

A Bibliography of Publications about the Arithmetic–Geometric Mean Iteration

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Title word cross-reference

-operators [Yam06]. **-starlike** [SMY14].
11 [Dra93a]. **11th** [CGM95]. **184** [Mat95a].
1975 [Tra76]. **1994** [Bro96].
 $(a, b) \leftarrow \left(\frac{a+3b}{4}, \frac{\sqrt{ab}+b}{2} \right)$ [BB89]. **1** [BM88]. **2**
[BM88, Gau02, KM10, KM12]. **3** [LR07].
\$49.95 [Ber88]. **B** [SL98]. **D_4** [Sol95]. **e**
[Has13b, Has14, YY01]. **E_6** [Sol95]. **E_8**
[Sol95]. **λ** [SMY14]. **C** [CT13a]. **μ** [SMY14].
 n [Liu94, LM70, Vas72, Yam06]. **p**
[HM89, Xu15]. **Φ** [Baj78]. **π**
[AB88, AB16, Arn11a, Bai16, BMW16,
BRT18, BB86, Hur88, Kan88, Sal76, Sal97,
Sal00, Sal04, Sal16, Sin16]. **q** [BRS13]. **U_n**
[SL98]. **$x^{1/x}$** [Sch89].
-adic [KM12, HM89, KM10]. **-adique**
[HM89]. **-convex** [SMY14].
-hypergeometric [BRS13]. **-like** [Baj78].
2-adic [KM13]. **2017** [BBB⁺20].
'88 [ML88].
94b [Mat95a]. **94c** [Dra93a].
AAECC [CGM95]. **AAECC-11** [CGM95].
additional [KLS00]. **adic**
[KM12, KM13, HM89, KM10]. **adique**
[HM89]. **Advanced** [Ber88, Bro96]. **AGM**
[Ber88, TBDS92, Wim88, Arn11a, BB87,
BB88, BB91, Bor95, BB98, Bor03a, Bor03b,
Bor03c, Bor04c, Bor04b, Bor04a, BCF04,

BC04, BDS92, Bre17, Bre20, CV91, CT13b, CT13a, Dis02, Dup11, Gau02, KS08, Lor08, Osl15, Roo03, Sin16, Sol95, SL98, Sur01, Vil14, Ask88, Cas99]. **algebra** [CGM95, Mat95a]. **algebraic** [CGM95]. **Algorithm** [Nis97, Bai16, DM97, Tri65]. **Algorithms** [BRT18, Bre06, Car71, Gau02, Nak01, Arn11a, BB86, Bre10b, CGM95, New85, New16]. **alternative** [QS09]. **AM** [Bak16, BS12, Haj20, Hir07, Hof16, Mah20, Mal12, Saw17, Sch89, Shi11]. **AM-GM** [Sch89]. **among** [CW13, Fur14]. **amplitude** [Sal89]. **analogues** [BR07, BBG93, Gar94]. **Analysis** [BBB⁺20, Bur16, BE17, Cha14, FAB12]. **Analytic** [Ber88, BB87, Tra76, Wim88, BB98, Tra76]. **Analytical** [Par65, Par68, Par79]. **analyze** [FAB12]. **Ando** [Yam06]. **Appl** [Mat95a]. **Application** [SA06, Her72, Mar88, ZJ15, ZFFS14]. **Applications** [dal96, Ba97, DJ94, WQC16, Wil63, Zou17]. **Applied** [CGM95]. **approach** [CO17, DJ94]. **Approximation** [Rey87, Jam14, Thu72, Rey87]. **Approximations** [CS08, BBB16, Eng06]. **April** [Tra76]. **arbitraire** [Bol99]. **arbitrary** [Bol99, GQ03]. **arc** [Alm78]. **Arch** [Dra93a]. **argument** [Dij94, Dij96a]. **Arithmetic** [Ake63, AFL96, AB88, Als00, Bel14, BS93a, BD93, BB83, BB84b, BB84a, BB97, BLM97, BB00, BB04, Bur87, But36, CR16, Car70, Car71, CN87, Cox97, Cox00, Cox04, Cus81, Dia60, Eve63, FP84, Gai67, Gen18, GM03, GT20, Hor95, Kat03, KP96a, Kos98, LR07, LO96, Mar88, MT10, MNC71, Min87, Nel87, Nel89, Nel15, Neu96, O'S68, PM82, Pla20, RLC09, Sal76, Sal97, Sal00, Sal04, Sch86, Sch78, Sch82, Sch88, Sch84, Toa98, WCW11, WCW12, Xie02, Yan00, YY01, Abr79, ABK16, Aiy45, Alb12, Ald08, Ald09, Ald10, Ald11, Ald12, AMPV97, ABPV97, Alm78, AB16, Alz87, Alz88, Alz89, Alz90b, Alz90f, Alz90c, Alz90d, Alz90e, Alz90a, Alz91, Alz92a, Alz92b, Alz94, Alz95, Alz96, Alz97, Alz99, AR02, And83, Aud15, Ba97, Baj78]. **arithmetic** [BR07, Bel56, Ben93, Ben94, Ben95, Ben98, BK00, Bha06, BK08, Bol99, Bor87, Bor88a, Bor88b, Bor88c, Bor88d, Bor88e, Bor88f, Bor89, BBG93, BB16b, Bra01, Bul67, Bul04, Bul91, BE15, CMN71, CF78, CS08, CB11, CO17, Cha02, CE09, CS17, Cho76, Cho77, CZW11, CW11, CW12, CWQ12, CW13, CWQM13, CQWZ15, Chu90, Chu12, CL92, Cox84, Cox85, Cox16, CK13, Dij92, Dij94, Dij96a, Dij96b, DZ17, DM97, Dob01, DL99, Dra93a, Dra93b, DCP97, Dra98, Dra99, DJ94, EN01, Eve67, Eve69, Fen95, FT08, FJ76, Fin81, Fou99, FLFJ11, FAB12, FFSZ16, Fur14, Fur94, Gao15, Gar94, Gas97, Gau92, Geo02, Gep28, Gla76, GSWC12, GM17, GHT11, GT13, GQ03, GZCS16, Hao93, Hao00, Har91, Has13a, Has13b, Has14, Hay09, HZQ12, HC12, Hei81, HM89]. **arithmetic** [Her72, Hir16, Hol06, HM86, Hun56, Hun27, IKW16, Ito08, Jam14, Jam18, Jar08, JK99, Kan88, Kan16, KL96, KL98, KP96b, Ked94, KL07, KLL09, KLL11, KM10, KM12, KM13, Kit92, KKLP12, Kla68, Kno03, Kob58, KS07, KMS79, KL12, KS00, KLS00, Lan78, Lat99, LL11, Lek09, LQ15, Lin91, Liu94, LZ06, LGSC13, LM70, LC10, LC11, Luc95, MV10, Mat10, Mat93, Mat95a, Mat95b, MW12, Mer03, MPŠ08, Mih05, Mit66, Mit70, Mol11, Mon03, MH72, Mur97, Nak01, Nan80, Nan46, Nis88, Nis94, Nis97, NC88, NC90, Ono83, Opp65, Opp68, OT04, Peč95, PM97, PV97, Pee89, Pin15, Qi03a, Qi03b, QS09, QC14, QCZ15, Rau42, Raz86, Rey87, Rod17, RM92, Roy03, Rua15, SA06, ST94, Sal89, Sal16, SM99, Sán90, Sán99, SK77, Sch11]. **arithmetic** [Sei87, Sei97, Sen87, Seo12, SZ13, She16, She17, Shi66, SA10, SvS12, SMY14, Ste96, Stu44, Tan06, Tan07, Tor56,

Tun75, Uch08, Vas72, WW07, WY88, Wan99, WCJQ14, WZSC14, WQC16, Waz91, Wil63, Wu17, XHWC12, Xu15, Xue17, YMT10, Yam13, YYWQ14, YSC14, Yan14, YYC08, ZX11, ZWCL14, ZJ15, ZH15, ZJ16, Zou17, Zou19, Zul86, ZFFS14, ZC15, dal96, BT11, BM88, Edd85, MP88, Nel95, OC14].

Arithmetic-Geometric [Sch78, Sch82, Sch88, Zou19, Edd85].

Arithmetic-Logarithmic-Geometric [Nel95].

arithmetic-mean [JK99, Ked94, Wan99].

arithmetic-mean-geometric-mean [Cho77].

arithmetic [Sur00, Bol99, BM88, HM89, Rey87].

aritmético-geométrica [Bol99].

arithmetisch [Gep28, Hei81, Sch11].

arithmetische [Alz88, Alz90f].

arithmetischen [Alz87, Sei87].

aritmet [Gau17].

aritmético [Gau92].

arithmeticorum [Gau92].

Aritmetisk [Alm78].

aspects [Tan06].

associated [DCP97, Eve67, Eve69, Nak01, Tan07].

Asymptotes [BB93].

Asymptotic [BE15, Bur16, BE17].

August [Bro96].

Australia [BBB⁺20].

Automated [Zha96].

automatic [AK93].

average [FLFJ11].

averages [Alz88].

averaging [FLFJ11].

Axially [Lek09].

B [Ask88, Ber88, MNC71, TBDS92, Wim88].

Båglängd [Alm78].

backlogging [CO17, OC13].

backorders [CB10a].

Barzilai [IP17].

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bcc [MH71].

be [Mal98].

Behold [Edd85, MP88].

Bernoulli [Mal12].

Best [Kno03].

Between [Gen18, WCW11, WCW12, Abr79, Ald08, Ald09, Ald10, Ald11, Ald12, Alz87, Alz90d, Aud15, Cha02, CE09, CW11, CW12, GSWC12, HC12, Hol06, KLS00, Lan78, Lat99, LQ15, LM70, Pin15, Sei87, Shi66, Tun75, WZSC14, ZJ16].

bi [SMY14].

bi- [SMY14].

biased [Sen87].

billion [BBB16].

binomial [Roo03].

Birth [AAS16].

bivariate [Roy03].

Book [Ber88, Cas99, MNC71, TBDS92, Wim88, BBB97, BBB00, BBB04].

bootstrapping [Shi11].

Borchardt [Bor88f, Tri65].

Borwein [Ask88, Ber88, Wim88, Ask88, Bre17, Bre20, IP17].

Borweins [Bai16].

bound [ABK16, Alz90d, LQ15, ZFFS14].

bounding [QS09].

Bounds [Hor95, PM82, WCJQ14, Ald12, CZW11, CWQ12, CWQM13, CQWZ15, DZ17, GZCS16, Kno03, LGSC13, LC11, Pin15, QC14, QCZ15, ST94, SZ13, Tun75, WQC16, XHWC12, YYWQ14, YSC14, Yan14].

