)*, pages 871–875. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Biswas:2017:LCF**

[1151] Dwaipayan Biswas, Koushik Maharatna, Goran Panic, Evangelos B. Mazomenos, Josy Achner, Jasmin Klemke, Michael Jöbges, and Steffen Ortmann. Low-complexity framework for movement classification using body-worn sensors. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 25(4):1537–1548, 2017. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Borole:2017:MRC**

[1152] Yogini Dilip Borole and C. G. Dethe. Mixed radix CORDIC FFT algorithm for OFDM WPAN applications. In *2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS)*, pages 2975–2979. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Cao:2017:MDV**

[1153] Wenhui Cao and Anding Zhu. A modified decomposed vector rotation-based behavioral model with efficient hardware implementation for digital predistortion of RF power amplifiers. *IEEE Transactions on Microwave Theory and Techniques*, 65(7):2443–2452, 2017. CODEN IETMAB. ISSN 0018-9480 (print), 1557-9670 (electronic).

**Chen:2017:ADF**

[1154] Linbin Chen, Jie Han, Weiqiang Liu, and Fabrizio Lombardi. Algorithm and design of a fully parallel approximate coordinate rotation digital computer (CORDIC). *IEEE Transactions on Multi-Scale Computing Systems*, 3(3):139–151, 2017.

**Franceschi:2017:AFI**

[1155] Marta Franceschi, Vincent Camus, Ali Ibrahim, Christian Enz, and Maurizio Valle. Approximate FPGA implementation of CORDIC for tactile data processing using speculative adders. In *2017 New Generation of CAS (NGCAS)*, pages 41–44. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Hasnat:2017:NUC**

[1156] Abul Hasnat, Atanu Dey, Md. Azizul Hoque, Santanu Halder, and Debotosh Bhattacharjee. A novel unit circle approach for computation of sine function. In *2017 Devices for Integrated Circuit (DevIC)*, pages 570–573. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Helvacioglu:2017:RCB**

[1157] Gülfem Helvacioğlu, Ali Bugra Korucu, Yaúar Kemal Alp, and Coşku Kasnakoğlu. Reduced CORDIC based logarithmic convertor. In *2017 25th Signal Processing and Communications Applications Conference (SIU)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Inguva:2017:ECA**

[1158] Sharath Chandra Inguva and J. B. Seventline. Enhanced CORDIC algorithm using an area efficient carry select adder. In *2017 International Conference on Intelligent Sustainable Systems (ICISS)*, pages 410–415. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Jacoby:2017:DDF**

[1159] Andres Jacoby and Daniel Llamocca. Dynamic dual fixed-point CORDIC implementation. In *2017 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW)*, pages 235–240. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Jain:2017:POD**

[1160] Mansi Jain, Palbha Kesharwani, Ashwini Kumar Malviya, Kavita Khare, Pratyush Shandilya, Sushmita Haldar, Himanshu Rai, and Supriya Aggarwal. Performance optimized digital QPSK modulator. In *2017 International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS)*, pages 68–71. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Jiang:2017:KCM**

[1161] Ziyang Jiang, Yu Dai, Jianxun Zhang, and Su He. Kinematics calculation of minimally invasive surgical robot based on FPGA. In *2017 IEEE International Conference on Robotics and Biomimetics (ROBIO)*, pages 1726–1730. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Kasiviswanathan:2017:EHI**

[1162] N. Kasiviswanathan and K. Srivatsan. An efficient hardware implementation of Gaussian random number generator. In *2017 International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2)*, pages 327–331. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Kulshreshtha:2017:CBH**

[1163] Tanmai Kulshreshtha and Anindya S. Dhar. CORDIC-based Hann windowed sliding DFT architecture for real-time spectrum analysis with bounded error-accumulation. *IET Circuits, Devices & Systems*, 11(5): 487–495, 2017. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/iet-cds.2016.0375`.

**Langhammer:2017:FPT**

[1164] Martin Langhammer and Bogdan Pasca. Floating point tangent implementation for FPGAs. In Burgess et al. [1600], pages 64–65. ISBN 1-5386-1966-0 (print), 1-5386-1965-2, 1-5386-1964-4. ISSN 1063-6889. LCCN QA76.9.C62 S95 2017. URL `https://ieeexplore.ieee.org/servlet/opac?punumber=8019911`.

**Li:2017:FIN**

[1165] ZhaoFang Li, Yu-Jung Huang, and Wei-Cheng Lin. FPGA implementation of neuron block for artificial neural network. In *2017 International Conference on Electron Devices and Solid-State Circuits (EDSSC)*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Li:2017:URF**

[1166] Bingyi Li, Linlin Fang, Yizhuang Xie, He Chen, and Liang Chen. A unified reconfigurable floating-point arithmetic architecture based on CORDIC algorithm. In *2017 International Conference on Field Programmable Technology (ICFPT)*, pages 301–302. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Lin:2017:DRT**

[1167] Jiang Lin, Lü Qing, Xie Xiaoyan, Shan Rui, and Deng Junyong. Design of a reconfigurable transcendental function generator. *The Journal of China Universities of Posts and Telecommunications*, 24(1):96–102, 2017. ISSN 1005-8885. URL `https://www.sciencedirect.com/science/article/pii/S1005888517601924`.

**Littlewood:2017:MDB**

[1168] Peter Littlewood, Krishna Murthy Kattiyan Ramamoorthy, and Shahnam Mirzaei. Modeling of digital baseband interference canceler using Hilbert and Fourier Transforms. In *2017 IEEE 13th International Colloquium on Signal Processing & its Applications (CSPA)*, pages 123–128. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**MacClellan:2017:DF**

[1169] James H. MacClellan, Ronald W. Schafer, and Mark A. Yoder. *DSP First*. Pearson, Harlow, US, second edition, 2017. ISBN 1-292-11386-3. 582 pp. LCCN TK5102.9 .M333 2017.

**Mami:2017:ECD**

[1170] Sonia Mami, Imen Ben Saad, Younes Lahbib, and Yassine Hachaïchi. Enhanced configurable DCT CORDIC Loeffler architectures for optimal power-PSNR trade-off. *Journal of Signal Processing Systems*, 90(3):371–393, April 2017. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Meher:2017:CC**

[1171] Pramod Kumar Meher and Thanos Stouraitis. *CORDIC Circuits*, pages 149–185. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Mopuri:2017:LCM**

[1172] Suresh Mopuri and Amit Acharyya. Low-complexity methodology for complex square-root computation. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 25(11):3255–3259, 2017. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Nirmala:2017:DCC**

[1173] Y. N. Nirmala, K. C. Shilpa, S. B. Umesh, and Hareesh Kumar. Design of CORDIC coprocessor for SPARC V8. In *2017 International Conference on Computing Methodologies and Communication (ICCMC)*, pages 200–203. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Niu:2017:MMC**

[1174] Lifan Niu, Xiaoling Jia, Jun Wu, and Zhifeng Zhang. *A Multi-mode Coordinate Rotation Digital Computer (CORDIC)*, pages 345–354. Springer International Publishing, October 2017. ISBN 3-319-66628-2. ISSN 1867-822X.

**Poczekajlo:2017:HIP**

[1175] Pawe Poczekajło and Krzysztof Wawryn. Hardware implementation of 3D pipelined Laplace filter based on rotation structures. In *2017 MIXDES — 24th International Conference "Mixed Design of Integrated Circuits and Systems*, pages 276–280. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Rai:2017:PCA**

[1176] Shalini Rai, C. K. Dwivedi, and Rajeev Srivastava. Pipelined CORDIC architecture and its implementation on Simulink. In *2017 3rd International Conference on Computational Intelligence & Communication Technology (CICT)*, pages 1–10. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Ramadoss:2017:RHA**

[1177] Rajkumar Ramadoss, Mehran Mozaffari Kermani, and Reza Azarderakhsh. Reliable hardware architectures of the CORDIC algorithm with a fixed angle of rotations. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 64(8):972–976, 2017. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Rudagi:2017:CAR**

[1178] Jayashri Rudagi and Shaila Subbaraman. Comparative analysis of radix-2, radix-4, radix-8 CORDIC processors. In *2017 International Conference on Inventive Computing and Informatics (ICICI)*, pages 378–382. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Saha:2017:AEA**

[1179] Anurup Saha, K. Gaurav Kumar, Archisman Ghosh, and Mrinal Kanti Naskar. Area efficient architecture of hyperbolic functions for high frequency applications. In *2017 International Conference on Circuits, Controls, and Communications (CCUBE)*, pages 139–142. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Sahu:2017:HLC**

[1180] Anil Kumar Sahu, Vivek Kumar Chandra, and G. R. Sinha. High level computation technique for characterization of sigma–delta A/D converter. In *2017 International conference on Microelectronic Devices, Circuits and Systems (ICMDCS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Sapper:2017:ECN**

[1181] André N. Sapper, Leonardo Soares, Eduardo Costa, and Sergio Bampi. Exploring the combination of number of bits and number of iterations for a power-efficient fixed-point CORDIC implementation. In *2017 24th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pages 302–305. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Setiawan:2017:IBT**

[1182] Erwin Setiawan, Mukmin Maulana Latin, Vita Awalia Mardiana, and Trio Adiono. Implementation of baseband transmitter design based on QPSK modulation on Zynq-7000 all-programmable System-on-Chip. In *2017 International Symposium on Electronics and Smart Devices (ISESD)*, pages 138–143. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Shabani:2017:LPD**

[1183] Ahmad Shabani and Somayeh Timarchi. Low-power DCT-based compressor for wireless capsule endoscopy. *Signal Processing: Image Communication*, 59:83–95, 2017. CODEN SPICEF. ISSN 0923-5965 (print), 1879-2677 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0923596517300383`.

**Shi:2017:RIF**

[1184] X. W. Shi, C. Wang, and C. L. Zhang. Research and implementation of floating-point exponential function algorithm based on FPGA. *Journal of Computer Measurement and Control*, 10(??):226–228, ???? 2017.

**Singh:2017:CDS**

[1185] Gurwinder Singh and Lakshmi Shrinivasan. Concept and design of scaling-free, look-ahead CORDIC. In *2017 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)*, pages 1656–1659. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Singhal:2017:FIP**

[1186] Akarshika Singhal, Anjana Goen, and Tanutrushna Mohapatra. FPGA implementation and power efficient CORDIC based ADPLL for signal processing and application. In *2017 7th International Conference on Communication Systems and Network Technologies (CSNT)*, pages 325–329. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Sokolovskiy:2017:HDC**

[1187] A. V. Sokolovskiy, A. B. Gladyshev, D. D. Dmitriev, and V. N. Ratushniak. Hardware diagram computing devices navigation equipment consumers SRNS. In *2017 Dynamics of Systems, Mechanisms and Machines (Dynamics)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Sushma:2017:LAB**

[1188] Sushma, Venkataratnam, and Siva Yellampalli. A low-area based Costas loop implementation for BPSK signals. In *2017 International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICEECCOT)*, pages 196–200. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Torres:2017:OCB**

[1189] V. Torres, J. Valls, and M. J. Canet. Optimised CORDIC-based `atan2` computation for FPGA implementations. *Electronics Letters*, 53(19): 1296–1298, 2017. CODEN ELLEAK. ISSN 0013-5194 (print), 1350-911X (electronic). URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/el.2017.2090`.

**Tsai:2017:FGM**

[1190] Yu-Cheng Tsai, Chiao-En Chen, and Chia-Hsiang Yang. A flexible geometric mean decomposition processor for MIMO communication systems. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 64 (2):446–456, 2017. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Vo-Thi:2017:FPF**

[1191] Phuong-Thao Vo-Thi, Trong-Thuc Hoang, Cong-Kha Pham, and Duc-Hung Le. A floating-point FFT twiddle factor implementation based on adaptive angle recoding CORDIC. In *2017 International Conference on Recent Advances in Signal Processing, Telecommunications & Computing (SigTelCom)*, pages 21–26. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Wenming:2017:RTS**

[1192] Tang Wenming, Liu Guixiong, Li Yuzhong, and Tan Daji. Real-time s-scan imaging reconstruction for ultrasonic phase array based on CORDIC and sectorial interpolation algorithms. In *2017 13th IEEE International Conference on Electronic Measurement & Instruments (ICEMI)*, pages 567–572. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Xiang:2017:RUC**

[1193] Li Xiang and Liu Yaohua. Research on uncertainty of CORDIC algorithm. In *2017 4th International Conference on Information Science and Control Engineering (ICISCE)*, pages 651–654. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Zhang:2017:FIS**

[1194] Shuiping Zhang, Xin Tian, Chengyi Xiong, Jinwen Tian, and Delie Ming. Fast implementation for the singular value and eigenvalue decomposition based on FPGA. *Chinese Journal of Electronics*, 26(1):132–136, 2017.

**Zhu:2017:LLL**

[1195] Baozhou Zhu, Yuanwu Lei, Yuanxi Peng, and Tingting He. Low latency and low error floating-point sine/cosine function based TCORDIC algorithm. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 64(4):892–905, 2017. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Zuluaga:2017:SAN**

[1196] J. R. Zuluaga, C. H. Rodríguez, L. J. Castañón, and J. L. Naredo. Sampling approaches for the numerical Laplace transform and its FPGA implementation. In *2017 14th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017.

**Barakat:2018:FIC**

[1197] Mohamed Barakat, Waleed Saad, and Mona Shokair. FPGA implementation of cyclostationary feature detector for cognitive radio OFDM signals. In *2018 13th International Conference on Computer Engineering and Systems (ICCES)*, pages 215–218. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Barthel:2018:HIB**

[1198] Moritz Bärthel, Jochen Rust, and Steffen Paul. Hardware implementation of basic arithmetics and elementary functions for unum computing. In *2018 52nd Asilomar Conference on Signals, Systems, and Computers*, pages 125–129. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Baruah:2018:EVI**

[1199] Rashmita Baruah, Preetisudha Meher, and Ashwini Kumar Pradhan. *Efficient VLSI Implementation of CORDIC-Based Multiplier Architecture*, pages 441–450. Springer Singapore, December 2018. ISBN 981-13-3329-7. ISSN 2194-5365.

**Biswas:2018:CFQ**

[1200] Dwaipayan Biswas, Zixuan Ye, Evangelos B. Mazomenos, Michael Jöbges, and Koushik Maharatna. CORDIC framework for quaternion-based joint angle computation to classify arm movements. In *2018 IEEE*

*International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Biswas:2018:RAB**

[1201] Rathindra Nath Biswas, Anurup Saha, Swarup Kumar Mitra, and Mrinal Kanti Naskar. Realization of adaptive beamforming in smart antennas on a reconfigurable architecture. In *2018 Emerging Trends in Electronic Devices and Computational Techniques (EDCT)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Changela:2018:AIH**

[1202] Ankur Changela, Mazad Zaveri, and Anurag Lakhlani. ASIC implementation of high performance radix-8 CORDIC algorithm. In *2018 International Conference on Advances in Computing, Communications and Informatics (ICACCI)*, pages 699–705. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Changela:2018:FIA**

[1203] Ankur Changela, Mazad Zaveri, and Anurag Lakhlani. FPGA implementation of asynchronous mousetrap pipelined radix-2 CORDIC algorithm. In *2018 International Conference on Current Trends towards Converging Technologies (ICCTCT)*, pages 252–258. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Chou:2018:NTC**

[1204] Pei-Yuan Chou, Ya-Bei Fang, Bo-Hao Chen, Chien-Tung Liu, Tay-Ji Lin, and Jinn-Shyan Wang. Near-threshold CORDIC design with dynamic circuitry for long-standby IoT applications. In *2018 31st IEEE International System-on-Chip Conference (SOCC)*, pages 250–253. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**De:2018:MLH**

[1205] Debaprasad De, Archisman Ghosh, K. Gaurav Kumar, Anurup Saha, and Mrinal Kanti Naskar. Multiplier-less hardware realization of trigonometric functions for high speed applications. In *2018 IEEE Applied Signal Processing Conference (ASPCON)*, pages 149–152. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Elnabawy:2018:LPC**

[1206] Abdelrahim Elnabawy, Hussien Abdelmohsen, Moatasem Moustafa, Mostafa Elbediwy, Amr Helmy, and Hassan Mostafa. A low power CORDIC-based hardware implementation of Izhikevich neuron model. In *2018 16th IEEE International New Circuits and Systems Conference (NEWCAS)*, pages 130–133. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Evangelista:2018:FPC**

[1207] Guillermo Evangelista, Carlos Olaya, and Erick Rodríguez. Fully-pipelined CORDIC-based FPGA realization for a 3-DOF hexapod-leg inverse kinematics calculation. In *2018 WRC Symposium on Advanced Robotics and Automation (WRC SARA)*, pages 237–242. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Hoang:2018:HSP**

[1208] Trong-Thuc Hoang, Cong-Kha Pham, and Duc-Hung Le. High-speed 8/16/32-point DCT architecture using fixed-rotation adaptive CORDIC. In *2018 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Hoang:2018:VDF**

[1209] Trong-Thuc Hoang, Duc-Hung Le, and Cong-Kha Pham. VLSI design of floating-point twiddle factor using adaptive CORDIC on various iteration limitations. In *2018 IEEE 12th International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC)*, pages 225–232. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Kulshreshtha:2018:CBH**

[1210] Tanmai Kulshreshtha and Anindya Sundar Dhar. CORDIC-based high throughput sliding DFT architecture with reduced error-accumulation. *Circuits, systems, and signal processing: CSSP*, 37(11):5101–5126, April 2018. CODEN CSSPEH. ISSN 1531-5878.

**Kumari:2018:RLS**

[1211] Aishwarya Kumari and D. P. Acharya. *Reduced Latency Square-Root Calculation for Signal Processing Using Radix-4 Hyperbolic CORDIC*, pages 219–225. Springer Singapore, 2018. ISBN 981-10-8636-2. ISSN 2194-5365.