Boyer [KP96a, KP96b].

Brent [New85, New16].

Brothers [Bre20].

busque [Gau92].

C [MNC71, TBDS92].

Calabi [MT10].

Calcul [Bol99].

Calculation [BB84c, Kin21, Kin24, Kin07, MH71, Kan88, Kan16, MH72, Sal89].

calculations [Tri66].

Calculus [Hof16, Min87, Sch78].

Callaghan [BBB⁺20].

called [Mal98].

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Carlson [TBDS92].

Carnegie [Tra76].

Carnegie-Mellon [Tra76].

case [Bor04c, Bor04b, BCF04, BC04].

categories [YMT10].

Cauchy [Aud15, ZJ16].

Celebration [BBB⁺20].

Certain [San96, Leh70, Leh71].

chain [Cha14, Chu12].

Characteristic [Gau02].

Characterization [Roy03].

Characterizations [RM92, Har91].

charge [Lek09].

chosen [FLFJ11].

Circles [Kin21].

class [Eng06].

classical [FLFJ11].

Classroom [Ake63, Dia60, Gai67].

closed [JK99].

cm [Ber88].

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codes [CGM95].

coefficient [SMY14].

Combination [Gau02, CZW11, HC12, LC11, XHWC12, YYWQ14].

combinations [CWQ12].

combinatorial [Hao00].

Comment [Abr79].

commutative [Hay09].

Comparison [Ald11, Gau02, HK99, FAB12].

complete [MH72, OC13, WQC16].

Complex [LO96, AR02, Bor04b, BC04, CT13b, CT13a, Fou99, MH72, Nis97, Tor56]. **complex-parameter** [BC04]. **Complexity** [BB84c, BB87, BB98, Bre76b, Bre10a, Eng06, Tra76, Ber88, Wim88]. **composition** [MV10]. **compositions** [Hol06]. **Compound** [BB93, BE17]. **compounding** [Leh70, Leh71]. **Computation** [BRT18, BB84b, BB97, BB00, BB04, Bre06, BE17, CR16, Sal76, Sal97, Sal00, Sal04, Sal16, AAS16, Bai16, BMW16, BB16a, BBP16, Bol99, BB16b, Eng06, IP17]. **Computational** [Arn11b, Ber88, BB87, Wim88, BB98, Tra76]. **Computations** [Krä93, Hur88, Kar93]. **compute** [BBB16, CB10b]. **Computer** [AFL96, Tra76, Pee89]. **computers** [Tri66]. **Computing** [BRT18, Dis02, AK93, AFL96, Arn11a, BI11]. **concave** [Lat99]. **Concentration** [Ald10]. **concerning** [Kla68, Mit66]. **condition** [BS12]. **conditions** [WZSC14]. **conjectures** [CL92]. **connected** [KL96, KL98, OT04, SMY14]. **connecting** [Opp65, Opp68, Vas72]. **consistent** [FLFJ11]. **Constant** [YY01]. **constants** [BBP16]. **Construction** [SL98, SA06]. **containing** [Ba97]. **contingency** [YMT10]. **Continued** [Bor03a, Bor03b, Bor03c, Bor04c, Bor04b, Bor04a]. **Continuous** [Mol11, FAB12]. **contra** [YYWQ14]. **contra-harmonic** [YYWQ14]. **contraharmonic** [CQWZ15]. **Contribution** [But36]. **Convergence** [Lor08, MH72]. **convergent** [Bai16]. **converging** [BB86]. **converse** [Alz90b, KL07, KLL09]. **convex** [AB07, CZW11, Hir16, KL12, SMY14, XHWC12]. **Convexity** [NC90, Xu15]. **Corollaries** [Pla20]. **correcting** [CGM95]. **corresponding** [KS08]. **Corrigendum** [Eve69]. **Counterpart** [BB88, BB91]. **Counterparts** [Dra99]. **Counting** [Gau02]. **courbes** [BM88]. **course** [Tka03]. **covariates** [SA06]. **criteria** [KL96, KL98, OT04]. **Cubic** [BB88, Gar94, BB91, Bor95]. **Curves** [Gau02, BM88, CT13b, CT13a, DL99, KM10, MT10]. **data** [FAB12]. **decimal** [Bai16, Kan88, Kan16]. **Decimals** [BRT18]. **Deductive** [Bro96, Bro96]. **definite** [And83, KL07, KLL09, ST94, Yam13]. **del** [Tri65]. **delay** [OC13]. **Department** [Tra76]. **derive** [CB10a]. **derived** [JK99]. **design** [Bro96]. **deteriorating** [Cha14]. **determinantal** [BT11]. **determining** [CO17]. **developments** [FFSZ16]. **Diary** [AB88, AB16]. **difference** [Ald12, Alz90d, GQ03, LM70, Pin15, Qi03a, Qi03b, SZ13, Tun75]. **differences** [Ald11, FAB12]. **Differential** [CK13, LL11]. **digits** [AAS16, Bai16, BMW16, BBB16, Kan88, Kan16]. **Dimensional** [Kat03, Bor88f]. **Direct** [Kin24, Kin07, SM99]. **disc** [Fou99]. **discovered** [Bor95]. **discrete** [Alz95, Gao15]. **dispute** [CB11]. **distance** [CB11]. **Distant** [BRT18]. **Distribution** [Lin91, Gla76, HM86, Nan80, Roy03]. **distributions** [Lek09, Nan80]. **divergence** [Lor08, Tan06]. **do** [Sen87]. **Double** [WCW11, WCW12, GSWC12, Lin91, QS09]. **Dynamics** [Bor04c, Bor04b, Bor04a, Bul91, Par65, Par68, Par79]. **easy** [CB10a]. **echelon** [Cha14]. **economic** [CB10b]. **Edgeworth** [HM86]. **Eigenvalue** [AB07]. **electronic** [Tri66]. **élémentaires** [Bol99]. **Elementary** [BB84b, BB97, BB00, BB04, Bre76a, Bre06, Hof16, Min87, Bol99, BB16b, Bre76b, Bre10a, Bre10b, Bre16, Mit70, Yam13]. **ellipse** [Alm78, Sur00, WCJQ14]. **Ellipsens** [Alm78]. **Ellipses** [AB88, AB16]. **Elliptic** [Gau02, Kin24, Kin07, Tka03, Arn11a, CT13b, CT13a, KM10, Mon03, MH72,

Wac00, WQC16]. **empiric** [FAB12].
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EPQ [CB10a]. **equality** [BS12]. **equation**
[Zul86]. **equations** [BBB16, MV10, Wil63].
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[Mal12, YYC08]. **Errata** [Dra93a].
Erratum [Mat95a]. **error** [CGM95, Mon03].
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[FLFJ11]. **estimates** [SMY14]. **Euclidean**
[Dob01, SA10]. **Evaluating** [Wac00].
Evaluation
[Bre76a, Bre76b, Bre10a, Bre16, Dup11].
every [Fur94]. **Exact**
[BRT18, Pin15, Bol99, Nan80]. **Excursion**
[Bor87, Bor88a, Bor88b, Bor88c, Bor88d,
Bor88e]. **expansion** [BE15, HM86, Roo03].
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Explicit [LR07]. **exponential** [Lin91].
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[Fou99, Had12]. **external** [Seo12].
Extremum [MP88].

failure [RM92, Roy03]. **Fast**
[BB84b, BB97, BB00, BB04, Bre76a, Bre06,
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fcc [MH71]. **Fibonacci** [Sch84]. **field**
[Tor56]. **fields** [KM12, KM13]. **find** [Sur00].
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[BD93, KS08, YYC08]. **Formula**
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[Bor03a, Bor03b, Bor03c, BCF04, BC04,
Lor08]. **Fractions** [Bor04c, Bor04b, Bor04a].
France [CGM95]. **French**
[Bol99, BM88, HM89, Rey87]. **function**
[Bre76b, Bre10a, Mit70, MH71, Nis15, Sal89].
functional [MV10, Zul86]. **functionals**
[LL11]. **Functions** [BB84b, BB97, BB00,
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generalibus [Gau17]. **generalis** [Gau92].
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[Kat03, NC88, NC90]. **Generalized**
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Xie02, CW13, DZ17, LC10, LC11, Mat10,
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[Pee89]. **generalizzazione** [Tri65].
generated [Szy91]. **generation** [BB16a].
genre [BM88]. **Genus**
[LR07, BM88, DL99, Jar08]. **Geometric**
[MP88]. **Geometric**
[Ake63, AB88, Als00, BT11, BS93a, BD93,
BB83, BB84b, BB84a, BB97, BLM97, BB00,
BB04, Bur87, But36, CR16, Car70, Car71,
Cox97, Cox00, Cox04, Cus81, Dia60, Eve63,
Gai67, Gen18, GM03, GT20, Hor95, Kat03,
KP96a, Kos98, KK09, LR07, LO96, MNC71,
Min87, Nel87, Nel89, Nel15, Neu96, O'S68,
OC14, PM82, Sal76, Sal97, Sal00, Sal04,
Sch86, Sch78, Sch82, Sch88, Sch84, Toa98,
WCW11, WCW12, Xie02, YY01, Abr79,
ABK16, Aiy45, Alb12, Ald08, Ald09, Ald10,
Ald11, Ald12, AMPV97, ABPV97, Alm78,
AB16, Alz87, Alz88, Alz89, Alz90b, Alz90f,
Alz90c, Alz90d, Alz90e, Alz90a, Alz91,
Alz92a, Alz92b, Alz94, Alz95, Alz96, Alz97,
Alz99, AR02, And83, Aud15, Ba97, Baj78,
BR07, Bel14, Bel56, Ben93, Ben94, Ben95].
geometric
[Ben98, BK00, Bha06, BK08, BI11, Bol99,
Bor87, Bor88a, Bor88b, Bor88c, Bor88d,
Bor88e, Bor88f, Bor89, BBG93, BB16b,

Bra01, Bul67, Bul04, Bul91, BE15, CMN71, CF78, CS08, CB11, CO17, Cha02, CE09, CS17, Cho76, Cho77, CZW11, CW11, CW12, CWQ12, CW13, CWQM13, CQWZ15, Chu90, Chu12, CN87, CL92, Cox84, Cox85, Cox16, CK13, Dij92, Dij94, Dij96a, Dij96b, DZ17, DM97, Dob01, DL99, Dra93a, Dra93b, DCP97, Dra98, Dra99, DJ94, EN01, Eve67, Eve69, Fen95, FT08, FJ76, Fin81, Fou99, FLFJ11, FAB12, FFSZ16, Fur14, Fur94, Gao15, Gar94, Gas97, Gau92, Geo02, Gep28, Gla76, GSWC12, GM17, GHT11, GT13, GQ03, GZCS16, Hao93, Hao00, Har91, Has13a, Has13b, Has14, Hay09, HZQ12, HC12, Hei81, HM89, Her72, Hir16, Hol06].