**Lee:2018:ELL**

[1212] Hyukyeon Lee, Kyungmook Oh, Minjeong Cho, Yunseok Jang, and Jaeseok Kim. Efficient low-latency implementation of CORDIC-based sorted $QR$ decomposition for multi-gbps MIMO systems. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 65(10):1375–1379, 2018. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Lee:2018:LLI**

[1213] Hyukyeon Lee, Hanjun Kim, Minjung Cho, and Jaeseok Kim. Low-latency implementation of CORDIC-based sorted $QR$ decomposition for high-speed MIMO-OFDM system. In *2018 28th International Conference Radioelektronika (RADIOELEKTRONIKA)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Liu:2018:HIP**

[1214] Tsung-Hsien Liu, Yi-Kuang Ko, Yen-Ju Chiu, Wen-Yen Lin, and Yuan-Sun Chu. Hardware implementation of the preprocessing $QR$-decomposition for the soft-output MIMO detection with multiple tree traversals. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 65(2):186–190, 2018. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Liu:2018:IIC**

[1215] Peng Liu, Yarong Guo, Yue Li, and Song Liu. IQ imbalance compensation based on CORDIC algorithm in VLC-OFDM system. In *2018 International Conference on Cyber-Enabled Distributed Computing and Knowledge Discovery (CyberC)*, pages 460–4604. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Liu:2018:PRB**

[1216] Yidong Liu and Tieying Ma. Parasitic resistance-based high precision capacitive MEMS accelerometer phase shift and its usage for temperature compensation. *IEEE Sensors Journal*, 18(2):629–634, 2018.

**Luo:2018:CBA**

[1217] Yuanyong Luo, Yuxuan Wang, Huaqing Sun, Yi Zha, Zhongfeng Wang, and Hongbing Pan. CORDIC-based architecture for computing $N$ th root and its implementation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 65(12):4183–4195, 2018. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Mokhtar:2018:ITF**

[1218] A. S. N. Mokhtar, M. I. Ayub, N. Ismail, and N. G. Nik Daud. Implementation of trigonometric function using CORDIC algorithms. In *AIP Conference Proceedings*, volume 1930, page 020040. American Institute of Physics, Woodbury, NY, USA, 2018. ISSN 0094-243x (print), 1551-7616 (electronic), 1935-0465.

**Mullane:2018:PPD**

[1219] Brendan Mullane and Vincent O'Brien. An in-place processor design for real-value FFTs targeting in-situ dynamic ADC test. In *2018 IEEE 61st International Midwest Symposium on Circuits and Systems (MWSCAS)*, pages 591–594. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Murty:2018:RME**

[1220] Mahesh S. Murty and Rahul Shrestha. Reconfigurable and memory-efficient cyclostationary spectrum sensor for cognitive-radio wireless networks. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 65(8):1039–1043, 2018. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Nguyen:2018:EFP**

[1221] Hong-Thu Nguyen, Xuan-Thuan Nguyen, and Cong-Kha Pham. An efficient fixed-point arithmetic processor using a hybrid CORDIC algorithm. In *2018 23rd Asia and South Pacific Design Automation Conference (ASP-DAC)*, pages 327–328. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Nguyen:2018:HPR**

[1222] Ngoc Hung Nguyen, Sheraz Ali Khan, Cheol-Hong Kim, and Jong-Myon Kim. A high-performance, resource-efficient, reconfigurable parallel-pipelined FFT processor for FPGA platforms. *Microprocessors and Microsystems*, 60:96–106, 2018. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933117302788`.

**Nguyen:2018:LPH**

[1223] Hong-Thu Nguyen, Xuan-Thuan Nguyen, and Cong-Kha Pham. A low-power hybrid adaptive CORDIC. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 65(4):496–500, 2018. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Omran:2018:FDB**

[1224] Safaa S. Omran and Ahmed K. Abdul-abbas. Fast $QR$ decomposition based on FPGA. In *2018 International Conference on Advanced Science and Engineering (ICOASE)*, pages 189–193. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Parmar:2018:HEV**

[1225] Yashrajsinh Parmar and K. Sridharan. Hardware-efficient velocity estimation of dynamic obstacles based on a novel radix-4 CORDIC and FPGA implementation. In *IECON 2018 — 44th Annual Conference of the IEEE Industrial Electronics Society*, pages 3770–3775. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Parmar:2018:PBR**

[1226] Yashrajsinh Parmar and Krishnamurthy Sridharan. Precomputation-based radix-4 CORDIC for approximate rotations and Hough transform. *IET Circuits, Devices & Systems*, 12(4):413–423, 2018. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/iet-cds.2017.0492`.

**Pendem:2018:ECA**

[1227] Suganda Pendem and Rajshekar B. Shettar. Enhancing computational accuracy and performance of interval arithmetic double rotation CORDIC algorithm. In *2018 International Conference on Networking, Embedded and Wireless Systems (ICNEWS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Polikarovskykh:2018:DDF**

[1228] O Polikarovskykh, I. V. Gula, L. Kovtun, and L. Karpova. Direct digital frequency synthesizer with a combined method of synthesis output harmonic signal. In *2018 International Conference on Information and Telecommunication Technologies and Radio Electronics (UkrMiCo)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Puzyrev:2018:SFD**

[1229] Pavel I. Puzyrev, Kirill V. Semenov, and Sergey A. Zavyalov. Spurious-free dynamic range of CORDIC based digital quadrature demodulator. In *2018 19th International Conference of Young Specialists on Micro/Nanotechnologies and Electron Devices (EDM)*, pages 167–171. IEEE

Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Rai:2018:FRS**

[1230] Shalini Rai and Rajeev Srivastava. *FPGA Realization of Scale-Free CORDIC Algorithm-Based Window Functions*, pages 245–257. Springer Singapore, December 2018. ISBN 981-13-2685-1. ISSN 1876-1119.

**Raj:2018:SSH**

[1231] E. P. Rejil Raj, Bibin Sam Paul, and G. Lakshmi Narayanan. Simplified SIFT histogram of oriented gradients bin locator on FPGA. In *2018 9th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Ray:2018:CBV**

[1232] Kailash Chandra Ray and Anindya Sundar Dhar. CORDIC-based VLSI architectures of running DFT with refreshing mechanism. *Journal of Signal Processing Systems*, 91(5):539–550, April 2018. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Rekha:2018:FIE**

[1233] R. Rekha and Karunakara P. Menon. FPGA implementation of exponential function using CORDIC IP core for extended input range. In *2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)*, pages 597–600. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Roy:2018:DSW**

[1234] S. Roy, D. Kumar, A. Dandapat, and P. Saha. Discretized sinusoidal waveform generators for signal processing applications. In *2018 2nd International Conference on Trends in Electronics and Informatics (ICOEI)*, pages 1350–1353. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Sahoo:2018:HIC**

[1235] Anuvab Sahoo and Mamata Panigrahy. Hardware implementation of CORDIC algorithm. In *2018 International Conference on Applied Electromagnetics, Signal Processing and Communication (AESPC)*, volume 1, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Samila:2018:WGD**

[1236] A. P. Samila, G. I. Lastivka, L. F. Politansky, and T. A. Kazemirskiy. Waveform generation for the digital synthesis systems based on embedded hardware. In *2018 14th International Conference on Advanced Trends in Radioelecrtronics, Telecommunications and Computer Engineering (TCSET)*, pages 831–834. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Sawant:2018:WGR**

[1237] Avilash Sawant, Shilpa Patil, and K. Aurobindo. Waveform generator for RADAR using FPGA. In *2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT)*, pages 905–909. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Shin:2018:LLA**

[1238] Dongyeob Shin and Jongsun Park. A low-latency and area-efficient Gram Schmidt-based QRD architecture for MIMO receiver. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 65(8):2606–2616, 2018. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Sokolovskii:2018:HSG**

[1239] A. V. Sokolovskii, D. D. Dmitriev, I. N. Kartsan, and A. E. Goncharov. A harmonic signal generator with a continuous phase. In *2018 Moscow Workshop on Electronic and Networking Technologies (MWENT)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Thiripurasundari:2018:FIN**

[1240] C. Thiripurasundari, V. Sumathy, and C. Thiruvengadam. An FPGA implementation of novel smart antenna algorithm in tracking systems for smart cities. *Computers and Electrical Engineering*, 65:59–66, 2018. CODEN CPEEBQ. ISSN 0045-7906 (print), 1879-0755 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0045790617316609`.

**Tseng:2018:DIH**

[1241] Tzu-Ting Tseng and Chung-An Shen. Design and implementation of a high-throughput configurable pre-processor for MIMO detections. *Microelectronics Journal*, 72:14–23, 2018. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S0026269216304669`.

**Wang:2018:DIC**

[1242] Xiaoyuan Wang. Design and implementation of CORDIC algorithm based on FPGA. In *2018 International Conference on Robots & Intelligent System (ICRIS)*, pages 70–71. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Wang:2018:FEB**

[1243] Leiou Wang, Donghui Wang, and Chengpeng Hao. A fast eigen-based signal combining algorithm by using CORDIC. In *2018 26th European Signal Processing Conference (EUSIPCO)*, pages 618–622. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Wang:2018:VVS**

[1244] Chao Wang, Jianwen Luo, and Jun Zhou. A 1-V to 0.29-V sub-100-pJ/operation ultra-low power fast-convergence CORDIC processor in 0.18-$\mu$ m CMOS. *Microelectronics Journal*, 76:52–62, 2018. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S002626921730873X`.

**Xie:2018:AFB**

[1245] Yu Xie, He Chen, Yi-Zhuang Xie, Chuang-An Mao, and Bing-Yi Li. An automated FPGA-based fault injection platform for granularly-pipelined fault tolerant CORDIC. In *2018 International Conference on Field-Programmable Technology (FPT)*, pages 370–373. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Yeh:2018:HSD**

[1246] Chun-Yu Yeh, Ting-Chung Chu, Chiao-En Chen, and Chia-Hsiang Yang. A hardware-scalable DSP architecture for beam selection in mm-wave MU-MIMO systems. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 65(11):3918–3928, 2018. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Yeshwanth:2018:HSS**

[1247] Balaji Yeshwanth, Vutukuri Venkatesh, and Repala Akhil. High-speed single precision floating point multiplier using CORDIC algorithm. In *2018 International Conference on Electrical, Electronics, Communication, Computer, and Optimization Techniques (ICEECCOT)*, pages 135–141. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2018.

**Zechmeister:2018:CLM**

[1248] M. Zechmeister. CORDIC-like method for solving Kepler's equation. *Astronomy and Astrophysics*, 619:A128, November 2018. CODEN AAEJAF. ISSN 0004-6361 (print), 1432-0746 (electronic).

**Zechmeister:2018:SKE**

[1249] Mathias Zechmeister. Solving kepler's equation CORDIC-like. *arXiv.org*, ??(??):??, 2018. URL `https://arxiv.org/abs/1808.07062`.

**Zhao:2018:CBM**

[1250] Dixian Zhao and Pingyang He. CORDIC-based multi-Gb/s digital outphasing modulator for highly efficient millimeter-wave transmitters. *Wireless Communications and Mobile Computing*, 2018(1):7216870, 2018. URL `https://onlinelibrary.wiley.com/doi/abs/10.1155/2018/7216870`.

**Bui:2019:VMS**

[1251] Ngoc-Tu Bui, Trong-Thuc Hoang, Duc-Hung Le, and Cong-Kha Pham. A 0.75-v 32-MHz 181-$\mu$W SOTB-65nm floating-point twiddle factor using adaptive CORDIC. In *2019 IEEE International Conference on Industrial Technology (ICIT)*, pages 835–840. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Bui:2019:VMW**

[1252] Ngoc-Tu Bui, Trong-Thuc Hoang, Akinori Yamamoto, Duc-Hung Le, and Cong-Kha Pham. A 0.75-v 58-MHz 340- W SOTB-65nm 32-point DCT implementation based on fixed-rotation adaptive CORDIC. In *2019 IEEE SOI-3D-Subthreshold Microelectronics Technology Unified Conference (S3S)*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Chakraborty:2019:LLS**

[1253] Anirban Chakraborty and Ayan Banerjee. Low latency semi-iterative CORDIC algorithm using normalized angle recoding and its VLSI implementation. In *2019 International Conference on Communication and Signal Processing (ICCSP)*, pages 0913–0920. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Datta:2019:IUM**

[1254] Debarshi Datta, Partha Mitra, and Himadri Sekhar Dutta. *Implementation of Universal Modulator Using CORDIC Architecture in FPGA*,

pages 434–441. Springer Singapore, 2019. ISBN 981-13-8578-5. ISSN 1865-0937.

**Dmitriev:2019:PSG**

[1255] Dmitry Dmitriev, Aleksey Sokolovskiy, Andrey Gladyshev, Vasily Ratushniak, and Valery Tyapkin. Pseudorandom sequence generator using CORDIC processor. In *2019 Ural Symposium on Biomedical Engineering, Radioelectronics and Information Technology (USBEREIT)*, pages 477–480. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Elshafiy:2019:OMR**

[1256] Ahmed Elshafiy, Mohammed A. El-Motaz, Mohamed E. Farag, Omar A. Nasr, and Hossam A. H. Fahmy. On optimization of mixed-radix FFT: a signal processing approach. In *2019 IEEE Wireless Communications and Networking Conference (WCNC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Fan:2019:ECI**

[1257] Yu-Cheng Fan, Chiao-An Chu, and Yi-Cheng Liu. Efficient CORDIC iteration design of LiDAR point cloud map reconstruction technology. In *2019 IEEE International Conference on Consumer Electronics — Taiwan (ICCE-TW)*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Fang:2019:GSC**

[1258] Linlin Fang, Yizhuang Xie, Bingyi Li, and He Chen. Generation scheme of chirp scaling phase functions based on floating-point CORDIC processor. *The Journal of Engineering*, 2019(21):7436–7439, 2019. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/joe.2019.0623`.

**Gao:2019:DGC**

[1259] Shaoquan Gao, Hanjun Jiang, Fule Li, and Zhihua Wang. DCO gain calibration technique in fractional-n — PLL based two-point phase modulators. In *2019 IEEE 62nd International Midwest Symposium on Circuits and Systems (MWSCAS)*, pages 718–721. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Gao:2019:EEU**

[1260] Yang Gao, Jian Liu, and Zhiwu Zhang. $\delta$-error elimination using truncation retention method and implementation on FPGA for non-redundant CORDIC. *Journal of Physics: Conference Series*, 1237(2):022145, June 2019. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic).

**Gassoumi:2019:EDC**

[1261] Ismail Gassoumi, Lamjed Touil, Bouraoui Ouni, and Abdellatif Mtibaa. An efficient design of CORDIC in quantum-dot cellular automata technology. *International Journal of Electronics Theoretical & Experimental*, 106(12):2039–2056, July 2019. CODEN IJELA2. ISSN 1362-3060.

**Gomar:2019:DPR**

[1262] Sh. Gomar and M. Ahmadi. A digital pseudo random number generator based on a chaotic dynamic system. In *2019 26th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pages 610–613. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Gupta:2019:PTR**

[1263] Arpit Gupta, Arashdeep Kaur, Malay Kishore Dutta, and Ji í Schimmel. Perceptually transparent & robust audio watermarking algorithm using multi resolution decomposition & CORDIC $QR$ decomposition. In *2019 42nd International Conference on Telecommunications and Signal Processing (TSP)*, pages 313–317. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Hao:2019:VID**

[1264] Liu Hao, Wang Ming-Jiang, Chen Mo-Ran, and Liu Ming. A VLSI implementation of double precision floating-point logarithmic function. In *2019 IEEE 4th International Conference on Signal and Image Processing (ICSIP)*, pages 345–349. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Heidarpur:2019:CSF**

[1265] Moslem Heidarpur, Arash Ahmadi, Majid Ahmadi, and Mostafa Rahimi Azghadi. CORDIC-SNN: On-FPGA STDP learning with Izhikevich neurons. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 66 (7):2651–2661, 2019. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Hoang:2019:LPF**

[1266] Trong-Thuc Hoang, Xuan-Thuan Nguyen, Duc-Hung Le, and Cong-Kha Pham. Low-power floating-point adaptive-CORDIC-based FFT twiddle factor on 65-nm Silicon-on-Thin-BOX (SOTB) with back-gate bias. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 66(10): 1723–1727, 2019. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Hou:2019:LLF**

[1267] Nanxin Hou, Mingjiang Wang, Xiafeng Zou, and Ming Liu. A low latency floating point CORDIC algorithm for sin/cosine function. In *2019 IEEE 4th International Conference on Signal and Image Processing (ICSIP)*, pages 751–755. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Inguva:2019:FBI**

[1268] Sharath Chandra Inguva and J. B. Seventline. FPGA based implementation of low power CORDIC architecture. In *2019 International Conference on Intelligent Sustainable Systems (ICISS)*, pages 389–395. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Jaquenod:2019:ICA**

[1269] Guillermo A. Jaquenod. Improved CORDIC angle computation for RF applications using an autorange circuit. In *2019 Argentine Conference on Electronics (CAE)*, pages 6–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Jing:2019:NOM**

[1270] Zhang Jing. No-overflowing magnification scheme in redundant CORDIC algorithm and its implementation in FPGA. *Journal of Physics: Conference Series*, 1345(4):042050, November 2019. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic).

**Jyothi:2019:AIF**

[1271] Grande Naga Jyothi, Kundu Debanjan, and Gorantla Anusha. *ASIC Implementation of Fixed-Point Iterative, Parallel, and Pipeline CORDIC Algorithm*, pages 341–351. Springer Singapore, November 2019. ISBN 981-15-0035-5. ISSN 2194-5365.

**Kulshreshtha:2019:IVA**

[1272] Tanmai Kulshreshtha and Anindya Sundar Dhar. Improved VLSI architecture for triangular windowed sliding DFT based on CORDIC algorithm. *IET Circuits, Devices & Systems*, 13(2):251–258, 2019. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/iet-cds.2018.5110`.

**Kumar:2019:FIT**

[1273] Puli Anil Kumar. FPGA implementation of the trigonometric functions using the CORDIC algorithm. In *2019 5th International Conference on*

*Advanced Computing & Communication Systems (ICACCS)*, pages 894–900. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Li:2019:DIS**

[1274] Ching-Iang Li, Gwo-Dong Chen, Tze-Yun Sung, and Huai-Fang Tsai. Design and implementation of smart multi-touch interface using special purpose CORDIC processor. *IEEE Transactions on Consumer Electronics*, 65(4):516–525, 2019. CODEN ITCEDA. ISSN 0098-3063 (print), 1558-4127 (electronic).

**Liu:2019:HFL**

[1275] Shaohan Liu and Dake Liu. A high-flexible low-latency memory-based FFT processor for 4G, WLAN, and future 5G. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 27(3):511–523, 2019. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Liu:2019:LCM**

[1276] Tsung-Hsien Liu, You-Zhi Ye, Chen-Kai Huang, Chiao-En Chen, Yin-Tsung Hwang, and Yuan-Sun Chu. A low-complexity maximum likelihood detector for the spatially modulated signals: Algorithm and hardware implementation. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 66(11):1820–1824, 2019. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Luo:2019:CGH**

[1277] Yuanyong Luo, Yuxuan Wang, Yajun Ha, Zhongfeng Wang, Siyuan Chen, and Hongbing Pan. Corrections to Generalized Hyperbolic CORDIC and Its Logarithmic and Exponential Computation With Arbitrary Fixed Base [Sep 19 DOI: 10.1109/TVLSI.2019.2919557]. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 27(9):2222, 2019. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic). See [1278].

**Luo:2019:GHC**

[1278] Yuanyong Luo, Yuxuan Wang, Yajun Ha, Zhongfeng Wang, Siyuan Chen, and Hongbing Pan. Generalized hyperbolic CORDIC and its logarithmic and exponential computation with arbitrary fixed base. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 27(9): 2156–2169, 2019. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic). See corrections [1277].

**Ma:2019:LCD**

[1279] Shang Ma, Xuesi Wang, Yongjie Li, Kai Long, Bixin Zhu, and Xin Lei. A low complexity DDS based on optimized CORDIC algorithm. In *2019 IEEE 13th International Conference on ASIC (ASICON)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Mahdavi:2019:ATP**

[1280] Hossein Mahdavi and Somayeh Timarchi. Area time power efficient FFT architectures based on binary-signed-digit CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 66(10):3874–3881, 2019. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Manupotisreenivasulu:2019:EMB**

[1281] Manupotisreenivasulu and T. Meenpal. Efficient MUX based CORDIC on FPGA for signal processing application. In *2019 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Mopuri:2019:CRB**

[1282] Suresh Mopuri, Swati Bhardwaj, and Amit Acharyya. Coordinate rotation-based design methodology for square root and division computation. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 66(7):1227–1231, 2019. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Mopuri:2019:CRM**

[1283] Suresh Mopuri and Amit Acharyya. Configurable rotation matrix of hyperbolic CORDIC for any logarithm and its inverse computation. *Circuits, systems, and signal processing: CSSP*, 39(5):2551–2573, September 2019. CODEN CSSPEH. ISSN 1531-5878.

**Mopuri:2019:LCG**

[1284] Suresh Mopuri and Amit Acharyya. Low complexity generic VLSI architecture design methodology for $N^{\text{th}}$ root and $N^{\text{th}}$ power computations. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 66(12): 4673–4686, 2019. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Moradi:2019:SEI**

[1285] Hamed Moradi, Fahimeh Hosseinibalam, and Smaeyl Hassanzadeh. Simulation and experimental investigation about interferometric optical fiber acoustic sensor for sensitivity enhancement. *Measurement: Journal*

*of the International Measurement Confederation*, 137:556–561, 2019. ISSN 0263-2241 (print), 1873-412x (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0263224119300855`.

**Navalgund:2019:CBD**

[1286] Anish K. Navalgund, V. Akshara, Ravali Jadhav, Shashank Shankar, and S. Sandya. *Comparison Between the DDFS Implementation Using the Look-up Table Method and the CORDIC Method*, pages 601–607. Springer Singapore, 2019. ISBN 981-13-6001-4. ISSN 2194-5365.

**Osta:2019:FIA**

[1287] Mario Osta, Ali Ibrahim, and Maurizio Valle. FPGA implementation of approximate CORDIC circuits for energy efficient applications. In *2019 26th IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pages 127–128. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Raditya:2019:DSS**

[1288] Murry Raditya, Purwadi Agus Darwito, Arviandi Cikadiarta, Halimatus Sadiyah, Aditya Wimansyah, and Effran Rajagukguk. Design of sinusoidal signal generator using pipelined CORDIC architecture based on Altera Cyclone II FPGA. In *2019 International Conference on Advanced Mechatronics, Intelligent Manufacture and Industrial Automation (ICAMIMIA)*, pages 105–108. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Raut:2019:ELP**

[1289] Gopal Raut, Vishal Bhartiy, Gunjan Rajput, Sajid Khan, Ankur Beohar, and Santosh Kumar Vishvakarma. *Efficient Low-Precision CORDIC Algorithm for Hardware Implementation of Artificial Neural Network*, pages 321–333. Springer Singapore, 2019. ISBN 981-329-767-0. ISSN 1865-0937.

**Saalfeld:2019:CBD**

[1290] Tobias Saalfeld, Tobias Piwczyk, Ralf Wunderlich, and Stefan Heinen. A CORDIC-based demodulator for digital baseband processing in multi-standard receivers. In *2019 Kleinheubach Conference*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019. URL `https://ieeexplore.ieee.org/document/8890171/`.

**Shiri:2019:FIS**

[1291] Aidin Shiri and Ghader Karimian Khosroshahi. An FPGA implementation of singular value decomposition. In *2019 27th Iranian Conference*

*on Electrical Engineering (ICEE)*, pages 416–422. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Sokolovskiy:2019:PDH**

[1292] A. V. Sokolovskiy, V. N. Tyapkin, E. A. Veisov, and Yu.L. Fateev. The pipelined $QR$ decomposition hardware architecture based on Givens rotation CORDIC algorithm. In *2019 International Siberian Conference on Control and Communications (SIBCON)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Steins:2019:DDE**

[1293] Manuel Steins, Simon Müller, and Andreas R. Diewald. Digital Doppler effect generation with CORDIC algorithm for radar target simulations. In *2019 23rd International Conference on Applied Electromagnetics and Communications (ICECOM)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Su:2019:BDC**

[1294] Yali Su, Zejie Kuang, Guohe Zhang, and Li Sun. A 14-bit DDS circuit design based on CORDIC algorithm. In *2019 IEEE International Conference of Intelligent Applied Systems on Engineering (ICIASE)*, pages 321–323. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Tiwari:2019:VPB**

[1295] Honey Durga Tiwari. Vedic processor based trigonometric calculations using power series. In *2019 5th International Conference on Advanced Computing & Communication Systems (ICACCS)*, pages 118–123. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Vachhani:2019:CSN**

[1296] Leena Vachhani. CORDIC as a switched nonlinear system. *Circuits, systems, and signal processing: CSSP*, 39(6):3234–3249, November 2019. CODEN CSSPEH. ISSN 1531-5878.

**Venkatesh:2019:EHS**

[1297] Vutukuri Venkatesh, Balaji Yeswanth, Repala Akhil, and Ravi Kumar Jatoth. *An Efficient High-Speed CORDIC Algorithm Using Parallel-Prefix Adders (PPA)*, pages 805–813. Springer Singapore, December 2019. ISBN 981-329-775-1. ISSN 1876-1119.

**Vyas:2019:HEI**

[1298] Pranjal Vyas, Leena Vachhani, and K. Sridharan. Hardware-efficient interval analysis based collision detection and avoidance for mobile robots. *Mechatronics*, 62:102258, 2019. ISSN 0957-4158. URL `https://www.sciencedirect.com/science/article/pii/S0957415819300911`.

**Wadkar:2019:LLS**

[1299] Sumit Satyavijay Wadkar, Bishnu Prasad Das, and Pramod Kumar Meher. Low latency scaling-free pipeline CORDIC architecture using augmented Taylor series. In *2019 IEEE International Symposium on Smart Electronic Systems (iSES) (Formerly iNiS)*, pages 312–315. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Weissbrich:2019:FRC**

[1300] M. Weißbrich, L. Gerlach, H. Blume, A. Najafi, A. García-Ortiz, and G. Payá-Vayá. FLINT+: a runtime-configurable emulation-based stochastic timing analysis framework. *Integration, the VLSI Journal*, 69:120–137, 2019. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0167926017307794`.

**Wu:2019:SPB**

[1301] Chun-Hun Wu and Pei-Yun Tsai. An SVD processor based on Golub Reinsch algorithm for MIMO precoding with adjustable precision. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 66(7):2572–2583, 2019. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Xu:2019:FCS**

[1302] Qunwei Xu, Zhun Hu, Jun Wu, Wentao Lv, and Hongyang Huang. Fast control strategy of APF based on improved DFT algorithm and repetitive control with multiple control frequency in synchronous rotation coordinates. In *2019 22nd International Conference on Electrical Machines and Systems (ICEMS)*, pages 1–6. IEEE, August 2019.

**Xue:2019:DIE**

[1303] Yuan Xue and Zhongsong Ma. Design and implementation of an efficient modified CORDIC algorithm. In *2019 IEEE 4th International Conference on Signal and Image Processing (ICSIP)*, pages 480–484. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2019.

**Zhu:2019:DPS**

[1304] Weibin Zhu, Shengjin Ye, Yao Huang, and Zi Xue. Design of a precise subdivision system for gratings using a modified CORDIC algorithm. *IET Circuits, Devices & Systems*, 13(8):1284–1291, 2019. URL `https://onlinelibrary.wiley.com/doi/abs/10.1049/iet-cds.2019.0150`.

**Zou:2019:ARH**

[1305] Xiafeng Zou and Mingjiang Wang. Algorithm research and hardware implementation of high precision floating point exponential function. *Journal of Physics: Conference Series*, 1345(4):042085, November 2019. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic).

**Akhil:2020:DAA**

[1306] Repala Akhil, Jithendreswar Rao Koleti, Adusumilli Vijaya Bhaskar, Volladam Sathish, and Bolepalli Arjun Goud. Delay and area analysis of hardware implementation of FFT using FPGA. In *2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Anju:2020:PDP**

[1307] P. Anju, A. A. Bazil Raj, and Chandra Shekhar. Pulse Doppler processing — a novel digital technique. In *2020 4th International Conference on Intelligent Computing and Control Systems (ICICCS)*, pages 1089–1095. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Annafianto:2020:FIL**

[1308] N. Fajar R. Annafianto, M. V. Jabir, I. A. Burenkov, H. F. Ugurdag, A. Battou, and S. V. Polyakov. FPGA implementation of a low latency and high SFDR direct digital synthesizer for resource-efficient quantum-enhanced communication. In *2020 IEEE East-West Design & Test Symposium (EWDTS)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Aranda:2020:RHD**

[1309] Luis Alberto Aranda, Francisco Garcia-Herrero, Luis Esteban, Alfonso Sánchez-Macián, and Juan Antonio Maestro. Radiation hardened digital direct synthesizer with CORDIC for spaceborne applications. *IEEE Access*, 8:83167–83176xo, 2020. ISSN 2169-3536.

**Banerjee:2020:NPC**

[1310] Ayan Banerjee and Anindya Sundar Dhar. A novel paradigm of CORDIC-based FFT architecture framed on the optimality of high-radix computation. *Circuits, systems, and signal processing: CSSP*, 40(1):311–334, June 2020. CODEN CSSPEH. ISSN 1531-5878.

**Bose:2020:FAE**

[1311] Sudipta Bose, Arijit De, and Indrajit Chakrabarti. Framework for automated earthquake event detection based on denoising by adaptive filter. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 67(9): 3070–3083, 2020. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Cao:2020:CBA**

[1312] Yongxiang Cao, Wan'ang Xiao, and Jingdun Jia. A CORDIC-based acceleration method on FPGA for CNN normalization layer. In *2020 International Conference on High Performance Big Data and Intelligent Systems (HPBD&IS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Cao:2020:CBS**

[1313] Yongxiang Cao, Wan'ang Xiao, Jingdun Jia, Dehua Wu, and Weixin Zhou. Cordic-based softmax acceleration method of convolution neural network on FPGA. In *2020 IEEE International Conference on Artificial Intelligence and Information Systems (ICAIIS)*, pages 66–70. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Chakraborty:2020:NVA**

[1314] Anirban Chakraborty and Ayan Banerjee. A novel VLSI architecture of CORDIC based image registration. In *2020 Sixth International Conference on Bio Signals, Images, and Instrumentation (ICBSII)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Changela:2020:FIH**

[1315] Ankur Changela, Mazad Zaveri, and Deepak Verma. FPGA implementation of high-performance, resource-efficient radix-16 CORDIC rotator based FFT algorithm. *Integration, the VLSI Journal*, 73:89–100, 2020. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S016792601930570X`.

**Chen:2020:CBA**

[1316] Hui Chen, Lin Jiang, Yuanyong Luo, Zhonghai Lu, Yuxiang Fu, Li Li, and Zongguang Yu. A CORDIC-based architecture with adjustable precision and flexible scalability to implement sigmoid and tanh functions. In *2020 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Chen:2020:EMP**

[1317] Lirui Chen, Zuocheng Xing, Yongzhong Li, and Shikai Qiu. Efficient MIMO preprocessor with sorting-relaxed $QR$ decomposition and modified greedy LLL algorithm. *IEEE Access*, 8:54085–54099, 2020. ISSN 2169-3536.

**Chen:2020:HCB**

[1318] Hui Chen, Kaifeng Cheng, Zhonghai Lu, Yuxiang Fu, and Li Li. Hyperbolic CORDIC-based architecture for computing logarithm and its implementation. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 67(11):2652–2656, 2020. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Chen:2020:IMC**

[1319] Wenjun Chen, Tianya Wu, Wangwang Tang, Kai Jin, and Guangming Huang. Implementation method of CORDIC algorithm to improve DDFS performance. In *2020 IEEE 3rd International Conference on Electronics Technology (ICET)*, pages 58–62. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Chen:2020:VII**

[1320] Yuan-Ho Chen, Szi-Wen Chen, and Min-Xian Wei. A VLSI implementation of independent component analysis for biomedical signal separation using CORDIC engine. *IEEE Transactions on Biomedical Circuits and Systems*, 14(2):373–381, 2020.

**Datta:2020:FBD**

[1321] Debarshi Datta, Partha Mitra, and Himadri Sekhar Dutta. FPGA-based digital down converter for GSM application. In *2020 IEEE VLSI Device Circuit and System (VLSI DCS)*, page 299. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Dutt:2020:HSL**

[1322] Rashi Dutt and Amit Acharyya. A high speed and low complexity architecture design methodology for square root unscented Kalman filter based SLAM. In *2020 European Conference on Circuit Theory and Design (ECCTD)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Fang:2020:URC**

[1323] Linlin Fang, Bingyi Li, Yizhuang Xie, He Chen, and Long Pang. A unified reconfigurable CORDIC processor for floating-point arithmetic. *International Journal of Electronics Theoretical & Experimental*, 107(9): 1436–1450, February 2020. CODEN IJELA2. ISSN 1362-3060.

**Faraji:2020:HBU**

[1324] S. Rasoul Faraji and Kia Bazargan. Hybrid binary–unary hardware accelerator. *IEEE Transactions on Computers*, 69(9):1308–1319, September 2020. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Florio:2020:EVN**

[1325] Antonello Florio, Gianfranco Avitabile, and Giuseppe Coviello. An experimental validation of the naïve approach to angle of arrival estimation for green WSNs. In *2020 IEEE 20th Mediterranean Electrotechnical Conference (MELECON)*, pages 165–168. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Ghosh:2020:FAU**

[1326] Amitava Ghosh, Uttaran De, Vivek Chaurasia, Zahid Iqbal, and Zainab Sultan. A fast architecture using CORDIC for simultaneous calculation of Hankel transforms. In *2020 4th International Conference on Electronics, Materials Engineering & Nano-Technology (IEMENTech)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Heidarpur:2020:CAT**

[1327] Moslem Heidarpur, Parvin Khosravifar, Arash Ahmadi, and Majid Ahmadi. CORDIC-Astrocyte: Tripartite Glutamate-IP3-$Ca^{2+}$ interaction dynamics on FPGA. *IEEE Transactions on Biomedical Circuits and Systems*, 14(1):36–47, 2020.

**Heidarpur:2020:CSF**

[1328] Moslem Heidarpur, Arash Ahmadi, Majid Ahmadi, and Mostafa Rahimi Azghadi. CORDIC-SNN: On-FPGA STDP learning with Izhikevich neurons. In *2020 IEEE International Symposium on Circuits and Systems*

*(ISCAS)*, page 1. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Jain:2020:EFD**

[1329] Prachi Jain and Ananiah Durai. Efficient fault diagnosis for CORDIC algorithm by using Hamming codes. *Journal of Physics: Conference Series*, 1716(1):012041, December 2020. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic).

**Johnson:2020:EAHa**

[1330] Jeff Johnson. Efficient, arbitrarily high precision hardware logarithmic arithmetic for linear algebra. *arxiv.org*, ??(??):1–8, May 14, 2020. URL `https://arxiv.org/pdf/2004.09313.pdf`.

**Johnson:2020:EAHb**

[1331] Jeff Johnson. Efficient, arbitrarily high precision hardware logarithmic arithmetic for linear algebra. In Cornea et al. [1601], pages 25–32. ISBN 1-72817-120-2, 1-72817-121-0. ISSN 2576-2265. LCCN ???? URL `https://ieeexplore.ieee.org/servlet/opac?punumber=9146973`.