geometric
[HM86, Hun56, Hun27, IP17, IKW16, Ito08, Jam14, Jam18, Jar08, JK99, KL96, KL98, KP96b, Ked94, KL07, KLL09, KLL11, KM10, KM12, KM13, Kit92, KKLP12, Kla68, Kno03, Kob58, KS07, KMS79, KL12, KS00, KLS00, Lan78, Lat99, LL11, Lek09, LQ15, Lin91, Liu94, LZ06, LGSC13, LM70, LC10, LC11, Luc95, MV10, Mar88, Mat10, Mat93, Mat95a, Mat95b, MT10, MW12, Mer03, MPŠ08, Mih05, Mit66, Mit70, Mol11, Mon03, MH72, Mur97, Nak01, Nan80, Nan46, Nis88, Nis94, Nis97, NC88, NC90, Ono83, Opp65, Opp68, OT04, Pec95, PM97, PV97, Pee89, Pin15, Qi03a, Qi03b, QS09, QC14, QCZ15, RLC09, Rau42, Raz86, Rey87, Rod17, RM92, Roy03, Rua15, SA06, ST94, Sal89, Sal16, SM99, Sán90, Sán99, SK77, Sch11, Sei87].

geometric [Sei97, Sen87, Seo12, SZ13, She16, She17, Shi66, SA10, SvS12, SMY14, Ste96, Stu44, Sur00, Tan06, Tan07, Tor56, Tun75, Uch08, Vas72, WW07, WY88, Wan99, WCJQ14, WZSC14, WQC16, Waz91, Wil63, Wu17, XHWC12, Xu15, Xue17, YMT10, Yam06, Yam13, Yan00, YYWQ14, YSC14, Yan14, YYC08, ZX11, ZWCL14, ZJ15, ZH15, ZJ16, Zou17, Zou19, Zul86, ZFFS14, ZC15, dal96, Edd85, Nel95, BM88].

geometric-harmonic

[Mat93, Mat95a, ST94, Ste96].

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geometric-mean
[GM17, JK99, Ked94, Kit92, Wan99].

geométrica [Gau92]. **Geometrical** [Shi66].

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[Alz87, Gep28, Hei81, Sch11, Sei87].

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[AFL96, Bro96]. **gewichtete** [Alz90f]. **Gini**
[CW12]. **GM** [Bak16, BS12, Haj20, Hir07, Hof16, Mah20, Mal12, Saw17, Sch89, Shi11].

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[Ber88]. **Green** [MH71]. **growth** [AAS16].

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 [YMT10]. **type**
 [Aiy45, BRS13, Mih05, YMT10].

uncertainty [YMT10]. **Ungleichung** [Alz87]. **Ungleichungen** [Alz88]. **Unification** [Zou19]. **unit** [Qi03a, Qi03b]. **Unitarily** [Hor95, Fur94, Zou19]. **united** [QS09]. **Univalence** [KL96, KL98, OT04, Baj78]. **University** [Tra76]. **Unrestricted** [Bre10b]. **unweighted** [Nan80]. **Upper** [ST94, ZFFS14, ABK16, Kno03, LQ15, Pin15, SZ13, Tun75]. **use** [Tri66, Zul86]. **Using** [KP96a, Sal76, Sal97, Sal00, Sal04, Bai16, Dob01, Dup11, FAB12, KP96b, Sal16, WCJQ14]. **usual** [Thu72].

validated [AFL96]. **validity** [Chu12]. **Value** [Sch88, Alb12, GHT11, Tao06]. **Values** [Toa98, Alz90f, Alz90a, Dis02, Har91, Hir16, Rua15, Zou17, Sei87]. **variables** [Liu94, MH72, Shi11]. **Variance** [Rod17]. **varieties** [MT10]. **Various** [HK99, BBP16]. **Vectorization** [Kan88, Kan16]. **Verallgemeinerung** [Hei81]. **Verification** [Krä93, AK93, Kar93]. **version** [Bha06, New85, New16, She16]. **versions** [FT08, FFSZ16]. **versus** [FLFJ11]. **via** [Eng06, Hof16, Mah20, Sal89, Sch88, Sch89, Yam06]. **Visualization** [BBB⁺20]. **Vuorinen** [TBDS92].

way [YMT10]. **Weibull** [Roy03]. **Weierstrass** [Wu05]. **Weighted** [Hof16, Pas71, Alz90a, Ben94, Dra98, Fin81, Gao15, Hol06, KL07, KLL09, KLL11, MW12, Nan80, Xue17, Yam13, Yan14, Zul86]. **weighted-arithmetic** [Fin81]. **well** [Har91]. **well-known** [Har91]. **Werke** [Gau66, Gau11]. **Werte** [Sei87]. **Wiley** [Ber88]. **Wisk.** [Dra93a]. **within** [FLFJ11]. **Without** [Nel15, Als00, Nel87, Nel95, Sch86]. **Words** [Als00, Nel87, Nel15, Sch86, Nel95]. **work** [Sch11]. **Wuppertal** [AFL96].

xv [Ber88].

Yau [MT10]. **York** [Ber88]. **Young** [Wu17]. **youthful** [Sch11].

Zahlen [Sei87]. **zero** [Bre76b, Bre10a]. **zero-finding** [Bre76b, Bre10a]. **zeros** [Her72]. **zum** [Sch11]. **Zur** [Gep28]. **zweier** [Sei87]. **zwischen** [Alz87, Sei87].

References

Agarwal:2016:BGC

[AAS16] Ravi Agarwal, Hans Agarwal, and Syamal Sen. Birth, growth and computation of pi to ten trillion digits (2013). In Bailey and Borwein [BB16a], pages 363–423. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.

Almkvist:1988:GLR

[AB88] Gert Almkvist and Bruce Berndt. Gauss, Landen, Ramanujan, the arithmetic-geometric mean, ellipses, π , and the *Ladies Diary*. *American Mathematical Monthly*, 95(7):585–608, August/September 1988. CODEN AM-MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Aujla:2007:EIC

[AB07] Jaspal Singh Aujla and Jean-Christophe Bourin. Eigenvalue inequalities for convex and log-convex functions. *Linear Algebra and its Applications*, 424(1):25–35, 2007. CODEN LAAPAW. ISSN 0024-

- 3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379506001261>. Special Issue in honor of Roger Horn.
- [AB16] Gert Almkvist and Bruce Berndt. Gauss, Landen, Ramanujan, the arithmetic-geometric mean, ellipses, π , and the *Ladies Diary* (1988). In Bailey and Borwein [BB16a], pages 125–150. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.
- [ABK16] Vandanjav Adiyasuren, Tserendorj Batbold, and Muhammad Adil Khan. Refined arithmetic-geometric mean inequality and new entropy upper bound. *Communications of the Korean Mathematical Society*, 31(1):95–100, 2016. ISSN 1225-1763 (print), 2234-3024 (electronic).
- [ABPV97] M. Alić, P. S. Bullen, J. E. Pečarić, and V. Volenec. On the geometric-arithmetical mean inequality for matrices. *Math. Commun.*, 2(2):125–128, 1997. ISSN 1331-0623.
- [Abr79] J. P. Abriata. Comment on a thermodynamic proof of the inequality between arithmetic and geometric mean. *Physics Letters A*, 71(4):309–310, 1979. CODEN PYLAAG. ISSN 0031-9163 (print), 1873-2410 (electronic).
- [AFL96] Götz Alefeld, Andreas Frommer, and Bruno Lang, editors. *Scientific computing and validated numerics: proceedings of the International Symposium on Scientific Computing, Computer Arithmetic and Validated Numerics SCAN-95 held in Wuppertal, Germany, September 26–29, 1995*, volume 90 of *Mathematical Research*. Akademie Verlag, Berlin, Germany, 1996. ISBN 3-05-501737-4. ISSN 0138-3019. LCCN QA76.95 .I575 1995.
- [Aiy45] S. Janardana Aiyer. On the arithmetic and the geometric means from a type III population. *The Mathematics Student*, 13:11–15, 1945. CODEN MTHSBH. ISSN 0025-5742.
- [AK93] E. Adams and U. Kulisch, editors. *Scientific computing with automatic result verification*, volume 189 of *Mathematics in science and engineering*. Academic Press, New York, NY, USA, 1993. ISBN 0-12-044210-8. LCCN QA76.S368 1993.
- [Ake63] Bengt Akerberg. Classroom notes: A proof of the arithmetic-geometric mean inequality. *American Mathematical Monthly*, 70

- (9):997–998, November 1963. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [Alb12] Hussien Albadawi. Singular value and arithmetic–geometric mean inequalities for operators. *Annals of Functional Analysis*, 3(1):10–18, 2012. ISSN 2008-8752.
- [Ald08] J. M. Aldaz. A refinement of the inequality between arithmetic and geometric means. *Journal of Mathematical Inequalities*, 2(4):473–477, 2008. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Ald09] J. M. Aldaz. Self-improvement of the inequality between arithmetic and geometric means. *Journal of Mathematical Inequalities*, 3(2):213–216, 2009. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Ald10] J. M. Aldaz. Concentration of the ratio between the geometric and arithmetic means. *Journal of Theoretical Probability*, 23(2):498–508, 2010. CODEN JT-PREO. ISSN 0894-9840 (print), 1572-9230 (electronic).
- [Ald11] J. M. Aldaz. Comparison of differences between arithmetic and geometric means. *Tamkang Journal of Mathematics*, 42(4):453–462, 2011. ISSN 0049-2930 (print), 2073-9826 (electronic).
- [Ald12] J. M. Aldaz. Sharp bounds for the difference between the arithmetic and geometric means. *Arch. Math. (Basel)*, 99(4):393–399, 2012. ISSN 0003-889x (print), 1420-8938 (electronic).
- [Alm78] Gert Almkvist. Aritmetisk–geometrisk medelvärde och ellipsens båglängd. (Swedish) [The arithmetic–geometric mean and the arc length of the ellipse]. *Nordisk Matematisk Tidskrift*, 25–26(3–4):121–130, 208, 1978. ISSN 0029-1412, 0801-3500. URL <http://www.jstor.org/stable/24525291>.
- [Als00] Claudi Alsina. Proof without words: The arithmetic–geometric mean inequality for three positive numbers. *Mathematics Magazine*, 73(2):97, 2000. CODEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor.org/stable/2691079?origin=pubexport>.
- [Alz87] Horst Alzer. Über die Ungleichung zwischen dem geometrischen und dem arithmetischen Mittel. (German) [On the inequality between the geometric and the arithmetic mean]. *Quaestiones Math.*, 10(4):351–356, 1987. ISSN 0379-9468.