**Kagalkar:2020:CBI**

[1332] Aishwarya Kagalkar and S. Raghuram. CORDIC based implementation of the softmax activation function. In *2020 24th International Symposium on VLSI Design and Test (VDAT)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Kajur:2020:HRG**

[1333] Renuka Kajur and K. V. Prasad. *Hardware Realization of GMSK System Using Pipelined CORDIC Module on FPGA*, pages 21–31. Springer International Publishing, 2020. ISBN 3-030-51974-0. ISSN 2194-5365.

**Kavitha:2020:EFA**

[1334] M. S. Kavitha and P. Rangarajan. An efficient FPGA architecture for reconfigurable FFT processor incorporating an integration of an improved CORDIC and radix-2r algorithm. *Circuits, systems, and signal processing: CSSP*, 39(11):5801–5829, May 2020. CODEN CSSPEH. ISSN 1531-5878.

**Khan:2020:DLP**

[1335] Mohammed Wajid Khan, V. Vannammal Revathy, and S. Kaja Mohideen. *Design of Low Power Barrel Shifter Architecture by Using Proposed MUX Based CORDIC in CMOS Logic*, pages 727–737. Springer Singapore, November 2020. ISBN 981-15-7486-3. ISSN 1876-1119.

**Khankin:2020:ECB**

[1336] Daniel Khankin, Elad Raz, and Ilan Tayari. *Efficient CORDIC-Based Sine and Cosine Implementation for a Dataflow Architecture: (Extended Abstract)*, pages 128–142. Springer International Publishing, 2020. ISBN 3-030-49785-2. ISSN 1611-3349.

**Kubinec:2020:SAA**

[1337] Peter Kubinec, Jozef Púčik, Miroslav Hagara, Elena Cocherová, and Oldřich Ondráček. Successive approximation algorithm for complex number magnitude and argument computation. In *2020 30th International Conference Radioelektronika (RADIOELEKTRONIKA)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Kumar:2020:HER**

[1338] Vikas Kumar, Mithun Mukherjee, and Jaime Lloret. A hardware-efficient and reconfigurable UFMC transmitter architecture with its FPGA prototype. *IEEE Embedded Systems Letters*, 12(4):109–112, 2020.

**Li:2020:HTL**

[1339] Diwei Li and Dixian Zhao. High-throughput low-power area-efficient outphasing modulator based on unrolled and pipelined radix-2 CORDIC. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 28 (2):480–491, 2020. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Liang:2020:RLR**

[1340] Ying Liang, Ke Li Li, Fang Hong Bi, Kun Zhang, and Jun Yang. Research on LFMCW radar velocity ranging optimization system based on FPGA. *Procedia Computer Science*, 166:187–194, 2020. ISSN 1877-0509. URL `https://www.sciencedirect.com/science/article/pii/S187705092030168X`. Proceedings of the 3rd International Conference on Mechatronics and Intelligent Robotics (ICMIR-2019).

**Liu:2020:FAH**

[1341] Duanmao Liu, Yinfei Pan, and Rongsheng Lu. FPGA-assisted high-precision, high-speed 3D shape measurement. *Sensors and Actuators A: Physical*, 315:112366, 2020. ISSN 0924-4247. URL `https://www.sciencedirect.com/science/article/pii/S0924424720316824`.

**Mahdavi:2020:IAB**

[1342] Hossein Mahdavi and Somayeh Timarchi. Improving architectures of binary signed-digit CORDIC with generic/specific initial angles. *IEEE*

*Transactions on Circuits and Systems I: Regular Papers*, 67(7):2297–2304, 2020. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Ozkilbac:2020:DHI**

[1343] Bahadır Özkılbaç and Tevhit Karacalı. Design and hardware implementation of bit length adjustable cosine and sine generator with CORDIC algorithm in FPGA. In ????, editor, *2020 12th International Conference on Electrical and Electronics Engineering (ELECO), 26–28 November 2020, Bursa, Turkey*, pages 145–149. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020. URL `https://ieeexplore.ieee.org/document/9317179/`.

**Paliwal:2020:HDI**

[1344] Atharv Paliwal, Bhavik Mohindroo, and Kriti Suneja. Hardware design of image encryption and decryption using CORDIC based chaotic generator. In *2020 5th IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Rajagopalan:2020:CBP**

[1345] P. Rajagopalan, Shrikant Dubey, Rajat Arora, and Sanjay. D. Mehta. CORDIC based phase calibration algorithm for phase coherent DSP applications. In *2020 7th International Conference on Signal Processing and Integrated Networks (SPIN)*, pages 576–580. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Raut:2020:CBC**

[1346] Gopal Raut, Shubham Rai, Santosh Kumar Vishvakarma, and Akash Kumar. A CORDIC based configurable activation function for ANN applications. In *2020 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, pages 78–83. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Salehi:2020:NDL**

[1347] Forouzan Salehi, Ebrahim Farshidi, and Hooman Kaabi. Novel design for a low-latency CORDIC algorithm for sine-cosine computation and its implementation on FPGA. *Microprocessors and Microsystems*, 77:103197, 2020. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933120303641`.

**Sharma:2020:CAC**

[1348] Nitesh Kumar Sharma, Shanti Rathore, and M. R. Khan. A comparative analysis on coordinate rotation digital computer (CORDIC) algorithm and its use on computer vision technology. In *2020 First International Conference on Power, Control and Computing Technologies (ICPC2T)*, pages 106–110. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Shashikala:2020:EIR**

[1349] BN Shashikala, BS Sudha, and Sayantam Sarkar. Efficient implementation of radix-2 FFT architecture using CORDIC for signal processing applications. In *2020 International Conference on Recent Trends on Electronics, Information, Communication & Technology (RTEICT)*, pages 137–142. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Shi:2020:APJ**

[1350] Zhiguo Shi, Qianwen He, and Ying Liu. Accelerating parallel Jacobi method for matrix eigenvalue computation in DOA estimation algorithm. *IEEE Transactions on Vehicular Technology*, 69(6):6275–6285, 2020. CODEN ITUTA6. ISSN 0018-9545 (print), 1939-9359 (electronic).

**Shrinivasan:2020:LPL**

[1351] Lakshmi Shrinivasan and Krishika Ponnamma C. R. Low power low area implementation of CORDIC architecture using carry select adder for realtime DSP applications. In *2020 IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Suryakumari:2020:RLU**

[1352] K. Suryakumari and N. Venkateswara Rao. Restrained latency universal modulator outlay adaptive CORDIC algorithm for digital communication. *Journal of Applied Security Research*, 16(2):224–246, September 2020. ISSN 1936-1629.

**Thiruvengadam:2020:LPA**

[1353] C. Thiruvengadam, M. Palanivelan, K. Senthil Kumar, and T. Jayasankar. Low power approximate adder based repetitive iteration cord (LP-ARICO) algorithm for high-speed applications. *Microprocessors and Microsystems*, 78:103260, 2020. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933120304208`.

**Tufekci:2020:EFI**

[1354] Burak Tufekci, Bugra Onal, Hamza Dere, and H. Fatih Ugurdag. Efficient FPGA implementation of field oriented control for 3-phase machine drives. In *2020 IEEE East-West Design & Test Symposium (EWDTS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Vachhani:2020:CSN**

[1355] Leena Vachhani. CORDIC as a switched nonlinear system. *Circuits Syst. Signal Process.*, 39(6):3234–3249, 2020. ISSN 0278-081x (print), 1531-5878 (electronic).

**Wang:2020:CSG**

[1356] Guofu Wang, Sheng Chen, Jincai Ye, and Faquan Zhang. A chirp signal generator without multiplier based on improved CORDIC algorithm. *Journal of the Chinese Institute of Engineers = Chung-kuo kung ch'eng hsueh kan*, 43(6):532–540, June 2020. CODEN CKCKDZ. ISSN 2158-7299.

**Wang:2020:GCB**

[1357] Yuxuan Wang, Yuanyong Luo, Zhongfeng Wang, Qinghong Shen, and Hongbing Pan. GH CORDIC-based architecture for computing $N$-th root of single-precision floating-point number. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 28(4):864–875, 2020. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Wenda:2020:RTS**

[1358] Zhao Wenda, Chen DeCheng, Han Song, and Wang Yanfei. Real-time SAR-CORDIC algorithm and application in signal generation and scene simulation. In *2020 IEEE 3rd International Conference on Electronics Technology (ICET)*, pages 612–619. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Wu:2020:CBH**

[1359] Chung-Bin Wu and Yu-Kuan Hsiao. CORDIC based hardware implementation for object region layer of Yolo V2. In *2020 IEEE International Conference on Consumer Electronics — Taiwan (ICCE-Taiwan)*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Yin-Di:2020:HMH**

[1360] Zhang Yin-Di, Liu Ming, and Wang Ming-Jiang. A hardware modeling of high precision floating point arcsine/arccosine function based on COR-

DIC algorithm. In *2020 IEEE 5th International Conference on Signal and Image Processing (ICSIP)*, pages 1040–1044. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Zechmeister:2020:SKEa**

[1361] Mathias Zechmeister. Solving Kepler's equation with CORDIC double iterations. *arXiv.org*, ??(??):??, 2020. URL `https://arxiv.org/abs/2008.02894`.

**Zechmeister:2020:SKEb**

[1362] M. Zechmeister. Solving Kepler's equation with CORDIC double iterations. *Monthly Notices of the Royal Astronomical Society*, 500(1): 109–117, November 2020. CODEN MNRAA4. ISSN 1365-2966. URL `https://doi.org/10.1093/mnras/staa2441`.

**Zhan:2020:FCB**

[1363] Yi Zhan, Zihao Wang, Jiarui Xu, Guoyi Yu, Fengwei An, Wenzheng Chi, and Chao Wang. Fast CORDIC based generalized-Voronoi-diagram hardware accelerator for efficient robotic exploration. In *2020 5th International Conference on Robotics and Automation Engineering (ICRAE)*, pages 100–105. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Zhao:2020:EHG**

[1364] Zikun Zhao, Qiuming Zhu, Kai Mao, Weiqiang Liu, Ning Li, Shuangyi Yan, and Wei Huang. An efficient hardware generator for massive non-stationary fading channels. In *2020 IEEE Globecom Workshops (GC Wkshps)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Zhu:2020:DNB**

[1365] Zehua Zhu, Haiyang Quan, Ling Tian, Tieliang Zhang, Xinmang Peng, and Lei Zhang. The design of NCO built in ultra high-speed data converter. In *2020 IEEE 3rd International Conference on Electronics Technology (ICET)*, pages 319–323. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020.

**Bhukya:2021:DIC**

[1366] Sreenivasu Bhukya and Sharath Chandra Inguva. Design and implementation of CORDIC algorithm using integrated adder and subtractor. In *2021 6th International Conference for Convergence in Technology (I2CT)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Bose:2021:VIR**

[1367] Sudipta Bose, Arijit De, and Indrajit Chakrabarti. VLSI implementation of a robust threshold-based earthquake early warning system. In *2021 IEEE 18th India Council International Conference (INDICON)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Chakraborty:2021:CBH**

[1368] Anirban Chakraborty and Ayan Banerjee. CORDIC-based high-speed VLSI architecture of transform model estimation for real-time imaging. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 29 (1):215–226, 2021. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**ChandraInguva:2021:IFD**

[1369] Sharath Chandra Inguva and J. B. Seventiline. Implementation of FPGA design of FFT architecture based on CORDIC algorithm. *International Journal of Electronics Theoretical & Experimental*, 108(11):1914–1939, February 2021. CODEN IJELA2. ISSN 1362-3060.

**Changela:2021:MRV**

[1370] Ankur Changela, Mazad Zaveri, and Deepak Verma. Mixed-radix, virtually scaling-free CORDIC algorithm based rotator for DSP applications. *Integration, the VLSI Journal*, 78:70–83, 2021. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S016792602100016X`.

**Chen:2021:GMA**

[1371] Hui Chen, Ruiqi Wu, Zhonghai Lu, Yuxiang Fu, Li Li, and Zongguang Yu. A general methodology and architecture for arbitrary complex number nth root computation. In *2021 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Chen:2021:LCH**

[1372] Hui Chen, Zongguang Yu, Yonggang Zhang, Zhonghai Lu, Yuxiang Fu, and Li Li. Low-complexity high-precision method and architecture for computing the logarithm of complex numbers. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 68(8):3293–3304, 2021. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Dec:2021:LCI**

[1373] Grzegorz Rafał Dec. LSTM cell implementation on FPGAs. *Parallel Processing Letters*, 31(02):??, June 2021. CODEN PPLTEE. ISSN 0129-6264 (print), 1793-642X (electronic). URL `https://www.worldscientific.com/doi/10.1142/S0129626421500110`.

**ElGhany:2021:SFC**

[1374] Mohamed A. Abd El Ghany and Khaled A. Ismail. Speed up functional coverage closure of CORDIC designs using machine learning models. In *2021 International Conference on Microelectronics (ICM)*, pages 91–95. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Guo:2021:WBD**

[1375] Yu Guo, Jin Meng, Hongzhang Gao, Songhu Ge, Yaxing Li, and Kai Yang. Wide-band DOA method with sparse array for interference cancellation. In *2021 13th International Symposium on Antennas, Propagation and EM Theory (ISAPE)*, volume Volume1, pages 01–03. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Hao:2021:CBR**

[1376] Xinyu Hao, Shuangming Yang, Bin Deng, Jiang Wang, Xile Wei, and Yanqiu Che. A CORDIC based real-time implementation and analysis of a respiratory central pattern generator. *Neurocomputing*, 423: 373–388, 2021. CODEN NRCGEO. ISSN 0925-2312 (print), 1872-8286 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0925231220317148`.

**Hao:2021:RAC**

[1377] Liang Hao, Tengbo Chen, and Jiyang Yu. Research on the application of CORDIC algorithm in the field of space-borne on-board signal processing. *Procedia Computer Science*, 183:361–371, 2021. ISSN 1877-0509. URL `https://www.sciencedirect.com/science/article/pii/S1877050921005470`. Proceedings of the 10th International Conference of Information and Communication Technology.

**Jiang:2021:DMT**

[1378] Cuili Jiang, Zhihui Tian, and Wenjiao Yu. Displacement measurement technology of nano grating sensor based on HHT algorithm. *Microelectronics Journal*, 109:104986, 2021. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S0026269220305851`.

**Jones:2021:DCB**

[1379] Keith John Jones. *Design of CORDIC-Based Processing Element for Regularized Fast Hartley Transform*, pages 119–134. Springer International Publishing, September 2021. ISBN 3-030-68245-5.

**Kang:2021:RHP**

[1380] Chengwei Kang, Ping Wang, and Weijie Li. *Research on High Precision AC Voltage Phase and Amplitude Detection Algorithms Based on SPLL and CORDIC*, pages 123–132. Springer Singapore, 2021. ISBN 981-336-606-0. ISSN 1876-1119.

**Khai:2021:RSG**

[1381] Lam Duc Khai and Trinh Viet Hoang. A road self-guided hardware-based demo system. In *2021 15th International Conference on Advanced Computing and Applications (ACOMP)*, pages 156–161. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Krishna:2021:LQT**

[1382] B. Murali Krishna, B. T. Krishna, and K. Babulu. Linear and quadratic time frequency transforms on FPGA using folding technique. *Microprocessors and Microsystems*, 80:103635, 2021. CODEN MIMID5. ISSN 0141-9331 (print), 1872-9436 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0141933120307821`.

**Kumar:2021:DDA**

[1383] Putchala Santosh Kumar, Prajapati Vatsalkumar, Snehasis Dolui, Nadeem Khan, and A. Arockia Bazil Raj. Design of digital architecture for custom implementation of CORDIC algorithm. In *2021 International Conference on System, Computation, Automation and Networking (ICSCAN)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Kumar:2021:NAT**

[1384] Ankit Kumar, Astha Singh, Shiv Prakash, and Vrijendra Singh. *A Novel Approach Towards Audio Watermarking Using FFT and CORDIC-based QR Decomposition*, chapter 20, pages 323–338. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021. ISBN 1-119-71123-1. URL `https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119711230.ch20`.