- [Alz88] **Alzer:1988:UGA**
 Horst Alzer. Ungleichungen für geometrische und arithmetische Mittelwerte. (German) [Inequalities for geometric and arithmetic averages]. *Nederl. Akad. Wetensch. Indag. Math.*, 50(4):365–374, 1988. ISSN 0019-3577, 0023-3358.
- [Alz89] **Alzer:1989:RAM**
 Horst Alzer. A refinement of the arithmetic mean–geometric mean inequality. *Rad. Mat.*, 5(2):231–235, 1989. ISSN 0352-6100.
- [Alz90a] **Alzer:1990:WAG**
 H. Alzer. On weighted arithmetic, geometric and harmonic mean values. *Glas. Mat. Ser. III*, 25(45)(2):279–285, 1990. ISSN 0017-095X.
- [Alz90b] **Alzer:1990:CAM**
 Horst Alzer. A converse of the arithmetic mean–geometric mean inequality. *Rev. Un. Mat. Argentina*, 36:146–151 (1992), 1990. ISSN 0041-6932.
- [Alz90c] **Alzer:1990:IAG**
 Horst Alzer. Inequalities for arithmetic, geometric and harmonic means. *Bulletin of the London Mathematical Society*, 22(4):362–366, 1990. CODEN LMSBBT. ISSN 0024-6093 (print), 1469-2120 (electronic).
- [Alz90d] **Alzer:1990:LBD**
 Horst Alzer. A lower bound for the difference between the arithmetic and geometric means. *Nieuw Archief voor Wiskunde. Vierde Serie*, 8(2):195–197, 1990. CODEN NAWIA7. ISSN 0028-9825.
- [Alz90e] **Alzer:1990:SAM**
 Horst Alzer. Sharpenings of the arithmetic mean–geometric mean inequality. *Congressus Numerantium*, 75:63–66, 1990. ISSN 0384-9864.
- [Alz90f] **Alzer:1990:GGA**
 Horst Alzer. Über gewichtete geometrische und arithmetische Mittelwerte. (German) [On over-weighted geometric and arithmetic mean values]. *Anz. Österreich. Akad. Wiss. Math.-Natur. Kl.*, 127:33–36 (1991), 1990.
- [Alz91] **Alzer:1991:NAM**
 Horst Alzer. A note on the arithmetic mean–geometric mean inequality. *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.*, 34:11–13 (1992), 1991. ISSN 0524-9007.
- [Alz92a] **Alzer:1992:IPA**
 Horst Alzer. Inequalities for pseudo-arithmetic and geometric means. In *General inequalities, 6 (Oberwolfach, 1990)*, volume 103 of *Internat. Ser. Numer. Math.*, pages 5–16. Birkhäuser, Basel, 1992.
- [Alz92b] **Alzer:1992:SAM**
 Horst Alzer. A sharpening of the arithmetic mean–geometric mean inequality. *Utilitas Mathematica*, 41:249–252, 1992. CODEN UT-MADA. ISSN 0315-3681.

- [Alz94] **Alzer:1994:NSA** Horst Alzer. Note on special arithmetic and geometric means. *Comment. Math. Univ. Carolin.*, 35(2):409–412, 1994. ISSN 0010-2628 (print), 1213-7243 (electronic).
- [Alz95] **Alzer:1995:DII** Horst Alzer. On discrete inequalities involving arithmetic, geometric, and harmonic means. *Rend. Istit. Mat. Univ. Trieste*, 27(1-2): 1–9 (1996), 1995. ISSN 0049-4704.
- [Alz96] **Alzer:1996:PAM** Horst Alzer. A proof of the arithmetic mean–geometric mean inequality. *American Mathematical Monthly*, 103(7):585, August/September 1996. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [Alz97] **Alzer:1997:NRA** Horst Alzer. A new refinement of the arithmetic mean–geometric mean inequality. *Rocky Mountain Journal of Mathematics*, 27(3): 663–667, 1997. CODEN RMJMAE. ISSN 0035-7596 (print), 1945-3795 (electronic).
- [Alz99] **Alzer:1999:SIA** Horst Alzer. Some inequalities for arithmetic and geometric means. *Proceedings of the Royal Society of Edinburgh. Section A, Mathematical and Physical Sciences*, 129(2):221–228, 1999. CODEN PEAMDU. ISSN 0308-2105 (print), 1473-7124 (electronic).
- [AMPV97] **Alic:1997:AGH** M. Alić, B. Mond, J. Pečarić, and V. Volenec. The arithmetic–geometric–harmonic-mean and related matrix inequalities. *Linear Algebra and its Applications*, 264:55–62, 1997. CODEN LAA-PAW. ISSN 0024-3795 (print), 1873-1856 (electronic).
- [And83] **Ando:1983:AGH** T. Ando. On the arithmetic–geometric–harmonic-mean inequalities for positive definite matrices. *Linear Algebra and its Applications*, 52/53:31–37, 1983. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).
- [AR02] **Alzer:2002:AMG** Horst Alzer and Stephan Ruscheweyh. The arithmetic mean–geometric mean inequality for complex numbers. *Analysis (Munich)*, 22(3):277–283, 2002. ISSN 0174-4747.
- [Arn11a] **Arndt:2010:AEI** Jörg Arndt. The AGM, elliptic integrals, and algorithms for computing π . In *Matters Computational* [Arn11b], pages 599–621. ISBN 3-642-14764-X, 3-642-14763-1. LCCN QA9.58 .A76 2011.
- [Arn11b] **Arndt:2011:MC** Jörg Arndt. *Matters Computational*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc.,

2011. ISBN 3-642-14764-X, 3-642-14763-1. xiv + 966 pp. LCCN QA9.58 .A76 2011.

Askey:1988:BRP

- [Ask88] Richard Askey. Reviews: *Pi and the AGM*, by Jonathan M. Borwein and Peter B. Borwein. *American Mathematical Monthly*, 95(9):895–897, November 1988. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL <http://www.jstor.org/stable/2322925>. [Baj78]

Audenaert:2015:IBA

- [Aud15] Koenraad M. R. Audenaert. Interpolating between the arithmetic-geometric mean and Cauchy–Schwarz matrix norm inequalities. *Operators and Matrices*, 9(2):475–479, 2015. ISSN 1846-3886 (print), 1848-9974 (electronic). [BB83]

Ba:1997:SMA

- [Ba97] Dalahu Ba. Some mixed arithmetic–geometric mean inequalities containing parameters and their applications. *Neimenggu Daxue Xuebao Ziran Kexue*, 28(6):731–734, 1997. CODEN NDZKEJ. ISSN 1000-1638. [BB84a]

Bailey:2016:CDD

- [Bai16] David H. Bailey. The computation of π to 29,360,000 decimal digits using Borweins’ quartically convergent algorithm (1988). In Bailey and Borwein [BB16a], pages 109–124. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>. [Bajpai:1978:SAG]

Bajpai:1978:SAG

S. K. Bajpai. Special arithmetic and geometric means preserve Φ -like univalence. *Rev. Colombiana Mat.*, 12(3-4):83–90, 1978. ISSN 0034-7426.

Bakherad:2016:RRG

Mojtaba Bakherad. Refinements of a reversed AM–GM operator inequality. *Linear Multilinear Algebra*, 64(9):1687–1695, 2016. CODEN LNMLAZ. ISSN 0308-1087 (print), 1563-5139 (electronic).

Borwein:1983:GAG

D. Borwein and P. B. Borwein. A generalized arithmetic–geometric mean. *SIAM Review*, 25(3):401, 1983. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Borwein:1984:GAG

D. Borwein and P. B. Borwein. A generalized arithmetic–geometric mean. *SIAM Review*, 26(3):433, July 1984. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Borwein:1984:AGM

J. M. Borwein and P. B. Borwein. The arithmetic–geometric mean and fast computation of elementary functions. *SIAM Review*, 26(3):351–366, July 1984. CODEN SIREAD. ISSN 0036-1445

(print), 1095-7200 (electronic).
 URL <http://www.jstor.org/stable/2031275>.

Borwein:1984:RCC

- [BB84c] J. M. Borwein and P. B. Borwein. Reduced complexity calculation of log. Technical Report DALTR 84-01, Department of Mathematics, Dalhousie University, Halifax, NS, Canada, January 1984. 17 pp.

Borwein:1986:MQC

- [BB86] J. M. Borwein and P. B. Borwein. More quadratically converging algorithms for π . *Mathematics of Computation*, 46(173): 247–253, January 1986. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://docserver.carma.newcastle.edu.au/1614/>.

Borwein:1987:PAS

- [BB87] Jonathan M. Borwein and Peter B. Borwein. *Pi and the AGM: a Study in Analytic Number Theory and Computational Complexity*. Canadian Mathematical Society series of monographs and advanced texts = Monographies et études de la Société mathématique du Canada. Wiley, New York, NY, USA, 1987. ISBN 0-471-83138-7, 0-471-31515-X (paperback). xv + 414 pp. LCCN QA241 .B774 1987.

Borwein:1988:CCJ

- [BB88] J. M. Borwein and P. B. Borwein. A cubic counterpart of Jacobi's identity and the AGM. Re-

port, Department of Mathematics, Statistics and Computing Science, Dalhousie University, Halifax, NS B3H 3J5, Canada, December 31, 1988. 20 pp.

Borwein:1989:MI

- [BB89] J. M. Borwein and P. B. Borwein. On the mean iteration $(a, b) \leftarrow \left(\frac{a+3b}{4}, \frac{\sqrt{ab+b}}{2}\right)$. *Mathematics of Computation*, 53(187): 311–326, July 1989. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://docserver.carma.newcastle.edu.au/1586/>.

Borwein:1991:CCJ

- [BB91] J. M. Borwein and P. B. Borwein. A cubic counterpart of Jacobi's identity and the AGM. *Transactions of the American Mathematical Society*, 323(2):691–701, February 1991. CODEN TAMTAM. ISSN 0002-9947 (print), 1088-6850 (electronic). URL <http://docserver.carma.newcastle.edu.au/1578/>; <http://www.jstor.org/stable/2001551>.