**Li:2021:NAE**

[1385] Yujie Li, Guangyou Hong, Zixuan Peng, Jipeng Wang, Jiarui Xu, Guoyi Yu, Chengjun Huang, and Chao Wang. A novel area-efficient fast CORDIC for energy-efficient adaptive exponential integrate and fire neuron design. In *2021 IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA)*, pages 249–250. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Liu:2021:FCT**

[1386] Tsung-Hsien Liu, Shih-Lun Wang, You-Jia Lin, Yin-Tsung Hwang, Chiao-En Chen, and Yuan-Sun Chu. Fixed-complexity tree search schemes for detecting generalized spatially modulated signals: Algorithms and hardware architectures. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 68(2):904–917, 2021. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Masram:2021:DIM**

[1387] Bharati Y. Masram and P. T. Karule. Design and implementation of 111 MHz frequency compression efficient CORDIC based 2D-DCT using FPGA and its power performance. In *2021 IEEE Bombay Section Signature Conference (IBSSC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Milic:2021:HAC**

[1388] Mateja Milić and Nenad Bunčić. Hardware accelerators for calculating the magnitude and angle of image gradient. In *2021 29th Telecommunications Forum (TELFOR)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Mohamed:2021:DIA**

[1389] Nadya A. Mohamed and Joseph R. Cavallaro. Design and implementation of Autoencoder-LSTM accelerator for edge outlier detection. In *2021 IEEE Workshop on Signal Processing Systems (SiPS)*, pages 134–139. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Muddasani:2021:CBO**

[1390] Satyanarayana Muddasani and A. V. Ravi Teja. CORDIC based orthogonal signal generation with in-loop moving average filter for single phase PLL systems. In *IECON 2021 47th Annual Conference of the IEEE Industrial Electronics Society*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Nguyen:2021:CBT**

[1391] Khai-Duy Nguyen, Dang Tuan Kiet, Trong-Thuc Hoang, Nguyen Quang Nhu Quynh, and Cong-Kha Pham. A CORDIC-based trigonometric hardware accelerator with custom instruction in 32-bit RISC-V System-on-Chip. In IEEE, editor, *2021 IEEE Hot Chips 33 Symposium (HCS)*, pages 1–13. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Nguyen:2021:HSA**

[1392] Thanh Dat Nguyen, Dong Hwan Kim, Jin Seok Yang, and Sang Yoon Park. High-speed ASIC implementation of tanh activation function based on the CORDIC algorithm. In *2021 36th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC)*, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Pal:2021:AFA**

[1393] Souvik Pal, G. Suseendran, D. Akila, R. Jayakarthik, and T. Nusrat Jabeen. Advanced FFT architecture based on CORDIC method for brain signal encryption system. In *2021 2nd International Conference on Computation, Automation and Knowledge Management (ICCAKM)*, pages 92–96. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Peng:2021:HAE**

[1394] Zixuan Peng, Jipeng Wang, Yi Zhan, Run Min, Guoyi Yu, Jianwen Luo, Kwen-Siong Chong, and Chao Wang. A high-accuracy and energy-efficient CORDIC based Izhikevich neuron. In *2021 19th IEEE International New Circuits and Systems Conference (NEWCAS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Pradeep:2021:VIE**

[1395] K. Pradeep and Neenavath Veeraiah. VLSI implementation of Euler number computation and stereo vision concept for CORDIC based image registration. In *2021 10th IEEE International Conference on Communication Systems and Network Technologies (CSNT)*, pages 269–272. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Raut:2021:CRR**

[1396] Gopal Raut, Shubham Rai, Santosh Kumar Vishvakarma, and Akash Kumar. Correction to RECON: Resource-efficient CORDIC-based neu-

ron architecture. *IEEE Open Journal of Circuits and Systems*, 2:292, 2021. See [1397].

**Raut:2021:RRE**

[1397] Gopal Raut, Shubham Rai, Santosh Kumar Vishvakarma, and Akash Kumar. RECON: Resource-efficient CORDIC-based neuron architecture. *IEEE Open Journal of Circuits and Systems*, 2:170–181, 2021. See correction [1396].

**Saraswathi:2021:VAA**

[1398] M. Saraswathi and E. Logashanmugam. VLSI architecture of autocorrelation module for cyclostationary detector-CR. In *2021 Second International Conference on Electronics and Sustainable Communication Systems (ICESC)*, pages 196–201. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Sergiyenko:2021:FIC**

[1399] Anatoliy Sergiyenko, Leonid Moroz, Lesya Mychuda, and Volodymir Samotyj. FPGA implementation of CORDIC algorithms for sine and cosine floating-point calculations. In *2021 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS)*, volume 1, pages 383–386. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Seyedbarhagh:2021:DRC**

[1400] Mahsasadat Seyedbarhagh, Arash Ahmadi, and Majid Ahmadi. Digital realization of ca2+ oscillation with impact of amyloid-. In *2021 IEEE International Midwest Symposium on Circuits and Systems (MWSCAS)*, pages 665–668. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Sharma:2021:ICR**

[1401] Nitesh Kumar Sharma, Shanti Rathore, and M. R. Khan. *Implementation of Coordinate Rotation Digital Computer (CORDIC) Processing Unit by Using of VLSI Technology*, pages 543–552. Springer Singapore, 2021. ISBN 981-334-501-2. ISSN 2367-3389.

**Usha:2021:AMS**

[1402] Isukapatla Tara Usha and LGM Prakasam. Adaptable microwave sensitivity time control for radars using FPGA. In *2021 IEEE International Conference on Electronics, Computing and Communication Technologies*

*(CONECCT)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**VanBrummelen:2021:DTH**

[1403] Glen Van Brummelen. *The Doctrine of Triangles: a History of Modern Trigonometry*. Princeton University Press, Princeton, NJ, USA, 2021. ISBN 0-691-17941-7 (hardcover), 0-691-21987-7 (e-book). xvi + 372 pp. LCCN QA24; QA24 .V35 2021.

**Vijay:2021:ILC**

[1404] Vishnu Vijay, Rohan Mathew George, Sneha Joe, Swetha Shajee Dominic, Riya Mary Joseph, Sherin Sunil Jose, Simi Zerine Sleeba, and Arun Ashok. Implementation of low complexity signal tracking loop of a GPS receiver using CORDIC algorithm. In *2021 International Conference on Advances in Computing and Communications (ICACC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Vucha:2021:CAD**

[1405] Mahendra Vucha and A. L. Siridhara. CORDIC architecture for discrete cosine transform. In *2021 6th International Conference on Communication and Electronics Systems (ICCES)*, pages 229–232. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Wang:2021:IDV**

[1406] Long Wang, Jin Pan, Qianlin Yang, Yan Liu, and Xinyang Ji. Implementation of direction and velocity measurement algorithm for moving target based on FPGA. In *2021 IEEE 5th Advanced Information Technology, Electronic and Automation Control Conference (IAEAC)*, volume 5, pages 1408–1412. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Wu:2021:EDS**

[1407] Jiajun Wu, Yi Zhan, Zixuan Peng, Xinglong Ji, Guoyi Yu, Rong Zhao, and Chao Wang. Efficient design of spiking neural network with STDP learning based on fast CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 68(6):2522–2534, 2021. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Xu:2021:LCA**

[1408] Jin Xu, Lin Jiang, Hui Chen, Yuxiang Fu, and Li Li. A low-complexity architecture for implementing square to tenth root of complex numbers.

In *2021 18th International SoC Design Conference (ISOCC)*, pages 15–16. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Yifen:2021:PDC**

[1409] Peng Yifen, Huan Sha, Cao Zhong, Wu Limei, and Yang Chao. Precise delay calibration of wideband digital array based on FPGA. In *2021 IEEE 4th International Conference on Electronics Technology (ICET)*, pages 373–377. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Yildiz:2021:CAR**

[1410] Recep Onur Yıldız and Ayse Yilmazer-Metin. CORDIC accelerator for RISC-V. In IEEE, editor, *2021 29th Telecommunications Forum (TELFOR)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Yu:2021:RMI**

[1411] Xiaoyu Yu, Shulin Tian, Hao Zeng, Yu Tian, Peng Ye, Lianping Guo, Shengyi Zhang, and Meng Wang. Research on method of instantaneous frequency measurement based on CORDIC algorithm. In *2021 IEEE 15th International Conference on Electronic Measurement & Instruments (ICEMI)*, pages 245–249. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Zhao:2021:CBH**

[1412] Zikun Zhao, Qiuming Zhu, Chen Fang, Shuangyi Yan, Tongbao Mao, and Xiaomin Chen. CORDIC-based hardware twin method for Loo and Corazza fading channels. In *2021 13th International Symposium on Antennas, Propagation and EM Theory (ISAPE)*, volume Volume1, pages 1–3. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2021.

**Anil:2022:AEV**

[1413] Roshan Anil, Puppala Pavan Venkata Adi Sampath, and P. Sathish Kumar. Area efficient VLSI design for image processing using the modified CORDIC algorithm. In *2022 IEEE 3rd International Conference on VLSI Systems, Architecture, Technology and Applications (VLSI SATA)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Bose:2022:SPA**

[1414] Sudipta Bose. Signal processing architecture for real-time earthquake early warning system. In *2022 IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Changela:2022:MRC**

[1415] Ankur Changela and Yogesh Kumar. A modified radix-16 CORDIC algorithm-based direct digital frequency synthesizer. In *2022 5th International Conference on Contemporary Computing and Informatics (IC3I)*, pages 1153–1157. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Cheduluri:2022:LCH**

[1416] Ganesh Cheduluri, Swati Bhardwaj, Ganesh R. Naik, Vidhumouli Hansigida, Appa Rao Nali, and Amit Acharyya. Low complex hardware architecture design methodology for cubic spline interpolation technique for assistive technologies. In *2022 20th IEEE Interregional NEWCAS Conference (NEWCAS)*, pages 70–74. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Choudhury:2022:HIL**

[1417] Rituparna Choudhury, Shaik Rafi Ahamed, and Prithwijit Guha. Hardware implementation of low complexity high-speed perceptron block. In *2022 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 26–30. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Delosme:2022:SFG**

[1418] Jean-Marc Delosme. A signal flow graph approach to the resolution of spherical triangles using CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 69(12):5159–5170, 2022. ISSN 1549-8328 (print), 1558-0806 (electronic).

**deMoura:2022:IPS**

[1419] Bruno F. de Moura, Adriana M. M. da Mata, Marcio F. Martins, Francisco H. S. Palma, and Rogério Ramos. *Implementation of a Phase-Sensitive Detector with CORDIC Algorithm in Microcontrollers for Low-Cost EIT Demodulation Procedure*, pages 101–109. Springer International Publishing, 2022. ISBN 3-030-93456-X. ISSN 2195-4364.

**Diwaker:2022:MSA**

[1420] Ritesh Diwaker and Deepak Asrani. Multimedia security in audio signals. In *2022 IEEE International Conference on Current Development in Engineering and Technology (CCET)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Dukhnich:2022:UAS**

[1421] Evgeny Dukhnich. *A Unified Approach to the Synthesis of Hypercomplex-Valued CORDIC-Like Algorithms*, pages 1–10. Springer International Publishing, November 2022. ISBN 3-031-20631-2. ISSN 1876-1119.

**Falkenberg:2022:EID**

[1422] Andreas Falkenberg. Efficient implementation of a digital chirp generator. In *2022 24th International Microwave and Radar Conference (MIKON)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Hu:2022:CBF**

[1423] Xionglong Hu, Jinhua Chen, Jun Tang, and Hai Qiao. CORDIC-based FOC control of polar coordinate systems and FPGA implementation. In *ECITech 2022; The 2022 International Conference on Electrical, Control and Information Technology, 25–27 March 2022, Kunming, China*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022. ISBN 3-8007-5916-0. URL `https://ieeexplore.ieee.org/document/10026076/`.

**Jahangir:2022:DAD**

[1424] Mohd Ziauddin Jahangir, Chandra Sekhar Paidimarry, Md. Sikander, and M. V. Shravanthi. *Design of an All Digital Phase-Locked Loop Using CORDIC Algorithm*, pages 143–149. Springer Nature Singapore, 2022. ISBN 981-19555-0-6. ISSN 1876-1119.

**Khachumov:2022:OCF**

[1425] Mikhail Khachumov, Alexander Talalaev, and Alexander Pankratov. Onboard computer function implementation based on CORDIC algorithm. In *2022 International Conference on Industrial Engineering, Applications and Manufacturing (ICIEAM)*, pages 795–800. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Lu:2022:EHI**

[1426] Hoang-Yang Lu, Mao-Hsu Yen, Che-Wei Chang, Chung-Wei Cheng, Tzu-Ching Hsu, and Yu-Chi Lin. Efficient hardware implementation of CORDIC-based symbol detector for GSM MIMO systems: Algorithm and hardware architecture. *IEEE Access*, 10:114232–114241, 2022. ISSN 2169-3536.

**Mishra:2022:DIL**

[1427] Saras Mani Mishra, Hanumant Singh Shekhawat, Gaurav Trivedi, Pidanic Jan, and Zdenek Nemec. Design and implementation of a low power area efficient Bfloat16 based CORDIC processor. In *2022 32nd International Conference Radioelektronika (RADIOELEKTRONIKA)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Mohamed:2022:FIR**

[1428] Sara M. Mohamed, Wafaa S. Sayed, Ahmed G. Radwan, and Lobna A. Said. FPGA implementation of reconfigurable CORDIC algorithm and a memristive chaotic system with transcendental nonlinearities. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 69(7):2885–2892, 2022. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Mohanty:2022:DIH**

[1429] Kalinga Mohanty, D. Ramesh Reddy, Chitra P, Ramana Reddy G, P. Ravi Sankar, and K. Prakash. Design and implementation of high frequency functional signal generator using DDFS based on 16-stage pipelined CORDIC architecture. In *2022 3rd International Conference for Emerging Technology (INCET)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Nair:2022:FIA**

[1430] Harshita Nair and Anu Chalil. FPGA implementation of area and speed efficient CORDIC algorithm. In *2022 6th International Conference on Computing Methodologies and Communication (ICCMC)*, pages 512–518. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Nawandar:2022:SCC**

[1431] Neha K. Nawandar and Vishal R. Satpute. A study and comparison of COordinate Rotation DIgital Computer (CORDIC) architectures, 2022. URL `https://arxiv.org/abs/2211.04053`.

**Puntsri:2022:RAG**

[1432] Kidsananapong Puntsri, Bussakorn Bunsri, Yaowarat Pittayang, Tanatip Bubpawan, Wuttichai Partipralam, and Watid Phakphisut. Reconfigurable AWGN generator using Box–Muller method with CORDIC-based square root calculation. In *2022 37th International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Ramani:2022:DDI**

[1433] Narnindi Ramani and Saroj Mondal. *A Deep Dive into CORDIC Architectures to Implement Trigonometric Functions*, pages 551–561. Springer Nature Switzerland, 2022. ISBN 3-031-21514-1. ISSN 1865-0937.

**Satheeswaran:2022:DOD**

[1434] V. Satheeswaran, A. Reethika, B. Gomathy, M. A. Raja, and S. Prabu. Design of optimized $\pi/4$ DQPSK modem using fuzzy based CORDIC algorithm for MIMO radar. In *2022 IEEE North Karnataka Subsection Flagship International Conference (NKCon)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Sharma:2022:LLR**

[1435] Rahul Sharma, Rahul Shrestha, and Satinder K. Sharma. Low-latency and reconfigurable VLSI-architectures for computing eigenvalues and eigenvectors using CORDIC-based parallel Jacobi method. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 30(8):1020–1033, 2022. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Tarasov:2022:CAF**

[1436] Ilya Tarasov and Dmitry Potekhin. *Calculation of Activation Functions in FPGA-Based Neuroprocessors Using the CORDIC Algorithm*, pages 13–20. Springer International Publishing, 2022. ISBN 3-030-94141-8. ISSN 1865-0937.

**Udeji:2022:FIA**

[1437] Uchechukwu Leo Udeji and Martin Margala. FPGA implementation of addition-based CORDIC-SNN with Izhikevich neurons. In *2022 IEEE 35th International System-on-Chip Conference (SOCC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Vakil:2022:TCB**

[1438] Ardavan Vakil and Miad Faezipour. Toward CORDIC-based hyperbolic function implementation for neural engineering hardware. In *2022 International Conference on Computational Science and Computational Intelligence (CSCI)*, pages 416–418. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Verma:2022:RVC**

[1439] Anu Verma, Priyamvada Sharma, and Bishnu Prasad Das. RISC-V core with approximate multiplier for error-tolerant applications. In *2022 25th Euromicro Conference on Digital System Design (DSD)*, pages 239–246. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Vinh:2022:FIT**

[1440] Truong Quang Vinh, Tran Ba Thanh, and Dang Hoang Viet. FPGA implementation of trigonometric function using loop-optimized radix-4 CORDIC. In *2022 9th NAFOSTED Conference on Information and Computer Science (NICS)*, pages 217–222. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2022.

**Wang:2022:HAE**

[1441] Jipeng Wang, Zixuan Peng, Yi Zhan, Yujie Li, Guoyi Yu, Kwen-Siong Chong, and Chao Wang. A high-accuracy and energy-efficient CORDIC based Izhikevich neuron with error suppression and compensation. *IEEE Transactions on Biomedical Circuits and Systems*, 16(5):807–821, 2022.

**Wu:2022:LLL**

[1442] Ruiqi Wu, Hui Chen, Guoqiang He, Yuxiang Fu, and Li Li. Low-latency low-complexity method and architecture for computing arbitrary nth root of complex numbers. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 69(6):2529–2541, 2022. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Zhang:2022:URB**

[1443] Zihan Zhang, Jianfei Jiang, Yongxin Zhu, Qin Wang, Zhigang Mao, and Naifeng Jing. A universal RRAM-based DNN accelerator with programmable crossbars beyond MVM operator. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*, 41(7):2094–2106, 2022. CODEN ITCSDI. ISSN 0278-0070 (print), 1937-4151 (electronic).

**Zhao:2022:HPR**

[1444] Yupu Zhao, Hong Lv, Jun Li, and Lulu Zhu. High performance and resource efficient FFT processor based on CORDIC algorithm. *EURASIP Journal on Advances in Signal Processing*, 2022(1), March 2022. ISSN 1687-6180.

**Bhardwaj:2023:LCC**

[1445] Swati Bhardwaj, Diptasri Ghosh, Debeshi Dutta, Ganesh Cheduluri, Vidhumauli Hansigida, Appa Rao Nali, and Amit Acharyya. Low complex CORDIC-based hand movement recognition design methodology for rehabilitation and prosthetic applications. In *2023 45th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Carmel:2023:RBA**

[1446] Ariya Carmel and Adersh V R. Reconfigurable beamforming architecture for ultrasound imaging. In *2023 International Conference on Control, Communication and Computing (ICCC)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Chang:2023:ULP**

[1447] Yaoxing Chang, Petar Jokic, Stephane Emery, and Luca Benini. An ultra-low-power serial implementation for sigmoid and tanh using CORDIC algorithm. In *2023 Design, Automation & Test in Europe Conference & Exhibition (DATE)*, pages 1–2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Changela:2023:NAS**

[1448] Ankur Changela, Mazad Zaveri, and Yogesh Kumar. A new angle set-based absolute scaling-free reconfigurable CORDIC algorithm. *Circuits, systems, and signal processing: CSSP*, 42(12):7404–7432, July 2023. CODEN CSSPEH. ISSN 1531-5878.