Borwein:1993:ICM

- [BB93] Jonathan M. Borwein and Peter B. Borwein. Inequalities for compound mean iterations with logarithmic asymptotes. *Journal of Mathematical Analysis and Applications*, 177(2):572–582, 1993. CODEN JMANAK. ISSN 0022-247X (print), 1096-0813 (electronic). URL <http://docserver.carma.newcastle.edu.au/1553/>; <http://www>.

- sciencedirect.com/science/article/pii/S0022247X83712783. ■
- [BB97] J. M. Borwein and P. B. Borwein. The arithmetic-geometric mean and fast computation of elementary functions. In Berggren et al. [BBB97], pages 537–552. ISBN 0-387-94924-0. LCCN QA484 .P5 1997. URL http://link.springer.com/chapter/10.1007/978-1-4757-2736-4_56.
- [BB98] Jonathan M. Borwein and Peter B. Borwein. *Pi and the AGM: A study in analytic number theory and computational complexity*. Canadian Mathematical Society Series of Monographs and Advanced Texts, 4. Wiley, New York, NY, USA, 1998. ISBN 0-471-31515-X. xvi + 414 pp. Reprint of the 1987 original.
- [BB00] J. M. Borwein and P. B. Borwein. The arithmetic-geometric mean and fast computation of elementary functions. In *Pi: a source book* [BBB00], pages 537–552. ISBN 0-387-98946-3 (hardcover). LCCN QA484 .P5 2000. URL http://link.springer.com/chapter/10.1007/978-1-4757-3240-5_56.
- [BB04] J. M. Borwein and P. B. Borwein. The arithmetic-geometric mean and fast computation of elementary functions. In Berggren et al. [BBB04], pages 537–552. ISBN 0-387-20571-3. LCCN QA484 .P5 2004. URL http://link.springer.com/chapter/10.1007/978-1-4757-4217-6_56.
- [BB16a] David H. Bailey and Jonathan M. Borwein, editors. *Pi: the next generation: a sourcebook on the recent history of Pi and its computation*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2016. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). xiv + 507 pp. LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.
- [BB16b] J. M. Borwein and P. B. Borwein. The arithmetic-geometric mean and fast computation of elementary functions (1984). In Bailey and Borwein [BB16a], pages 79–96. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL http://link.springer.com/chapter/10.1007/978-3-319-32377-0_4.
- [BBB97] J. L. Berggren, Jonathan M. Borwein, and Peter B. Borwein, editors. *Pi, a source book*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1997. ISBN 0-387-94924-0. xix + 716 pp. LCCN QA484 .P5 1997.

- Berggren:2000:PSB**
- [BBB00] Lennart Berggren, Jonathan Borwein, and Peter Borwein. *Pi: a source book*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., second edition, 2000. ISBN 0-387-98946-3 (hardcover). xx + 736 pp. LCCN QA484 .P5 2000.
- Berggren:2004:PSB**
- [BBB04] Lennart Berggren, Jonathan Borwein, and Peter Borwein, editors. *Pi, a source book*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., third edition, 2004. ISBN 0-387-20571-3. xix + 797 pp. LCCN QA484 .P5 2004. URL <http://www.loc.gov/catdir/enhancements/fy0818/2003066023-d.html>; <http://www.loc.gov/catdir/enhancements/fy0818/2003066023-t.html>.
- Borwein:2016:RME**
- [BBB16] Jonathan M. Borwein, Peter B. Borwein, and David H. Bailey. Ramanujan, modular equations, and approximations to pi or how to compute one billion digits of pi (1989). In Bailey and Borwein [BB16a], pages 175–195. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.
- Bailey:2020:AVC**
- [BBB+20] David H. Bailey, Naomi Simone Borwein, Richard P. Brent, Regina S. Burachik, Judy anne Heather Osborn, Brailey Sims, and Qiji J. Zhu, editors. *From Analysis to Visualization: A Celebration of the Life and Legacy of Jonathan M. Borwein, Callaghan, Australia, September 2017*, volume 313 of *Springer Proceedings in Mathematics & Statistics*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2020. ISBN 3-030-36567-0 (print), 3-030-36568-9 (e-book). ISSN 2194-1009 (print), 2194-1017 (electronic). LCCN ????.
- Borwein:1993:HAA**
- [BBG93] J. Borwein, P. Borwein, and F. Garvan. Hypergeometric analogues of the arithmetic–geometric mean iteration. *Constructive Approximation*, 9(4): 509–523, 1993. ISSN 0176-4276 (print), 1432-0940 (electronic). URL <http://docserver.carma.newcastle.edu.au/1556/>; <http://link.springer.com/article/10.1007/BF01204654>.
- Bailey:2016:CPI**
- [BBMW16] David H. Bailey, Jonathan M. Borwein, Andrew Mattingly, and Glenn Wightwick. The computation of previously inaccessible digits of π . In Bailey and Borwein [BB16a], pages 327–339. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.

Bailey:2016:RCV

- [BBP16] David H. Bailey, Peter B. Borwein, and Simon Plouffe. On the rapid computation of various polylogarithmic constants (1997). In Bailey and Borwein [BB16a], pages 219–231. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.

Borwein:2004:RAFb

- [BC04] J. Borwein and R. Crandall. On the Ramanujan AGM fraction. II. The complex-parameter case. *Experimental Mathematics*, 13(3):287–295, 2004. CODEN 2004. ISSN 1058-6458 (print), 1944-950X (electronic). URL <http://docserver.carma.newcastle.edu.au/29/>; <http://projecteuclid.org/euclid.em/1103749837>.

Borwein:2004:RAFa

- [BCF04] J. Borwein, R. Crandall, and G. Fee. On the Ramanujan AGM fraction. I. The real-parameter case. *Experimental Mathematics*, 13(3):275–285, 2004. CODEN 2004. ISSN 1058-6458 (print), 1944-950X (electronic). URL <http://docserver.carma.newcastle.edu.au/27/>; <http://projecteuclid.org/euclid.em/1103749836>.

Bhatia:1993:MMF

- [BD93] Rajendra Bhatia and Chandler Davis. More matrix forms of

the arithmetic–geometric mean inequality. *SIAM Journal on Matrix Analysis and Applications*, 14(1):132–136, January 1993. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).

Braden:1992:IAL

- [BDS92] B. Braden, B. Danloy, and F. Schmidt. Inequality of the AGM and the logarithmic mean. *SIAM Review*, 34(4):653–654, 1992. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Buric:2015:AEA

- [BE15] Tomislav Burić and Neven Elezović. Asymptotic expansion of the arithmetic–geometric mean and related inequalities. *Journal of Mathematical Inequalities*, 9(4):1181–1190, 2015. ISSN 1846-579x (print), 1848-9575 (electronic).

Buric:2017:CAA

- [BE17] Tomislav Burić and Neven Elezović. Computation and analysis of the asymptotic expansions of the compound means. *Applied Mathematics and Computation*, 303(??):48–54, 2017. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0096300317300334>.

Bellman:1956:AGM

- [Bel56] Richard Bellman. On the arithmetic–geometric mean inequality. *The Mathematics Stu-*

- dent*, 24:233–234 (1957), 1956. CODEN MTHSBH. ISSN 0025-5742.
- [Bel14] Fabio Bellissima. Arithmetic and harmonic means in music theory. *Bollettino di Storia delle Scienze Matematiche*, 34(2): 201–244, 2014. ISSN 0392-4432 (print), 1724-1650 (electronic).
- [Ben93] M. Bencze. A new proof of the arithmetic–geometric mean inequality. *Octagon Mathematical Magazine*, 1(1):9–10, 1993. ISSN 1222-5657 (print), 2248-1893 (electronic).
- [Ben94] M. Bencze. A new proof of the weighted arithmetic–geometric mean inequality. *Octagon Mathematical Magazine*, 2(1):17–18, 1994. ISSN 1222-5657 (print), 2248-1893 (electronic).
- [Ben95] Mihály Bencze. A new proof of the arithmetic–geometric pondered mean inequality. *Octagon Mathematical Magazine*, 3(1):16–17, 1995. ISSN 1222-5657 (print), 2248-1893 (electronic).
- [Ben98] Mihály Bencze. A new proof of the arithmetic–geometric mean inequality. *Octagon Mathematical Magazine*, 6(1):49–50, 1998. ISSN 1222-5657 (print), 2248-1893 (electronic).
- [Ber88] Bruce C. Berndt. Book review: Jonathan M. Borwein and Peter B. Borwein, *Pi and the AGM — A Study of Analytic Number Theory and Computational Complexity*, Canadian Mathematical Society Series of Monographs and Advanced Texts, Wiley, New York, 1987, xv + 414 pp., 24 cm. Price \$49.95. *Mathematics of Computation*, 50(181): 352–354, January 1988. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://www.jstor.org/stable/2007942>.
- [Bha06] Rajendra Bhatia. Interpolating the arithmetic–geometric mean inequality and its operator version. *Linear Algebra and its Applications*, 413(2–3): 355–363, March 1, 2006. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379505001382>. Special Issue on the 11th Conference of the International Linear Algebra Society, Coimbra, 200411th Conference of the International Linear Algebra Society, Coimbra, 2004.
- [BI11] Dario Andrea Bini and Bruno Iannazzo. A note on computing matrix geometric means. *Advances in Computational Mathematics*, 35(2–4):175–192, Novem-

ber 2011. CODEN ACMHEX. ISSN 1019-7168 (print), 1572-9044 (electronic). URL <http://link.springer.com/article/10.1007/s10444-010-9165-0>.

Bhatia:2000:NMA

[BK00]

Rajendra Bhatia and Fuad Kittaneh. Notes on matrix arithmetic-geometric mean inequalities. *Linear Algebra and its Applications*, 308(1-3):203-211, March 15, 2000. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.elsevier.nl/gej-ng/10/30/19/125/25/36/abstract.html>; <http://www.elsevier.nl/gej-ng/10/30/19/125/25/36/article.pdf>;

<http://www.sciencedirect.com/science/article/pii/S0024379500000482>.

■

Bhatia:2008:MAG

[BK08]

Rajendra Bhatia and Fuad Kittaneh. The matrix arithmetic-geometric mean inequality revisited. *Linear Algebra and its Applications*, 428(8-9):2177-2191, April 15, 2008. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379507005381>.

Borwein:1997:AGMb

[BLM97]

Jonathan A. Borwein, Petr Lišoněk, and John A. Macdonald. Arithmetic-geometric means revisited. *Maple Technical Newsletter*, 4(1):20-27, Winter 1997. ISSN 1061-5733. URL <http://docserver.carma.newcastle.edu.au/4/>. Special issue on Maple in the mathematical sciences.