**Changela:2023:RCA**

[1449] Ankur Changela, Yogesh Kumar, Marcin Wo niak, Jana Shafi, and Muhammad Fazal Ijaz. Radix-4 CORDIC algorithm based low-latency and hardware efficient VLSI architecture for $N$-th root and $N$-th power computations. *Scientific Reports*, 13(1), November 2023. CODEN SRCEC3. ISSN 2045-2322.

**Chen:2023:DPR**

[1450] Woei-Luen Chen and Guan-Ling Chen. A direct phase resolver with zero transient against phase jump and variable frequency conditions. *IEEE Transactions on Instrumentation and Measurement*, 72:1–10, 2023. CODEN IEIMAO. ISSN 0018-9456 (print), 1557-9662 (electronic).

**Chen:2023:QES**

[1451] Yi-Ta Chen, Yu-Chuan Chuang, Li-Sheng Chang, and An-Yeu Wu. S-QRD-ELM: Scalable $QR$-decomposition-based extreme learning machine engine supporting online class-incremental learning for ECG-based user identification. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 70(6):2342–2355, 2023. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Chetana:2023:VIC**

[1452] Chetana and Sharmila K P. VLSI implementation of coordinate rotation based design methodology using Verilog HDL. In *2023 Third International Conference on Artificial Intelligence and Smart Energy (ICAIS)*, pages 1574–1581. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Chi:2023:PIM**

[1453] Shuli Chi, Sammy Johnatan Carbajal Ipenza, and Ulrich Muehlmann. Phase-independent maximum modulation level extraction in IQ receivers. In *2023 Austrochip Workshop on Microelectronics (Austrochip)*, pages 14–17. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Dang:2023:PRF**

[1454] Trung-Hieu Dang, Van-Nghia Tran, and Le-Cuong Nguyen. A parallel rotator for FFT/IFFT applied in multi-carrier wireless communication systems. *Digital Signal Processing*, 141:104190, 2023. CODEN DSPREJ. ISSN 1051-2004 (print), 1095-4333 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1051200423002853`.

**Deng:2023:HOQ**

[1455] Juinn-Horng Deng, Pavan Vatal Shankar Prasad, Yuan-Pei Wang, Min-Sion Yang, T. N. Vyas Kaushik, and P. R. Siva Prasanna. High-order QAM/APSK receiver design with blind CFO estimator of CORDIC-based high-order power pre-processor for LEO satellite communications. In *2023 46th International Conference on Telecommunications and Signal Processing (TSP)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Deng:2023:SIR**

[1456] Juinn-Horng Deng, T. N. Vyas Kaushik, P. R. Siva Prasanna, Min-Sion Yang, and Pavan Vatal Shankar Prasad. Study of iterations reduction for CORDIC computation with more accuracy. In *2023 International Conference on Consumer Electronics — Taiwan (ICCE-Taiwan)*, pages 311–312. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Fang:2023:CAD**

[1457] Chongzheng Fang, Chenhui Zhou, and Fan Ye. A common architecture for digital process of ultrasonic imaging system after AFE. In *2023 IEEE 15th International Conference on ASIC (ASICON)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Hingu:2023:AFI**

[1458] Chanakya Hingu, Xingang Fu, Rajab Challoo, Jiang Lu, Xiaokun Yang, and Letu Qingge. Accelerating FPGA implementation of neural network controllers via 32-bit fixed-point design for real-time control. In *2023 IEEE 14th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON)*, pages 0445–0450. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Hong:2023:LCH**

[1459] Wanyuan Hong, Hui Chen, Lianghua Quan, Yuxiang Fu, and Li Li. Low-cost high-precision architecture for arbitrary floating-point nth root computation. In *2023 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Kim:2023:EAC**

[1460] Young-Man Kim. Error analysis of CORDIC processor with FPGA implementation, 2023. URL `https://arxiv.org/abs/2308.01025`.

**Leigh:2023:REH**

[1461] Alexander J. Leigh, Moslem Heidarpur, and Mitra Mirhassani. A resource-efficient and high-accuracy CORDIC-based digital implementation of the Hodgkin Huxley neuron. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 31(9):1377–1388, 2023. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Liu:2023:DMR**

[1462] Youyao Liu, Shihao Gai, Ping Liu, and Haimei Huang. Design of mixed-radix FFT processor based on the modified CORDIC algorithm. In *2023 19th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Mao:2023:CBM**

[1463] Tongbao Mao, Boyu Hua, Xin Tai, Maozhong Song, Qiangjun Zhou, and Qiuming Zhu. A CORDIC-based multi-scene MIMO channel emulator. In *2023 IEEE MTT-S International Wireless Symposium (IWS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Mehra:2023:EEE**

[1464] Sumiran Mehra, Gopal Raut, Ribhu Das Purkayastha, Santosh Kumar Vishvakarma, and Anton Biasizzo. An empirical evaluation of enhanced performance softmax function in deep learning. *IEEE Access*, 11:34912–34924, 2023. ISSN 2169-3536.

**Mohamed:2023:UPC**

[1465] Nadya A. Mohamed and Joseph R. Cavallaro. A unified parallel CORDIC-based hardware architecture for LSTM network acceleration. *IEEE Transactions on Computers*, 72(10):2752–2766, October 2023. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Paz:2023:CBC**

[1466] Pedro Paz and Mario Garrido. CORDIC-based computation of arcsine and arccosine functions on FPGA. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 70(9):3684–3688, 2023. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Pujari:2023:DFI**

[1467] Shubhanjay S. Pujari and M. Bhaskar. Design and FPGA implementation of pre-computation based radix-4 hyperbolic CORDIC for direct digital synthesis. *Journal of Signal Processing Systems*, 95(6):765–775, June 2023. ISSN 1939-8018 (print), 1939-8115 (electronic).

**Rachel:2023:RLP**

[1468] N. Agnes Shiny Rachel and G. Rajakumar. A robust low-power fsm CORDIC lms filter design for exponential noise removal in pacemaker. *In-*

*ternational Journal of Electronics Theoretical & Experimental*, 111(12): 2303–2323, October 2023. CODEN IJELA2. ISSN 1362-3060.

**Raut:2023:EAE**

[1469] Gopal Raut, Saurabh Karkun, and Santosh Kumar Vishvakarma. An empirical approach to enhance performance for scalable CORDIC-based deep neural networks. *ACM Transactions on Reconfigurable Technology and Systems*, 16(3):39:1–39:??, September 2023. CODEN ???? ISSN 1936-7406 (print), 1936-7414 (electronic). URL `https://dl.acm.org/doi/10.1145/3596220`.

**Roy:2023:CA**

[1470] Shirshendu Roy. *CORDIC Algorithm*, pages 207–225. Springer International Publishing, September 2023. ISBN 3-031-41085-8.

**Sathe:2023:ECA**

[1471] Pushkar Sathe, Ajay Verma, and Laxmeesha Somappa. Efficient CORDIC architectures for FFT based all digital resonator frequency estimation. In *2023 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)*, pages 178–182. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Stasytis:2023:OTH**

[1472] Lukas Stasytis and Zsolt István. Optimization techniques for Hestenes–Jacobi SVD on FPGAs. In *2023 33rd International Conference on Field-Programmable Logic and Applications (FPL)*, pages 144–150. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Sun:2023:MAO**

[1473] Sixian Sun, Qijia Zheng, Liping Ren, Linxue An, Yufeng He, and Shuyue Han. *Method and Testing of Shaft Angle Digital Conversion Based on Improved CORDIC Algorithm*, pages 595–608. Springer Nature Singapore, 2023. ISBN 981-9968-82-8. ISSN 1876-1119.

**Urs:2023:DIC**

[1474] H. D. Nataraj Urs, B. N. Aravind, K. Krishna Veni, and N Yashwanth. Design and implementation of CORDIC based digital modulation techniques using DPLL. In *2023 IEEE 3rd International Conference on Technology, Engineering, Management for Societal impact using Marketing, Entrepreneurship and Talent (TEMSMET)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**V:2023:IFP**

[1475] Velmurugan V M, Ayub Khan A, and Bharanidharan S. Implementation of floating point CORDIC algorithm using 45 nm technology for COS SINE generation. In *2023 International Conference on Next Generation Electronics (NEleX)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Verma:2023:ESF**

[1476] Anu Verma, Khyati Kiyawat, Bishnu Prasad Das, and Pramod Kumar Meher. An efficient scaling-free folded hyperbolic CORDIC design using a novel low-complexity power-of-2 Taylor series approximation. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 31(8): 1167–1177, 2023. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Verma:2023:PCA**

[1477] Sandeep Kumar Verma, Muralidhar Pullakandam, and Rama Muni Reddy Yanamala. Pipelined CORDIC architecture based DDFS design and implementation. In *2023 IEEE 20th India Council International Conference (INDICON)*, pages 1440–1445. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Wang:2023:RHP**

[1478] Bochang Wang, Ziang Duan, Zixuan Shen, Yuansheng Zhao, Lu Gao, and Chao Wang. A reconfigurable high-precision and energy-efficient circuit design of sigmoid, tanh and softmax activation functions. In *2023 IEEE International Conference on Integrated Circuits, Technologies and Applications (ICTA)*, pages 118–119. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Wang:2023:RIE**

[1479] Yanlin Wang. Research on image edge detection algorithm based on CORDIC. *Journal of Physics: Conference Series*, 2440(1):012001, January 2023. CODEN JPCSDZ. ISSN 1742-6588 (print), 1742-6596 (electronic).

**Wu:2023:DBC**

[1480] Haoyu Wu, Liyu Lin, Haodong Sun, Xiaoyang Zeng, and Yun Chen. A decision-based CORDIC hardware for arc tangent calculation. In *2023 IEEE 15th International Conference on ASIC (ASICON)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Xiang:2023:DIA**

[1481] Fuxin Xiang, Xiaojiang Yao, Zilong Zheng, Shenghui Fan, and Tubin Zhou. Design and implementation of active phased array beam steering system based on FPGA. In *2023 8th International Conference on Integrated Circuits and Microsystems (ICICM)*, pages 612–616. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**Yen:2023:AVA**

[1482] Mao-Hsu Yen, Hoang-Yang Lu, Ken-Hua Lu, Shao-Yueh Lin, and Chia-Chen Chan. Algorithm and VLSI architecture of a near-optimum symbol detector for QSM MIMO systems. *IEEE Access*, 11:144113–144125, 2023. ISSN 2169-3536.

**Yen:2023:PGR**

[1483] Mao-Hsu Yen, Hoang-Yang Lu, Shao-Yueh Lin, Ken-Hua Lu, and Chia-Chen Chan. A partial-Givens-rotation-based symbol detector for GSM MIMO systems: Algorithm and VLSI implementation. *IEEE Systems Journal*, 17(4):6322–6333, 2023.

**Zhang:2023:HPM**

[1484] Yuan Zhang, Lele Peng, Lianghua Quan, Yonggang Zhang, Shubin Zheng, and Hui Chen. High-precision method and architecture for base-2 softmax function in DNN training. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 70(8):3268–3279, 2023. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Zhi:2023:SHC**

[1485] Hao Zhi and Jiye Jiao. Software and hardware collaborative design of PMSM FOC system based on CORDIC algorithm improvement. In *2023 19th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2023.

**A:2024:DIF**

[1486] Karthik A, Ramana R, Ramkumar K, Santhosh R, and Robin K. Design and implementation of fundamental calculation method by using the CORDIC algorithm. In *2024 International Conference on Data Science and Network Security (ICDSNS)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Al-Safi:2024:CBI**

[1487] Amean Al-Safi. CORDIC based implementation of QPSK modulator using FPGA. In *2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Ashar:2024:QEH**

[1488] Neha Ashar, Gopal Raut, Vasundhara Trivedi, Santosh Kumar Vishvakarma, and Akash Kumar. QuantMAC: Enhancing hardware performance in DNNs with quantize enabled multiply-accumulate unit. *IEEE Access*, 12:43600–43614, 2024. ISSN 2169-3536.

**Bahrami:2024:DDS**

[1489] Mohammad Kazem Bahrami and Soheila Nazari. Digital design of a spatial-pow-STDP learning block with high accuracy utilizing pow CORDIC for large-scale image classifier spatiotemporal SNN. *Scientific Reports*, 14(1), February 2024. CODEN SRCEC3. ISSN 2045-2322.

**Basavaraju:2024:EHA**

[1490] Mahati Basavaraju, Vinay Rayapati, and Madhav Rao. Exploring hardware activation function design: CORDIC architecture in diverse floating formats. In *2024 25th International Symposium on Quality Electronic Design (ISQED)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Basavaraju:2024:PHC**

[1491] Mahati Basavaraju, Vinay Rayapati, and Madhav Rao. POCO: Hardware characterization of activation functions using POSIT-CORDIC architecture. In *2024 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Bhattacharjya:2024:MLE**

[1492] Rajat Bhattacharjya, Arnab Sarkar, Biswadip Maity, and Nikil Dutt. MUSIC-Lite: Efficient MUSIC using approximate computing: an OFDM radar case study. *IEEE Embedded Systems Letters*, 16(4):329–332, 2024.

**Burge:2024:QCA**

[1493] Iain Burge, Michel Barbeau, and Joaquin Garcia-Alfaro. Quantum CORDIC — arcsin on a budget, 2024. URL `https://arxiv.org/abs/2411.14434`.

**Cao:2024:MPS**

[1494] Shengli Cao, Yutao Jiao, Gang Xiao, Wenbin Wu, Ziyu Xie, Jiawei Li, Xiewen Liu, Ergang Zhao, and Zhao Yue. Miniaturized photoelectrochemical sensing system for reusable detection of macromolecules and its applications for unattended environmental monitoring. *Sensors and Actuators B: Chemical*, 421:136515, 2024. ISSN 0925-4005. URL `https://www.sciencedirect.com/science/article/pii/S0925400524012450`.

**Celikovic:2024:HED**

[1495] Janko Čeliković, Wisam Al-Hoor, John Kesterson, Angel Maria Gomez Arguello, Siamak Abedinpour, Luca Corradini, and Dragan Maksimović. Hardware-efficient digital autotuning for integrated switched-mode battery chargers. *IEEE Transactions on Power Electronics*, 39(5):5041–5057, 2024.

**Chen:2024:HCH**

[1496] Hui Chen, Lianghua Quan, and Weiqiang Liu. HGH-CORDIC: a High-Radix Generalized Hyperbolic COordinate Rotation Digital Computer. In IEEE [1602], pages 88–95. ISSN 2576-2265 (electronic), 1063-6889 (print-on-demand). LCCN QA76.9.C62 .I578 2024. URL `https://ieeexplore.ieee.org/xpl/conhome/10579097/proceeding`.

**Chong:2024:QRP**

[1497] Yi Sheng Chong, Hongyu Cao, Wang Ling Goh, Patrick Bore, Yuanzheng Paul Tan, Yung Szen Yap, Rainer Dumke, Vishnu P. Nambiar, and Anh Tuan Do. Quantum readout processing accelerator with a CORDIC core at cryogenic temperature. In *2024 IEEE International Symposium on Circuits and Systems (ISCAS)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Dalloo:2024:LPL**

[1498] Ayad M. Dalloo, Amjad Jaleel Humaidi, Ammar K. Al Mhdawi, and Hamed Al-Raweshidy. Low-power and low-latency hardware implementation of approximate hyperbolic and exponential functions for embedded system applications. *IEEE Access*, 12:24151–24163, 2024. ISSN 2169-3536.

**deDinechin:2024:ASA**

[1499] Florent de Dinechin and Martin Kumm. *Application-specific Arithmetic: Computing Just Right for the Reconfigurable Computer and the Dark Silicon Era*. Springer-Verlag, Cham, Switzerland, 2024. ISBN

3-031-42807-2, 3-031-42808-0 (e-book), 3-031-42809-9, 3-031-42810-2. xxiii + 804 pp. LCCN QA76.9.C62 D56 2024. URL `http://perso.citi-lab.fr/fdedinec/ASA-book/errata.pdf; https://link.springer.com/book/10.1007/978-3-031-42808-1`.

**Deng:2024:EFB**

[1500] Jiawen Deng, Jie Yang, and Xin'an Wang. An efficient FP16-based hardware architecture with enhanced CORDIC to implement sigmoid and tanh functions. In *2024 IEEE 7th Information Technology, Networking, Electronic and Automation Control Conference (ITNEC)*, volume 7, pages 1633–1636. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Dora:2024:HIO**

[1501] Sai Kumar Dora, Himanshu B. Mishra, Manodipan Sahoo, and Kapil Yadav. Hardware implementation of OTFS modulation using CORDIC algorithm. In *2024 International Conference on Signal Processing and Communications (SPCOM)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Elrefai:2024:CML**

[1502] Hisham M. Elrefai, Sara S. Abou Zeid, Wafaa S. Sayed, Lobna A. Said, and Ahmed G. Radwan. Compact multiplier-less CORDIC-based FPGA implementation of sine and modified sine chaotic maps. In *Advances in Nonlinear Dynamics, Volume III*, NODYCON Conference Proceedings Series, pages 153–161. Springer-Verlag, Cham, Switzerland, 2024. ISBN 3-031-50634-0; 3-031-50635-9. ISSN 2730-7697.

**Feng:2024:DIH**

[1503] Zhenfu Feng, Hao Chang, Huan Zhang, Ang Li, and Lidong Xing. Design and implementation of high-speed and high-precision CORDIC algorithm. In *2024 6th International Conference on Frontier Technologies of Information and Computer (ICFTIC)*, pages 1050–1056. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Ghanbarpour:2024:CAM**

[1504] Gilda Ghanbarpour, Milad Ghanbarpour, and Pourya Spari. Creative and accurate method for optimal hardware implementation of neurons and biological cells: Application in FPGA-based implementation of cardiac pacemaker cell. *AEU - International Journal of Electronics and Communications*, 187:155561, 2024. ISSN 1434-8411. URL `https://www.sciencedirect.com/science/article/pii/S1434841124004473`.