Bost:1988:MAG

[BM88]

Jean-Benoît Bost and Jean-François Mestre. Moyenne arithmético-géométrique et périodes des courbes de genre 1 et 2. (French) [Arithmetic-geometric mean and periods of the curves of genus 1 and 2]. *Gazette des Mathématiciens*, 38(38):36-64, 1988. ISSN 0224-8999.

Boldo:1999:CRE

[Bol99]

Sylvie Boldo. Calcul rapide et exact de fonctions élémentaires en précision arbitraire par la moyenne arithmético-géométrique. (French) [rapid and exact computation of elementary functions in arbitrary precision by the arithmetic-geometric mean]. Report, INRIA, Projet Spaces, LORIA, Campus Scientifique, B.P. 239, 54506 Vandoeuvre-lès-Nancy Cedex, France, 1999. 29 pp. URL <http://perso.ens-lyon.fr/sylvie.boldo/doc/mpfr.ps>. Under the direction of Paul Zimmermann.

Borwein:1987:AGM

[Bor87]

Jonathan M. Borwein. The arithmetic-geometric mean of Gauss and Legendre: An excursion. Canadian Mathematical Society, Coxeter-James Lecture, Vancouver, BC, Canada., December 15, 1987.

- [Bor88a] Jonathan M. Borwein. The arithmetic–geometric mean of Gauss and Legendre: An excursion. Distinguished Lecturer Series, University of Delaware, Newark, DE, USA., May 13, 1988.
- [Bor88b] Jonathan M. Borwein. The arithmetic–geometric mean of Gauss and Legendre: An excursion. Colloquium, University of Newcastle, Newcastle, NSW, Australia., June 14, 1988.
- [Bor88c] Jonathan M. Borwein. The arithmetic–geometric mean of Gauss and Legendre: An excursion. Colloquium, University of New England, Armidale, NSW, Australia., June 27, 1988.
- [Bor88d] Jonathan M. Borwein. The arithmetic–geometric mean of Gauss and Legendre: An excursion. Colloquium, Auckland University, Auckland, New Zealand., July 27, 1988.
- [Bor88e] Jonathan M. Borwein. The arithmetic–geometric mean of Gauss and Legendre: An excursion. Colloquium, Macquarie University, Sydney, NSW, Australia., September 12, 1988.
- [Bor88f] Jonathan M. Borwein. Borchartd’s four-dimensional arithmetic–geometric mean. Seminar, Macquarie University, Sydney, NSW, Australia., September 14, 1988.
- [Bor89] Jonathan M. Borwein. Pi and the arithmetic–geometric mean. Colloquium, Rutgers University, New Brunswick, NJ, USA., April 14, 1989.
- [Bor95] Jonathan M. Borwein. The cubic AGM discovered. Specialist Colloquium Lecture, University of Utrecht, Utrecht, The Netherlands., October 26, 1995.
- [Bor03a] Jonathan M. Borwein. The AGM continued fraction of Ramanujan. CECM Day 2003, Simon Fraser University, Burnaby, BC, Canada., July 31, 2003.
- [Bor03b] Jonathan M. Borwein. The AGM continued fraction of Ramanujan. First Plenary Lecture, First Congress of the Mathematical Society of South East Europe (MASSEÉ), Borovets, Bulgaria., September 16, 2003.
- [Bor03c] Jonathan M. Borwein. The AGM continued fraction of Ramanujan. Colloquium, Reed College, OR, USA., October 14, 2003.

- [Bor04a] **Borwein:2004:RACc** Jonathan M. Borwein. Ramanujan's AGM continued fractions and dynamics. Workshop on Analytic and Computational Number Theory, August 23–27, Dalhousie University, Halifax, NS, Canada., August 27, 2004.
- [Bor04b] **Borwein:2004:RACb** Jonathan M. Borwein. Ramanujan's AGM continued fractions and dynamics: the complex case. Analysis Seminar, Mathematics Department, Dalhousie University, Halifax, NS, Canada., March 10, 2004.
- [Bor04c] **Borwein:2004:RACa** Jonathan M. Borwein. Ramanujan's AGM continued fractions and dynamics: the real case. Colloquium, Mathematics Department, Dalhousie University, Halifax, NS, Canada., March 4, 2004.
- [BR07] **Barnard:2007:IHA** Roger W. Barnard and Kendall C. Richards. On inequalities for hypergeometric analogues of the arithmetic–geometric mean. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 8(3):Article 65, 5, 2007. ISSN 1443-5756.
- [Bra01] **Bracken:2001:AGM** Paul Bracken. An arithmetic–geometric mean inequality. *Expositiones Mathematicae*, 19(3):273–279, 2001. ISSN 0723-0869 (print), 1878-0792 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0723086901800062>.
- [Bre76a] **Brent:1976:FMP** Richard P. Brent. Fast multiple-precision evaluation of elementary functions. *Journal of the ACM*, 23(2):242–251, April 1976. CODEN JACOA. ISSN 0004-5411 (print), 1557-735X (electronic).
- [Bre76b] **Brent:1976:MPZ** Richard P. Brent. Multiple-precision zero-finding methods and the complexity of elementary function evaluation. In Traub [Tra76], pages 151–176. ISBN 0-12-697560-4. LCCN QA297 .S915 1975.
- [Bre06] **Brent:2006:FAH** Richard P. Brent. Fast algorithms for high-precision computation of elementary functions. Report ??, Australian National University, Canberra, ACT 0200, Australia, July 12, 2006. 61 pp. URL http://rnc7.loria.fr/brent_invited.pdf; <https://maths-people.anu.edu.au/~brent/pd/RNC7t.pdf>.
- [Bre10a] **Brent:2010:MPZ** Richard P. Brent. Multiple-precision zero-finding methods and the complexity of elementary function evaluation. Reprint of [Bre76b] with a postscript describing more recent developments. See also [Sal76], April 20, 2010. URL <http://arxiv.org/abs/1004.3412v2>; <http://>

- wwwmaths.anu.edu.au/~brent/
pub/pub028.html.
- [Bre10b] Richard P. Brent. Unrestricted algorithms for elementary and special functions. *arXiv.org*, ??(??): 1–13, April 2010. URL <https://arxiv.org/abs/1004.3621>.
- [Bre16] Richard P. Brent. Fast multiple-precision evaluation of elementary functions (1976). In Bailey and Borwein [BB16a], pages 9–20. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.mylibrary.com?id=941862>.
- [Bre17] Richard P. Brent. Jonathan Borwein, pi and the AGM. Talk slides, Australian National University and CARMA, University of Newcastle, Canberra, ACT and Newcastle, NSW, Australia, September 26, 2017. 76 pp. URL https://carma.newcastle.edu.au/meetings/jbcc/abstracts/pdf/JBCC-Richard_Brent.pdf.
- [Bre20] Richard P. Brent. The Borwein brothers, pi and the AGM. In Bailey et al. [BBB⁺20], pages 323–347. ISBN 3-030-36567-0 (print), 3-030-36568-9 (e-book). ISSN 2194-1009 (print), 2194-1017 (electronic). LCCN ????
- [Bro96] M. Broy, editor. *Deductive program design: Proceedings of the NATO Advanced Study Institute on Deductive Program Design, held in Marktoberdorf, Germany, July 26–August 7, 1994*, volume 152 of *NATO ASI series. Series F, Computer and systems sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1996. ISBN 3-540-60947-4 (hardcover). LCCN QA76.9.D5 D38 1996. URL <http://www.loc.gov/catdir/enhancements/fy0812/96010788-d.html>.
- [BRS13] Árpád Baricz, Kondooru Raghavendar, and Anbhu Swaminathan. Turán type inequalities for q -hypergeometric functions. *Journal of Approximation Theory*, 168(?):69–79, 2013. CODEN JAXTAZ. ISSN 0021-9045 (print), 1096-0430 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0021904513000129>.
- [BRT18] Yves Bertot, Laurence Rideau, and Laurent Théry. Distant decimals of π : Formal proofs of some algorithms computing them and guarantees of exact computation. *Journal of Automated Reasoning*, 61(1–4):33–71, June 2018. CODEN JAREEW. ISSN 0168-7433 (print), 1573-0670 (electronic). URL <http://link.springer>.

- com/article/10.1007/s10817-017-9444-2.
- [BS93a] Mihaly Bencze and Norman Schaumberger. A new proof of the arithmetic–geometric mean inequality. *Mathematics Magazine*, 66(4):245, 1993. CODEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor.org/stable/2690740?origin=pubexport>.
- [BS93b] Shaun Bullett and Jaroslav Stark. Renormalizing the simple pendulum. *SIAM Review*, 35(4):631–640, December 1993. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).
- [BS12] Carl Barratt and Ramesh Sharma. 96.16 An inductive proof of the condition for the AM–GM equality. *The Mathematical Gazette*, 96(535):131–133, March 2012. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).
- [BT11] M. Bayat and H. Teimoori. Arithmetic–Geometric Mean determinantal identity. *Linear Algebra and its Applications*, 435(11):2936–2941, December 1, 2011. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S002437951100440X>.
- [Bul67] P. S. Bullen. Some more inequalities involving the arithmetic and geometric means. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.*, 181–196:61–66, 1967. ISSN 0522-8441.
- [Bul91] Shaun Bullett. Dynamics of the arithmetic–geometric mean. *Topology*, 30(2):171–190, 1991. CODEN TPLGAF. ISSN 0040-9383 (print), 1879-3215 (electronic). URL <http://www.sciencedirect.com/science/article/pii/004093839190004N>.
- [Bul04] P. S. Bullen. The geometric–arithmetic mean inequality. *J. Indones. Math. Soc.*, 10(2):99–102, 2004. ISSN 0854-1388.
- [Bur87] Frank Burk. Notes: The geometric, logarithmic, and arithmetic mean inequality. *American Mathematical Monthly*, 94(6):527–528, June/July 1987. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [Bur16] Tomislav Burić. Asymptotic analysis of the iterative power means. *Journal of Mathematical Analysis and Applications*, 433(1):701–705, 2016. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www>.