**Ghosh:2024:DDL**

[1505] Diptasri Ghosh, Debasish Chatterjee, Debeshi Dutta, Somsukla Maiti, Amit Acharyya, and Soumen Sen. Design and development of low-complex methodology for sEMG-based hand activity identification and actuation of soft robots for rehabilitating and amputated patients. In *2024 31st IEEE International Conference on Electronics, Circuits and Systems (ICECS)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Ghosh:2024:SCB**

[1506] Amitava Ghosh, Anindya.S. Dhar, and Indrajit Chakrabarti. A single CORDIC based architecture for real-time tomographic image reconstruction for industrial applications. In *2024 IEEE Calcutta Conference (CALCON)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Guo:2024:LLH**

[1507] Jiatong Guo, Jinxiang Gao, Zixuan Shen, Jipeng Wang, Zhuo Cheng, Jingru Jiang, Wenjue Chen, and Chao Wang. A low-latency and high-accuracy dual-mode neuron design for accelerating neurological diseases simulation and analysis. In *TENCON 2024 — 2024 IEEE Region 10 Conference (TENCON)*, pages 374–377. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Haghiri:2024:MIF**

[1508] Saeed Haghiri, Salah I. Yahya, Abbas Rezaei, and Arash Ahmadi. Multiplierless implementation of Fitz-Hugh Nagumo (FHN) modeling using CORDIC approach. *IEEE Transactions on Emerging Topics in Computational Intelligence*, 8(1):279–287, 2024.

**Han:2024:HAD**

[1509] Dongjun Han, Ming Xu, Yuhang Wu, and Fuhui Zhou. A hardware architecture design for high-speed vessel orientation recognition. *IEEE Access*, 12:155287–155294, 2024. ISSN 2169-3536.

**Hingu:2024:BFF**

[1510] Chanakya Hingu, Xingang Fu, Praneeth Vangala, Ramkrishna Mishan, and Poria Fajri. 32-bit fixed and floating-point hardware implementation for enhanced inverter control: Leveraging FPGA in recurrent neural network applications. *IEEE Access*, 12:111097–111110, 2024. ISSN 2169-3536.

**K:2024:FPC**

[1511] Padmakumar K, Lalu V, and Shiny G. Floating-point CORDIC coprocessor with dynamic iterations. In *2024 International Conference on Advancements in Power, Communication and Intelligent Systems (APCI)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Karrenbauer:2024:EHA**

[1512] Jens Karrenbauer, Sven Schönewald, Simon Klein, and Holger Blume. Enhancing a hearing aid processor with ISA extensions supporting flexible fixed-point formats. In *2024 IEEE 35th International Conference on Application-specific Systems, Architectures and Processors (ASAP)*, pages 176–183. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Luo:2024:OLE**

[1513] Zhibin Luo, Junyi Mai, and Enyi Yao. OTFC-LSTM: an efficient design of LSTM accelerator based on on-the-fly CORDIC. In *2024 IEEE 6th International Conference on AI Circuits and Systems (AICAS)*, pages 372–376. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**McGuinness-Rodriguez:2024:REF**

[1514] Cristopher McGuinness-Rodriguez, Johan Arbustini, Pablo Mendoza-Ponce, Eric Elzenheimer, Andrey Morales-Zamora, Michael Höft, Robert Rieger, and Andreas Bahr. Resource-efficient FPGA-based I/Q-demodulator detects 0.0005 modulation index with 9.5 dB SNR for converse ME sensors. In *2024 IEEE 42nd Central America and Panama Convention (CONCAPAN XLII)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Moses:2024:FPP**

[1515] Yashwant Moses and Madhav Rao. A fixed-point pre-processing hardware architecture design for complex independent component analysis. In *2024 29th Asia and South Pacific Design Automation Conference (ASP-DAC)*, pages 244–249. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Mule:2024:SFI**

[1516] Priya Mule and Sudhakar Mande. 12-stage FFT implementation using CORDIC-based pipelined SDF architecture. In *2024 15th International*

*Conference on Computing Communication and Networking Technologies (ICCCNT)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Na:2024:DSC**

[1517] Jiesi Na. Design of SPWM controller based on FPGA. In *2024 5th International Conference on Artificial Intelligence and Computer Engineering (ICAICE)*, pages 1029–1032. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Ortega:2024:EES**

[1518] Eduardo Ortega, Alejandro Vicente, Agustín Martínez, Óscar Rodríguez, Manuel Prieto, Pablo Parra, Antonio Da Silva, and Sebastián Sánchez. Enhancing efficiency in spaceborne phased array systems: MVDR algorithm and FPGA integration. *Digital Signal Processing*, 155:104732, 2024. CODEN DSPREJ. ISSN 1051-2004 (print), 1095-4333 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1051200424003579`.

**P:2024:ADN**

[1519] Arjun P and Shanmugha Sundaram GA. Advanced design of numerical control oscillators with enhanced CORDIC pipelining. In *2024 IEEE International Conference on Intelligent Signal Processing and Effective Communication Technologies (INSPECT)*, pages 1–7. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Palchaudhuri:2024:FSS**

[1520] Ayan Palchaudhuri and Anindya Sundar Dhar. FPGA specific speed-area optimized architectures of arithmetic cores with scan insertion for carry chain based multi-level logic implementation. In *2024 37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems (VLSID)*, pages 617–622. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Park:2024:IAF**

[1521] Jiho Park, Geon Shin, and Hoyoung Yoo. Implementation of activation functions using various approximation methods. In *2024 21st International SoC Design Conference (ISOCC)*, pages 175–176. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Parmar:2024:SCR**

[1522] Yashrajsinh Parmar, Florian Caullery, and Sonali Kale. Secure coordinate rotation in embedded systems using homomorphic encryption: Implementation and evaluation on the AI-Saqr platform. In *2024 1st International Conference On Cryptography And Information Security (VCRIS)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Poczekajlo:2024:ICA**

[1523] Paweł Poczekajło. Iterative computing algorithms implemented in FPGA using ALTERA_CORDIC library as an example. *Procedia Computer Science*, 246:2380–2389, 2024. ISSN 1877-0509. URL `https://www.sciencedirect.com/science/article/pii/S187705092402578X`. 28th International Conference on Knowledge Based and Intelligent information and Engineering Systems (KES 2024).

**Poczekajlo:2024:MCA**

[1524] Pawel Poczekajlo, Leonid Moroz, Ewa Deelman, and Pawel Gepner. Modified CORDIC algorithm for Givens rotator. In *Computational science—ICCS 2024. Part VI*, volume 14837 of *Lecture Notes in Computer Science*, pages 101–114. Springer-Verlag, Cham, Switzerland, 2024. ISBN 3-031-63777-1; 3-031-63778-X. ISSN 1611-3349.

**Raut:2024:SDF**

[1525] Gopal Raut, Pranose J. Edavoor, David Selvakumar, and Ritambhara Thakur. A SIMD dynamic fixed point processing engine for DNN accelerators. In *2024 25th International Symposium on Quality Electronic Design (ISQED)*, pages 1–8. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Rayapati:2024:EEB**

[1526] Vinay Rayapati, Sanampudi GopalaKrishna Reddy, Gandi Ajay Kumar, Gogireddy Ravikiran Reddy, and Madhav Rao. EBACA: Efficient Bfloat16-based activation function implementation using enhanced CORDIC architecture. In *2024 37th International Conference on VLSI Design and 2024 23rd International Conference on Embedded Systems (VLSID)*, pages 605–610. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Sheng:2024:EEH**

[1527] Shirui Sheng, Kwen-Siong Chong, Jun-Sheng Ng, Zhiping Lin, Joseph S. Chang, and Bah-Hwee Gwee. An energy-efficient and high-accuracy spiking neural network utilizing asynchronous CORDIC for On-FPGA STDP

learning. In *2024 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS)*, pages 571–575. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Singh:2024:EEL**

[1528] Gian Singh, Ayushi Dube, and Sarma Vrudhula. Energy-efficient and low-latency computation of transcendental functions in a precision-tunable PIM architecture. In *2024 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, pages 186–191. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Singh:2024:FBS**

[1529] Suryadev Singh and Babita Jajodia. FPGA-based SoC design with CORDIC-POSIT arithmetic for efficient IoT data processing. In *2024 International Conference on IoT, Communication and Automation Technology (ICICAT)*, pages 1534–1539. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Wong:2024:HGT**

[1530] Paul Wong, Dania Susanne Mosuli, Xuechen Zhang, and Xiaokun Yang. Hardware generation on trigonometric functions. In *2024 IEEE International Conference on Big Data (BigData)*, pages 7571–7576. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Wu:2024:GMR**

[1531] Ruiqi Wu, Xinyu Wang, Jie Li, Lili Cao, Guoqiang He, Yuxiang Fu, and Li Li. A general methodology and reconfigurable architecture for calculating AB-like functions in the complex field. *IEEE Transactions on Circuits and Systems II: Express Briefs*, 71(11):4758–4762, 2024. ISSN 1549-7747 (print), 1558-3791 (electronic).

**Xie:2024:CCP**

[1532] Minghui Xie, Ningmei Yu, Dian Tian, Jing Zhang, Álvaro Hernández, and Jesús Ureña. A configurable CORDIC and PSADIC fusion architecture for nonlinear edge-computing. In *2024 9th International Conference on Integrated Circuits and Microsystems (ICICM)*, pages 665–670. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2024.

**Zhang:2024:APV**

[1533] Haoran Zhang, Minqi Chen, Shuqin Wan, Zihao Jiao, Shenglin Hu, and Peng Song. An arbitrary-phase-varying digital chirp signal generator based on improved CORDIC algorithm and trajectory approximator. *IEEE Access*, 12:135362–135371, 2024. ISSN 2169-3536.

**A:2025:DAR**

[1534] Anjana A, Nakkeeran R, and Ramya Jothikumar R. Design and analysis of RMFAS CORDIC II rotator for FPGA. *IETE Journal of Research*, pages 1–11, April 2025. ISSN 0974-780X.

**Abdkrimi:2025:OFI**

[1535] Mounir Abdkrimi, Olivier Rossetto, Olivier Bourrion, Christophe Vescovi, and Christophe Hoarau. Optimized FPGA implementation of the CORDIC algorithm for a frequency multiplexed readout. In *2025 14th Mediterranean Conference on Embedded Computing (MECO)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Arul:2025:MBA**

[1536] Sanjai Arul, Tharani Kumar, Yu Ting Tung, and Juinn-Horng Deng. Model-based adjustable carrier frequency offset generator design for mmWave array communication system. In *2025 1st International Conference on Radio Frequency Communication and Networks (RFCoN)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Bai:2025:LIH**

[1537] Na Bai, Ruizheng Qu, Yaohua Xu, Yi Wang, Xiaojie Chen, and Li Li. Low-iteration hybrid computing CORDIC architecture. *Microelectronics Journal*, 156:106481, 2025. CODEN MICEB9. ISSN 1879-2391. URL `https://www.sciencedirect.com/science/article/pii/S1879239124001851`.

**Blanchard:2025:FII**

[1538] Philippe Blanchard, Manouane Caza-Szoka, Roger Bergeron, and Daniel Massicotte. FPGA implementation of IEC 61000-4-30 quasi-peak meter with CORDIC algorithm. In *2025 IEEE International Instrumentation and Measurement Technology Conference (I2MTC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Bouarah:2025:HFP**

[1539] Romain Bouarah and Florent De Dinechin. Hardware fixed-point 2D and 3D norms. In *2025 IEEE 32nd Symposium on Computer Arithmetic (ARITH)*, pages 29–36. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Chen:2025:HPL**

[1540] Hui Chen, Lianghua Quan, Weiqiang Liu, and Zhonghai Lu. High-precision low-latency method and architecture for computing binary and decimal logarithms. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, pages 1–5, 2025. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Chen:2025:HRG**

[1541] Hui Chen, Lianghua Quan, Ke Chen, and Weiqiang Liu. High-radix generalized hyperbolic CORDIC and its hardware implementation. *IEEE Transactions on Computers*, 74(3):983–995, March 2025. CODEN ITCOB4. ISSN 0018-9340 (print), 1557-9956 (electronic).

**Chen:2025:IIE**

[1542] Ru Chen, Songjie Xiang, Die Yu, Meixuan Li, Mohammad Sh. Daoud, Minmin Shao, Abdulilah Mohammad Mayet, Yisu Ge, Guodao Zhang, Yanling Chu, and Yideng Huang. An investigation on inner ear operation in sense of hearing: High-speed FPGA-based circuits for digital realization of 2D cochlea modeling. *Alexandria Engineering Journal*, 118: 371–383, 2025. ISSN 1110-0168. URL `https://www.sciencedirect.com/science/article/pii/S1110016825000821`.

**D:2025:FIC**

[1543] Girijamba D L, Amrutha Mahendrakar, Anagha, Annapurna, and Eunice Paulina. FPGA implementation of the CORDIC algorithm for sinusoidal waveform generation. In *2025 3rd International Conference on Inventive Computing and Informatics (ICICI)*, pages 1402–1407. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Elrefai:2025:IRC**

[1544] Hisham M. Elrefai, Wafaa S. Sayed, Ahmed G. Radwan, and Lobna A. Said. Investigation of reconfigurable CORDIC modes and efficiency. In *2025 21st International Conference on Synthesis, Modeling, Analysis and Simulation Methods, and Applications to Circuits Design (SMACD)*, pages 1–4. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Garrido:2025:UDC**

[1545] Mario Garrido, Daniel Medina, Pedro Paz, and Marisa López-Vallejo. Uniformly distributed CORDIC. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 72(11):6948–6961, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**GarzonGonzalez:2025:FIM**

[1546] Jeferson Andres Garzon Gonzalez, Jose de Jesus Rangel-Magdaleno, and Jesus Manuel Munoz-Pacheco. FPGA implementation of a multi-PRNG based on a multiscroll chaotic Hopfield neural network. *IEEE Transactions on Industrial Informatics*, 21(4):3097–3106, 2025.

**Joseph:2025:FPC**

[1547] Nimmy Joseph, Joji Daniel, Padmakumar K, and Jayalekshmi L. Floating-point CORDIC processor in hyperbolic coordinate system. In *2025 6th International Conference on Control, Communication and Computing (ICCC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Khan:2025:DIF**

[1548] Gani Nawaz Khan, Mujeev Khan, Mohammed Usman, Abhishek Srivastava, and Mohd Wajid. Design and implementation of FPGA-based system for angle estimation using FMCW radar. In *2025 7th International Conference on Signal Processing, Computing and Control (ISPCC)*, pages 824–829. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Khurshid:2025:HPC**

[1549] Burhan Khurshid. High-performance CORDIC-based approximate MAC architectures for FPGA platforms. *Integration, the VLSI Journal*, 101:102338, 2025. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0167926024002025`.

**Kokane:2025:CAY**

[1550] Omkar Kokane, Adam Teman, Anushka Jha, Guru Prasath SL, Gopal Raut, Mukul Lokhande, S. V. Jaya Chand, Tanushree Dewangan, and Santosh Kumar Vishvakarma. CORDIC is all you need, 2025. URL `https://arxiv.org/abs/2503.11685`.

**Kokane:2025:RCBa**

[1551] Omkar Kokane, Gopal Raut, Salim Ullah, Mukul Lokhande, Adam Teman, Akash Kumar, and Santosh Kumar Vishvakarma. Retrospective:

A CORDIC based configurable activation function for NN applications, 2025. URL `https://arxiv.org/abs/2503.14354`.

**Kokane:2025:RCBb**

[1552] Omkar Kokane, Gopal Raut, Salim Ullah, Mukul Lokhande, Adam Teman, Akash Kumar, and Santosh Kumar Vishvakarma. Retrospective: a CORDIC based configurable activation function for NN applications. In *2025 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, volume 1, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Kulkarni:2025:CAI**

[1553] Kaushal Kulkarni, Neha Joshi, Isha Lale, and N. G. Nirmal. *CORDIC Algorithm Implementation Using FPGA*, pages 167–182. Springer Nature Singapore, 2025. ISBN 981-9657-51-2. ISSN 2367-3389.

**Li:2025:EHA**

[1554] Wenjie Li, Gang Wang, Dongxu Lyu, Ningyi Xu, and Guanghui He. Efficient hardware architecture design for rotary position embedding of large language models. *IEEE Journal on Emerging and Selected Topics in Circuits and Systems*, 15(2):244–257, 2025. ISSN 2156-3357 (print), 2156-3365 (electronic).

**Liu:2025:DHP**

[1555] Yu Liu, Xiaojie Zhang, and Zhenfu Feng. Design of high precision rotary transformer decoding system based on FPGA. In *2025 4th International Symposium on Semiconductor and Electronic Technology (ISSET)*, pages 191–194. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Liu:2025:RDI**

[1556] Yu Liu, Jiaxing He, and Zhenfu Feng. Realization of digital image rotation based on FPGA. In *2025 4th International Symposium on Semiconductor and Electronic Technology (ISSET)*, pages 183–186. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Lokhande:2025:FPF**

[1557] Mukul Lokhande, Gopal Raut, and Santosh Kumar Vishvakarma. FlexPE: Flexible and SIMD multiprecision processing element for AI workloads. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 33(6):1610–1623, 2025. CODEN IEVSE9. ISSN 1063-8210 (print), 1557-9999 (electronic).

**Meher:2025:EDI**

[1558] Pramod Kumar Meher and Supriya Aggarwal. Efficient design and implementation of scale-free CORDIC with mutually exclusive micro-rotations. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 72(5):2243–2251, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Paramasivam:2025:EPN**

[1559] C. Paramasivam, Sandeep Singh Chauhan, Veerpratap Meena, A. Sreejagathi, B. A. V. N. Hasini, K. L. K. Kishore, T. V. N. G. Vamsikrishna, M. Durga Ananta Sai, and Abdessamad Didi. Enhanced performance of new scaling-free CORDIC for memory-based Fast Fourier Transform architecture. *IEEE Access*, 13:19828–19844, 2025. ISSN 2169-3536.