- sciencedirect.com/science/article/pii/S0022247X15007477. Butter:1936:CTA [Cas99]
- [But36] Franklin A. Butter, Jr. *A Contribution to the Theory of the Arithmetic-Geometric Mean*. Thesis (Ph.D.), Stanford University, Stanford, CA, USA, 1936. ??? pp. URL <http://search.proquest.com/docview/301788817>. Carlson:1970:IMA
- [Car70] B. C. Carlson. An inequality of mixed arithmetic and geometric means. *SIAM Review*, 12(2):287–288, ??? 1970. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic). Carlson:1971:AIA
- [Car71] Bille Chandler Carlson. Algorithms involving arithmetic and geometric means. *American Mathematical Monthly*, 78(5):496–505, May 1971. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL <http://www.jstor.org/stable/2317754>. Carls:2011:GTC
- [Car11] Robert Carls. Galois theory of the canonical theta structure. *International Journal of Number Theory*, 7(1):173–202, February 2011. ISSN 1793-0421 (print), 1793-7310 (electronic). URL <https://www.worldscientific.com/doi/10.1142/S1793042111003934>. Cass:1999:BRP
- Peter Cass. Book review: *Pi and the AGM. The Mathematical Gazette*, 83(497):334–335, July 1999. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL <http://www.jstor.org/stable/3619084>. Cardenas-Barron:2010:EMD
- [CB10a] Leopoldo Eduardo Cárdenas-Barrón. An easy method to derive EOQ and EPQ inventory models with backorders. *Computers and Mathematics with Applications*, 59(2):948–952, 2010. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0898122109006774>. Cardenas-Barron:2010:SMC
- [CB10b] Leopoldo Eduardo Cárdenas-Barrón. A simple method to compute economic order quantities: Some observations. *Applied Mathematical Modelling*, 34(6):1684–1688, 2010. CODEN AMMODL. ISSN 0307-904x (print), 1872-8480 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0307904X09002777>. Casquilho:2011:MDA
- [CB11] Miguel Casquilho and Jorge Buescu. A minimum distance: arithmetic and harmonic means in a geometric dispute. *International Journal of Mathematical Education in Science and Tech-*

- nology*, 42(3):399–405, 2011. CODEN IJMEBM. ISSN 0020-739x (print), 1464-5211 (electronic).
- [CE09] Gi-Sang Cheon and Andrew W. Eckford. A relationship between subpermanents and the arithmetic–geometric mean inequality. *Linear Algebra and its Applications*, 430(1):114–120, January 1, 2009. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379508003406>.
Cheon:2009:RBS [Cha02]
- [CF78] D. I. Cartwright and M. J. Field. A refinement of the arithmetic mean–geometric mean inequality. *Proceedings of the American Mathematical Society*, 71(1):36–38, 1978. CODEN PAM-YAR. ISSN 0002-9939 (print), 1088-6826 (electronic).
Cartwright:1978:RAM
- [CGM95] G. (Gérard) Cohen, Marc Giusti, and Teo Mora, editors. *Applied algebra, algebraic algorithms, and error-correcting codes: 11th international symposium, AAEECC-11, Paris, France, July 1995: proceedings*, volume 948 of *Lecture notes in computer science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1995. ISBN 3-540-60114-7 (softcover). LCCN QA268 .A35 1995. URL <http://www.loc.gov/catdir/enhancements/fy0815/95021560-d.html>.
Charzynski:2002:IBA [Cha02]
- [Cha14] Zygmunt Karol Charzyński. On an inequality between an arithmetic mean and a geometric mean. *Zeszyty Nauk. Politech. Rzeszowskiej Mat.*, 26:165–171, 2002. ISSN 1232-7867.
Chang:2014:API [Cha14]
- [Cho76] Hung-Chi Chang. An analysis of production-inventory models with deteriorating items in a two-echelon supply chain. *Applied Mathematical Modelling*, 38(3):1187–1191, 2014. CODEN AMMODL. ISSN 0307-904x (print), 1872-8480 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0307904X13004757>.
Chong:1976:AMG [Cho76]
- [Cho77] Kong Ming Chong. The arithmetic mean–geometric mean inequality: a new proof. *Mathematics Magazine*, 49(2):87–88, 1976. CODEN MAMGA8. ISSN 0011-801x.
Chong:1977:AMG [Cho77]
- [Chu90] Hao Zhi Chuan. Note on the inequality of the arithmetic and geometric means. *Pacific Journal of Mathematics*, 143(1):43–46, 1990. CODEN PJMAAI.
Chuan:1990:NIA [Chu90]

- ISSN 0030-8730 (print), 1945-5844 (electronic). URL <http://projecteuclid.org/euclid.pjm/1102646201>. [CMN71]
- [Chu12] Kun-Jen Chung. On the validity of the arithmetic-geometric mean method to locate the optimal solution in a supply chain system. *International Journal of Systems Science*, 43(8):1454–1463, 2012. CODEN IJSYA9. ISSN 0020-7721 (print), 1464-5319 (electronic).
- [CK13] O. Crişan and S. Kanas. Differential subordinations involving arithmetic and geometric means. *Applied Mathematics and Computation*, 222(??):123–131, October 1, 2013. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0096300313008011>.
- [CL92] Joel E. Cohen and Thomas M. Liggett. Random arithmetic-geometric means and random pi: observations and conjectures. *Stochastic Processes and Their Applications*, 41(2):261–271, 1992. CODEN STOPB7. ISSN 0304-4149 (print), 1879-209x (electronic). URL <http://www.sciencedirect.com/science/article/pii/030441499290126B>.
- [Carlson:1971:MAG] B. C. Carlson, R. K. Meany, and S. A. Nelson. Mixed arithmetic and geometric means. *Pacific Journal of Mathematics*, 38:343–349, 1971. CODEN PJMAAI. ISSN 0030-8730 (print), 1945-5844 (electronic). URL <http://projecteuclid.org/euclid.pjm/1102970046>.
- [Cohen:1987:AGM] Joel E. Cohen and Roger D. Nussbaum. Arithmetic-geometric means of positive matrices. *Mathematical Proceedings of the Cambridge Philosophical Society*, 101(2):209–219, 1987. CODEN MPCPCO. ISSN 0305-0041 (print), 1469-8064 (electronic).
- [Chang:2017:AGM] Chun-Tao Chang and Liang-Yuh Ouyang. An arithmetic-geometric mean inequality approach for determining the optimal production lot size with backlogging and imperfect rework process. *J. Appl. Anal. Comput.*, 7(1):224–235, 2017. ISSN 2156-907X.
- [Cox:1984:AGM] David A. Cox. The arithmetic-geometric mean of Gauss. *L'Enseignement Mathématique. Revue Internationale. 2e Série*, 30(3–4):275–330, 1984. CODEN ENMAAR. ISSN 0013-8584 (print), 2309-4672 (electronic).
- [Crisan:2013:DSI]
- [Cohen:1992:RAG]

- [Cox85] **Cox:1985:GAG** David A. Cox. Gauss and the arithmetic–geometric mean. *Notices of the American Mathematical Society*, 32(2):147–151, 1985. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).
- [Cox97] **Cox:1997:AGM** David A. Cox. The arithmetic–geometric mean of Gauss. In Berggren et al. [BBB97], pages 481–536. ISBN 0-387-94924-0. LCCN QA484 .P5 1997. URL http://link.springer.com/chapter/10.1007/978-1-4757-2736-4_55.
- [Cox00] **Cox:2000:AGM** David A. Cox. The arithmetic–geometric mean of Gauss. In *Pi: a source book* [BBB00], pages 481–536. ISBN 0-387-98946-3 (hardcover). LCCN QA484 .P5 2000. URL http://link.springer.com/chapter/10.1007/978-1-4757-3240-5_55.
- [Cox04] **Cox:2004:AGM** David A. Cox. The arithmetic–geometric mean of Gauss. In Berggren et al. [BBB04], pages 481–536. ISBN 0-387-20571-3. LCCN QA484 .P5 2004. URL http://link.springer.com/chapter/10.1007/978-1-4757-4217-6_55.
- [Cox16] **Cox:2016:AGM** David A. Cox. The arithmetic–geometric mean of Gauss (1984). In Bailey and Borwein [BB16a], pages 21–78. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.mylibrary.com?id=941862>.
- [CQWZ15] **Chu:2015:OBF** Yu-Ming Chu, Wei-Mao Qian, Li-Min Wu, and Xiao-Hui Zhang. Optimal bounds for the first and second Seiffert means in terms of geometric, arithmetic and contra-harmonic means. *Journal of Inequalities and Applications*, pages 44:1–44:9, 2015. ISSN 1029-242X.
- [CR16] **Cardoso:2016:MAG** João R. Cardoso and Rui Ralha. Matrix arithmetic–geometric mean and the computation of the logarithm. *SIAM Journal on Matrix Analysis and Applications*, 37(2):719–743, 2016. CODEN SJMAEL. ISSN 0895-4798 (print), 1095-7162 (electronic).
- [CS08] **Carvalhaes:2008:APS** Claudio G. Carvalhaes and Patrick Suppes. Approximations for the period of the simple pendulum based on the arithmetic–geometric mean. *American Journal of Physics*, 76(12):1150–1154, December 2008. CODEN AJPIAS. ISSN 0002-9505 (print), 1943-2909 (electronic). URL <http://aapt.scitation.org/doi/full/10.1119/1.2968864>. See comments in [Vil14] about prior work before 1966 by Al-

- bert Edward Ingham (1900–1967) producing both upper and lower bounds to approximations to the period of a pendulum.
- [CS17] **Choi:2017:IRA** [CV91] D. Choi and M. Sababheh. Inequalities related to the arithmetic, geometric and harmonic means. *Journal of Mathematical Inequalities*, 11(1):1–16, 2017. ISSN 1846-579x (print), 1848-9575 (electronic).
- [CT13a] **Cremona:2013:CAPb** [CW11] John E. Cremona and Thotsaphon Thongjunthug. The complex AGM, periods of elliptic curves over \mathbf{C} and complex elliptic logarithms. *Journal of Number Theory*, 133(8):2813–2841, August 2013. CODEN JNUTA9. ISSN 0022-314X (print), 1096-1658 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022314X13000735>.
- [CT13b] **Cremona:2013:CAPa** [CW13] John E. Cremona and Thotsaphon Thongjunthug. The complex AGM, periods of elliptic curves over and complex elliptic logarithms. *arXiv.org*, ??(??):1–32, February 20, 2013. URL <https://arxiv.org/pdf/1011.0914.pdf>.
- [Cus81] **Cusmariu:1981:MNP** [CWQ12] Adolf Cusmariu. Mathematical notes: a proof of the arithmetic mean–geometric mean inequality. *American Mathematical Monthly*, 88(3):192–194, March 1981. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Carlson:1991:IAL** B. C. Carlson and M. Vuorinen. Inequality of the AGM and the logarithmic mean. *SIAM Review*, 33(4):655, 1991. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).
- Chu:2011:OIB** Yu-Ming Chu and Miao-Kun Wang. Optimal inequalities between harmonic, geometric, logarithmic, and arithmetic–geometric means. *Journal of Applied Mathematics*, pages 618929:1–618929:9, 2011. ISSN 1110-757x (print), 1687-0042 (electronic).
- Chu:2012:IBA** Yu-Ming Chu and Miao-Kun Wang. Inequalities between arithmetic–geometric, Gini, and Toader means. *Abstract and Applied Analysis*, pages 830585:1–830585:11, 2012. ISSN 1085-3375 (print), 1687-0409 (electronic).
- Chu:2013:IAG** [CW13] Yu Ming Chu and Miao Kun Wang. Inequalities among generalized logarithmic, arithmetic and geometric means. *Acta Math. Sci. Ser. A Chin. Ed.*, 33(2):298–308, 2013. ISSN 1003-3998.
- Chu:2012:OLM** Y.-M. Chu, M.-K. Wang, and Y.-F. Qiu. Optimal Lehmer mean