**Paul:2025:CFP**

[1560] Aditi Paul, Shaik Rafi Ahamed, and Roy Paily Palathinkal. Continuous flow 4096-point FFT/IFFT hardware architecture for 5G applications. *IEEE Transactions on Circuits and Systems I: Regular Papers*, pages 1–14, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Poczekajlo:2025:ENC**

[1561] Pawel Poczekajlo, Leonid Moroz, Ewa Deelman, and Pawel Gepner. Evaluation of new CORDIC algorithms implemented on FPGA for the Givens Rotator. *Journal of Computational Science*, 87:102567, 2025. ISSN 1877-7503 (print), 1877-7511 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S1877750325000444`.

**Poczekajlo:2025:LLR**

[1562] Pawel Poczekajlo, Leonid Moroz, Ewa Deelman, Michela Taufer, Pawel Gepner, and Jerzy Krawiec. *Low Latency Recoding CORDIC Algorithm for FPGA Implementation*, pages 75–89. Springer Nature Switzerland, 2025. ISBN 3-031-97632-0. ISSN 1611-3349.

**Ramyajothikumar:2025:RHU**

[1563] Ramyajothikumar, S. Dhivya, S. Kiruthika, A. Harivardani, and PS. Hemma. Reduced hardware utilization with enhanced error reduction for arcsine/arccosine computation using CORDIC algorithm through the utilization of a look-up table. In *2025 Devices for Integrated Circuit (DevIC)*, pages 5–9. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Rao:2025:SPC**

[1564] Talla Srinivasa Rao, V. Bharathi Devarakonda, Konadababu Amaradi, Bujjibabu Penumutchi, Ch. Srinivasu, and K. Babulu. Semi-pipelined

CORDIC framework: FPGA and ASIC implementation for real-time applications. In *2025 International Conference on Electronics, Computing, Communication and Control Technology (ICECCC)*, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Sharma:2025:DLL**

[1565] Prashnat Sharma, Sourav Nath, Koushik Guha, and Krishna Lal Baishnab. Design of low-latency, area- and power-efficient CORDIC algorithms for sine/cosine floating-point computation. In *2025 Devices for Integrated Circuit (DevIC)*, pages 583–588. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Shen:2025:ECB**

[1566] Wan Shen, Junye Jiang, Minghan Li, and Shuanglong Liu. Efficient CORDIC-based activation functions for RNN acceleration on FPGAs. *IEEE Transactions on Artificial Intelligence*, 6(1):199–210, 2025.

**Verma:2025:LWL**

[1567] Anu Verma and Bishnu Prasad Das. Light-weight low-latency reconfigurable CORDIC architecture with a new non-power-of-2 angle set of microrotations. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 72(10):5861–5871, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Vorontsov:2025:CAM**

[1568] Konstantin V. Vorontsov, Michael N. Baldaev, Sergey A. Chechenya, Sergey V. Soldatkin, Anton Y. Boev, and Anastasia O. Khodakova. A combined algorithm for measuring the frequency and bandwidth of a signal with increased accuracy. In *2025 7th International Youth Conference on Radio Electronics, Electrical and Power Engineering (REEPE)*, pages 1–5. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Wen:2025:DRT**

[1569] Mingrong Wen, Tao Fu, and Yinbing An. Design of a real-time spectrum acquisition and analysis system based on 10G optical Ethernet. In *2025 7th International Conference on Electronics and Communication, Network and Computer Technology (ECNCT)*, pages 145–149. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Wu:2025:NFC**

[1570] Junyi Wu, Hongge Li, Yumeng Liu, Yuanfei Ren, and Weiheng Guo. Nonlinear function computation based on CORDIC with stochastic bitstreams. In *2025 23rd IEEE Interregional NEWCAS Conference (NEWCAS)*, pages 500–504. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Xie:2025:ULL**

[1571] Liangbo Xie, Zhiyong Zhou, Mu Zhou, and Hui Chen. Ultra-low latency generalized architecture for complex nth root and nth power computation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, pages 1–14, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Yadav:2025:REL**

[1572] Abhishek Yadav, Ayush Dixit, Utsav Jana, Masahiro Fujita, and Binod Kumar. Resource-efficient LSTM architecture for keyword spotting with CORDIC-Activation approximation. In *2025 IEEE Computer Society Annual Symposium on VLSI (ISVLSI)*, volume 1, pages 1–6. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Yen:2025:FQS**

[1573] Mao-Hsu Yen, Hoang-Yang Lu, Guang-Yan Li, Yuan-Cheng Xu, Yi-Jang Li, and S. Pourmohammad Azizi. Flexible quadrature spatial modulation: Transmission, detection, and implementation. *IEEE Transactions on Circuits and Systems I: Regular Papers*, 72(8):4261–4272, 2025. ISSN 1549-8328 (print), 1558-0806 (electronic).

**Zhang:2025:APC**

[1574] Xiyuan Zhang and Xueyong Liu. An adaptive precision CORDIC processor with UART interface for FPGA-based edge computing. In *2025 IEEE 7th International Conference on Communications, Information System and Computer Engineering (CISCE)*, pages 1015–1020. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Zhang:2025:CLD**

[1575] Yuncheng Zhang, Zezheng Liu, Duo Li, Minzhe Tang, Yi Zhang, Hóngyè Huáng, Dingxin Xu, Waleed Madany, Ashbir Aviat Fadila, Wenqian Wang, Yuang Xiong, Daxu Zhang, Garry Pranata Kusuma, Hiroyuki Sakai, Kazuaki Kunihiro, Atsushi Shirane, and Kenichi Okada. CORDIC-less digital polar transmitter architecture based on delta–sigma

modulator. *IEEE Journal of Solid-State Circuits*, pages 1–14, 2025. CODEN IJSCBC. ISSN 0018-9200 (print), 1558-173X (electronic).

**Zhang:2025:PEC**

[1576] Yuncheng Zhang, Zezheng Liu, Duo Li, Minzhe Tang, Yi Zhang, Hongye Huang, Dingxin Xu, Waleed Madany, Ashbir Aviat Fadila, Wenqian Wang, Yuang Xiong, Daxu Zhang, Garry Pranata Kusuma, Hiroyuki Sakai, Kazuaki Kunihiro, Atsushi Shirane, and Kenichi Okada. 5.6 a power-efficient CORDIC-Less digital polar transmitter using 1b DSM-based PA supporting 256-QAM. In *2025 IEEE International Solid-State Circuits Conference (ISSCC)*, volume 68, pages 100–103. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Zhao:2025:RVP**

[1577] Ruixiao Zhao, Min Xie, Xinchen Li, and Yujie Zhang. A RISC-V processor with optimized CORDIC-based trigonometric function accelerator. In *2025 IEEE 14th International Conference on Communications, Circuits and Systems (ICCCAS)*, pages 155–159. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2025.

**Jarray:2026:LCC**

[1578] Nedra Jarray, Majdi Elhajji, and Abdelkrim Zitouni. Low-cost compression architecture based on extended DCT algorithm. *Integration, the VLSI Journal*, 106:102568, 2026. CODEN IVJODL. ISSN 0167-9260 (print), 1872-7522 (electronic). URL `https://www.sciencedirect.com/science/article/pii/S0167926025002251`.

**Wilkinson:1965:AEP**

[1579] J. H. Wilkinson. *The Algebraic Eigenvalue Problem*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1965. ISBN 0-19-853403-5. xviii + 662 pp. LCCN QA218 .W686 1965.

**AFIPS:1971:ACP**

[1580] Anonymous, editor. *1971 Spring Joint Computer Conference, May 18–20, 1971, Atlantic City, New Jersey*, volume 38 of *AFIPS conference proceedings*. AFIPS Press, Montvale, NJ, USA, 1971. LCCN ????

**Anonymous:1980:CPA**

[1581] Anonymous, editor. *Conference Proceedings 7th Annual Symposium on Computer Architecture, La Baule, France, 6–8 May 1980*, volume 8(3) of *ACM SIGARCH Computer Architecture News*. IEEE Computer Society

Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1980. CODEN CANED2. ISSN 0163-5964 (print), 1943-5851 (electronic).

**IEEE:1980:IIS**

[1582] Anonymous, editor. *1980 IEEE International Solid-State Circuits Conference Digest of Technical Papers, Philadelphia, PA, USA, 13–15 February 1980*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1980. ISBN ???? LCCN ???? IEEE Catalog Number 80CH1490-2-SSC.

**Kirk:1984:CRE**

[1583] Donald E. Kirk, editor. *Conference Record: Eighteenth Asilomar Conference on Circuits, Systems and Computers: Papers Presented November 5–7, 1984, Pacific Grove, California*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1984. ISBN 0-8186-0673-8 (paperback), 0-8186-8673-1 (hard), 0-8186-4673-X (microfiche). LCCN TK 7801 A83 1984.

**Hwang:1985:PSC**

[1584] Kai Hwang, editor. *Proceedings: 7th Symposium on Computer Arithmetic, June 4–6, 1985, University of Illinois, Urbana, Illinois*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1985. ISBN 0-8186-0632-0 (paperback), 0-8186-8632-4 (hard), 0-8186-4632-2 (microfiche). LCCN QA76.9.C62 S95 1985. IEEE catalog number 85CH2146-9. IEEE Computer Society order number 632.

**Irwin:1987:PSC**

[1585] Mary Jane Irwin and Renato Stefanelli, editors. *Proceedings: 8th Symposium on Computer Arithmetic, May 19–21, 1987, Villa Olmo, Como, Italy*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, May 1987. ISBN 0-8186-0774-2 (paperback), 0-8186-4774-4 (microfiche), 0-8186-8774-6 (case). LCCN QA 76.9 C62 S95 1987.

**ACM:1989:PSN**

[1586] ACM, editor. *Proceedings, Supercomputing '89: November 13–17, 1989, Reno, Nevada*. ACM Press, New York, NY 10036, USA, 1989. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

**Ercegovac:1989:PSC**

[1587] Miloš D. Ercegovac and Earl E. Swartzlander, Jr., editors. *Proceedings: 9th Symposium on Computer Arithmetic: September 6–8, 1989, Santa Monica, California, USA*. IEEE Computer Society Press, 1109 Spring

Street, Suite 300, Silver Spring, MD 20910, USA, 1989. ISBN 0-8186-8963-3 (case), 0-8186-5963-7 (microfiche). LCCN QA 76.9 C62 S95 1989. IEEE catalog no. 89CH2757-3.

**Kornerup:1991:PIS**

[1588] Peter Kornerup and David W. Matula, editors. *Proceedings: 10th IEEE Symposium on Computer Arithmetic: June 26–28, 1991, Grenoble, France*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1991. ISBN 0-8186-9151-4 (case), 0-8186-6151-8 (microfiche), 0-7803-0187-0 (library binding). LCCN QA76.9.C62 S95 1991. IEEE catalog no. 91CH3015-5.

**IEEE:1992:PIC**

[1589] IEEE, editor. *Proceedings of the IEEE 1992 Custom Integrated Circuits Conference: the Westin Copley Place Hotel, Boston, Massachusetts, May 3–6, 1992*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1992. ISBN 0-7803-0246-X, 0-7803-0247-8, 0-7803-0248-6. LCCN ???? IEEE catalog no. 92CH3078-3.

**Swartzlander:1993:SCA**

[1590] Earl Swartzlander, Jr., Mary Jane Irwin, and Graham Jullien, editors. *Proceedings: 11th Symposium on Computer Arithmetic, June 29–July 2, 1993, Windsor, Ontario*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1993. ISBN 0-7803-1401-8 (softbound), 0-8186-3862-1 (casebound), 0-8186-3861-3 (microfiche). ISSN 0018-9340 (print), 1557-9956 (electronic). LCCN QA 76.9 C62 S95 1993. IEEE Transactions on Computers **43(8)**, 1994.

**Luk:1996:PSC**

[1591] Franklin T. Luk, editor. *Proceedings of the 1996 SPIE Conference on Advanced Signal Processing Algorithms, Architectures, and Implementations VI, 6–8 August, 1996, Denver, Colorado*, volume 2846. Society of Photo-optical Instrumentation Engineers (SPIE), Bellingham, WA, USA, 1996. ISBN 0-8194-2234-7. LCCN ???? URL `http://spiedigitallibrary.org/proceedings/resource/2/psisdg/2846/1`.

**Lang:1997:ISC**

[1592] Tomas Lang, Jean-Michel Muller, and Naofumi Takagi, editors. *13th IEEE Symposium on Computer Arithmetic: proceedings, July 6–9, 1997, Asilomar, California, USA*, volume 13 of *Symposium on Computer Arithmetic*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1997. ISBN 0-8186-7846-1, 0-8186-7847-X, 0-8186-7848-8. ISSN 1063-6889. LCCN QA76.9.C62 S95 1997. IEEE

Computer Society order number PR07846. IEEE Order Plan catalog number 97CB36091.

**Koren:1999:ISC**

[1593] Israel Koren and Peter Kornerup, editors. *14th IEEE Symposium on Computer Arithmetic: proceedings: April 14–16, 1999, Adelaide, Australia*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1999. ISBN 0-7803-5609-8, 0-7695-0116-8, 0-7695-0118-4. ISSN 1063-6889. LCCN QA76.6 .S887 1999. URL `http://computer.org/conferen/home/arith/`; `http://www.ecs.umass.edu/ece/arith14/program.html`. IEEE Computer Society Order Number PR00116. IEEE Order Plan Catalog Number 99CB36336.

**Bajard:2003:ISC**

[1594] Jean Claude Bajard and Michael Schulte, editors. *16th IEEE Symposium on Computer Arithmetic: ARITH-16 2003: proceedings: Santiago de Compostela, Spain, June 15–18, 2003*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2003. ISBN 0-7695-1894-X. ISSN 1063-6889. LCCN QA76.6 .S919 2003. URL `http://www.dec.usc.es/arith16/`; `https://ieeexplore.ieee.org/servlet/opac?punumber=8582`. IEEE Computer Society order number PR01894. Selected papers republished in *IEEE Transactions on Computers*, **54**(3) (2005) [575].

**Montuschi:2005:PIS**

[1595] Paolo Montuschi and Eric (Eric Mark) Schwarz, editors. *Proceedings of the 17th IEEE Symposium on Computer Arithmetic, ARITH-17 2005, June 27–29, 2005, Cape Cod, Massachusetts, USA*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005. ISBN 0-7695-2366-8. LCCN QA76.9.C62 .S95 2005.

**Muller:2006:EFA**

[1596] Jean-Michel Muller. *Elementary Functions: Algorithms and Implementation*. Birkhäuser, Cambridge, MA, USA; Berlin, Germany; Basel, Switzerland, second edition, 2006. ISBN 0-8176-4372-9. xxii + 266 pp. LCCN QA331 .M866 2006. US$59.95. URL `http://perso.ens-lyon.fr/jean-michel.muller/SecondEdition.html`; `http://www.springer.com/sgw/cda/frontpage/0,,4-40109-22-72377986-0,00.html`.

**Woods:2008:RCA**

[1597] Roger Woods, Katherine Compton, Christos Bouganis, and Pedro C. Diniz, editors. *Reconfigurable Computing: Architectures, Tools and Applications: 4th International Workshop, ARC 2008, London, UK, March*

*26–28, 2008. Proceedings*, volume 4943 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2008. ISBN 3-540-78610-4. ISSN 1611-3349.

**Bruguera:2009:PIS**

[1598] Javier D. Bruguera, Marius Cornea, Debjit DasSarma, and John Harrison, editors. *Proceedings of the 19th IEEE Symposium on Computer Arithmetic, June 8–10, 2009, Portland, Oregon, USA*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2009. ISBN 0-7695-3670-0, 1-4244-4329-6. ISSN 1063-6889. LCCN QA76.6 .S887 2009. URL `http://www.ac.usc.es/arith19/`.

**Muller:2015:ISC**

[1599] Jean-Michel Muller, Arnaud Tisserand, and Julio Villalba, editors. *2015 IEEE 22nd Symposium on Computer Arithmetic (ARITH 2015) Lyon, France, 22–24 June 2015*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2015. ISBN 1-4799-8665-8, 1-4799-8663-1. ISSN 1063-6889. LCCN QA76.9.C62 S95 2015. URL `https://ieeexplore.ieee.org/servlet/opac?punumber=7193754`.

**Burgess:2017:ISC**

[1600] Neil Burgess, Javier Bruguera, and Florent de Dinechin, editors. *2017 IEEE 24th Symposium on Computer Arithmetic (ARITH 24), London, UK, 24–26 July 2017*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2017. ISBN 1-5386-1966-0 (print), 1-5386-1965-2, 1-5386-1964-4. ISSN 1063-6889. LCCN QA76.9.C62 S95 2017. URL `https://ieeexplore.ieee.org/servlet/opac?punumber=8019911`.

**Cornea:2020:ISC**

[1601] Marius Cornea, Weiqiang Liu, and Arnaud Tisserand, editors. *2020 27th IEEE Symposium on Computer Arithmetic: ARITH 2020: proceedings: Portland, Oregon, USA, 7–10 June 2020*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2020. ISBN 1-72817-120-2, 1-72817-121-0. LCCN ???? URL `https://ieeexplore.ieee.org/servlet/opac?punumber=9146973`.

**IEEE:2024:PIS**

[1602] IEEE, editor. *Proceedings: 2024 IEEE 31st Symposium on Computer Arithmetic: ARITH 2024, 10–12 June 2024, Málaga, Spain*. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD

20910, USA, 2024. ISSN 2576-2265 (electronic), 1063-6889 (print-on-demand). LCCN QA76.9.C62 .I578 2024. URL `https://ieeexplore.ieee.org/xpl/conhome/10579097/proceeding`.