- bounds for the geometric and arithmetic combinations of arithmetic and Seiffert means. *Azerb. J. Math.*, 2(1):3–9, 2012. ISSN 2218-6816.
- [CWQM13] Yu-Ming Chu, Miao-Kun Wang, Ye-Fang Qiu, and Xiao-Yan Ma. Sharp two parameter bounds for the logarithmic mean and the arithmetic–geometric mean of Gauss. *Journal of Mathematical Inequalities*, 7(3):349–355, 2013. ISSN 1846-579x (print), 1848-9575 (electronic).
- [CZW11] Yu-Ming Chu, Cheng Zong, and Gen-Di Wang. Optimal convex combination bounds of Seiffert and geometric means for the arithmetic mean. *Journal of Mathematical Inequalities*, 5(3): 429–434, 2011. ISSN 1846-579x (print), 1848-9575 (electronic).
- [dal96] Ba dalahu. Applications of the inequality for arithmetic means and geometric means in nonlinear programming. *Neimenggu Daxue Xuebao Ziran Kexue*, 27(6):736–739, 1996. ISSN 1000-1638.
- [DCP97] S. S. Dragomir, D. Comănescu, and C. E. M. Pearce. On some mappings associated with geometric and arithmetic means. *Bulletin of the Australian Mathematical Society*, 55(2):299–309, 1997. CODEN ALNBAB. ISSN 0004-9727 (print), 1755-1633 (electronic).
- [Dia60] P. H. Diananda. Classroom notes: a simple proof of the arithmetic mean geometric mean inequality. *American Mathematical Monthly*, 67(10):1007, December 1960. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [Dij92] Edsger W. Dijkstra. The arithmetic mean and the geometric mean. Circulated privately., October 1992. URL <http://www.cs.utexas.edu/users/EWD/ewd11xx/EWD1140.PDF>.
- [Dij94] Edsger W. Dijkstra. The argument about the arithmetic mean and the geometric mean, heuristics included. Circulated privately., January 1994. URL <http://www.cs.utexas.edu/users/EWD/ewd11xx/EWD1171.PDF>.
- [Dij96a] Edsger W. Dijkstra. The argument about the arithmetic mean and the geometric mean, heuristics included. In Broy [Bro96], pages 29–32. ISBN 3-540-60947-4 (hardcover). LCCN QA76.9.D5 D38 1996. URL <http://www.loc.gov/catdir/enhancements/fy0812/96010788-d.html>.

- Dijkstra:1996:AGM**
- [Dij96b] Edsger W. Dijkstra. The arithmetic and geometric means once more. Circulated privately., February 1996. URL <http://www.cs.utexas.edu/users/EWD/ewd12xx/EWD1231.PDF>.
- Disch:2002:CPV**
- [Dis02] Burkhard Disch. Computing present values by the AGM. *Blätter der DGVFM*, 25(4):831–849, October 2002.
- Dzhaparidze:1994:SAI**
- [DJ94] Kacha Dzhaparidze and René H. P. Janssen. A stochastic approach to an interpolation problem with applications to Hellinger integrals and arithmetic–geometric mean relationship. *CWI Quarterly*, 7(3):245–258, 1994. ISSN 0922-5366.
- Donagi:1999:AGM**
- [DL99] Ron Donagi and Ron Livné. The arithmetic–geometric mean and isogenies for curves of higher genus. *Annali della Scuola normale superiore di Pisa, Classe di scienze*, 28(2):323–339, 1999. CODEN PSNAAL. ISSN 0391-173x (print), 2036-2145 (electronic). URL http://www.numdam.org/item?id=ASNSP_1999_4_28_2_323_0.
- Dmitrieva:1997:FAB**
- [DM97] O. M. Dmitrieva and V. N. Malozëmov. On a fast algorithm based on arithmetic–geometric means. *Zhurnal Vychislitel’noi Matematiki i Matematicheskoi Fiziki*, 37(3):277–290, 1997. CODEN ZVMFAN. ISSN 0044-4669.
- Dobbs:2001:PAG**
- [Dob01] David E. Dobbs. A proof of the arithmetic–geometric mean inequality using non-Euclidean geometry. *International Journal of Mathematical Education in Science and Technology*, 32(5):778–782, 2001. CODEN IJMEBM. ISSN 0020-739x (print), 1464-5211 (electronic).
- Dragomir:1993:ETR**
- [Dra93a] Sever Silvestru Dragomir. Errata: “Two refinements of the arithmetic mean–geometric mean inequality” [Nieuw Arch. Wisk. (4) 11 (1993), no. 1, 9–12; MR1220829 (94c:26025)]. *Nieuw Archief voor Wiskunde. Vierde Serie*, 11(3):198, 1993. CODEN NAWIA7. ISSN 0028-9825.
- Dragomir:1993:TRA**
- [Dra93b] Sever Silvestru Dragomir. Two refinements of the arithmetic mean–geometric mean inequality. *Nieuw Archief voor Wiskunde. Vierde Serie*, 11(1):9–12, 1993. CODEN NAWIA7. ISSN 0028-9825.
- Dragomir:1998:IAG**
- [Dra98] Sever S. Dragomir. The improvement of arithmetic–geometric inequality for weighted means. *Ranchi Univ. Math. J.*, 29:11–19 (1999), 1998. ISSN 0079-9602.

- Dragomir:1999:CAM**
- [Dra99] S. S. Dragomir. Counterparts of arithmetic mean–geometric mean–harmonic mean inequality. *Studia Univ. Babeş-Bolyai Math.*, 44(4):37–42, 1999. ISSN 0252-1938.
- Dupont:2011:FEM**
- [Dup11] Régis Dupont. Fast evaluation of modular functions using Newton iterations and the AGM. *Mathematics of Computation*, 80(275):1823–1847, July 2011. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://www.ams.org/journals/mcom/2011-80-275/S0025-5718-2011-01880-6/>; <http://www.ams.org/journals/mcom/2011-80-275/S0025-5718-2011-01880-6/S0025-5718-2011-01880-6.pdf>.
- Ding:2017:OBA**
- [DZ17] Qing Ding and Tiehong Zhao. Optimal bounds for arithmetic–geometric and Toader means in terms of generalized logarithmic mean. *Journal of Inequalities and Applications*, pages 102:1–102:12, 2017. ISSN 1029-242X.
- Eddy:1985:BAG**
- [Edd85] Roland H. Eddy. Behold! The Arithmetic-Geometric Mean Inequality. *College Mathematics Journal*, 16(3):208, June 1985. CODEN ????? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.1985.11972881>.
- Ekart:2001:NGA**
- [EN01] Anikó Ekárt and S. Z. Németh. A noncontinuous generalization of the arithmetic–geometric mean. *Applied Mathematics and Computation*, 124(2):261–279, October 25, 2001. CODEN AMHCBQ. ISSN 0096-3003 (print), 1873-5649 (electronic). URL <http://www.elsevier.com/gej-ng/10/9/12/113/31/36/abstract.html>; <http://www.sciencedirect.com/science/article/pii/S0096300300000989>.
- Enge:2006:CCP**
- [Eng06] Andreas Enge. The complexity of class polynomial computation via floating point approximations. *arXiv.org*, ??(??):??, January 24, 2006. CODEN ????? ISSN ????? URL <http://arxiv.org/abs/cs/0601104>. Published in *Mathematics of Computation* 78, 266 (2009) 1089–1107.
- Everitt:1963:IGA**
- [Eve63] W. N. Everitt. On an inequality for the generalized arithmetic and geometric means. *American Mathematical Monthly*, 70(3):251–255, March 1963. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Everitt:1967:LPA**
- [Eve67] W. N. Everitt. On a limit problem associated with the arithmetic–geometric mean inequality. *Journal of the London Mathematical Society*, 42:712–718, 1967. CODEN JLMSAK. ISSN 0024-6107

- (print), 1469-7750 (electronic). See corrigendum [Eve69].
- [Eve69] W. N. Everitt. Corrigendum: “On a limit problem associated with the arithmetic–geometric mean inequality”. *Journal of the London Mathematical Society. Second Series*, 1:428–430, 1969. CODEN JLMSAK. ISSN 0024-6107 (print), 1469-7750 (electronic). See [Eve67].
- [FAB12] Jan O. Friedrich, Neill K. J. Adhikari, and Joseph Beyene. Ratio of geometric means to analyze continuous outcomes in meta-analysis: comparison to mean differences and ratio of arithmetic means using empiric data and simulation. *Stat. Med.*, 31(17):1857–1886, 2012. ISSN 0277-6715.
- [Fen95] Ci Huang Feng. A refinement of the arithmetic–geometric mean inequality. *J. Hangzhou Univ. Natur. Sci. Ed.*, 22(3):222–225, 1995. CODEN HHHPD7. ISSN 0253-3618.
- [FFSZ16] Jun Ichi Fujii, Masatoshi Fujii, Yuki Seo, and Hongliang Zuo. Recent developments of matrix versions of the arithmetic–geometric mean inequality. *Annals of Functional Analysis*, 7(1):102–117, 2016. ISSN 2008-8752.
- [Fin81] A. M. Fink. A weighted-arithmetic–geometric means inequality. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.*, 716–734(716-734):35–40, 1981. ISSN 0522-8441.
- [FJ76] A. M. Fink and Max Jodeit, Jr. A generalization of the arithmetic–geometric means inequality. *Proceedings of the American Mathematical Society*, 61(2):255–261 (1977), 1976. CODEN PAM-YAR. ISSN 0002-9939 (print), 1088-6826 (electronic).
- [FKY09] Shigeru Furuichi, Ken Kuriyama, and Kenjiro Yanagi. Trace inequalities for products of matrices. *Linear Algebra and its Applications*, 430(8–9):2271–2276, 2009. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379508005685>.
- [FLFJ11] S. Fréour, E. Lacoste, J. Fajoui, and F. Jacquemin. On the meaning of the chosen set-averaging method within Eshelby–Kröner self-consistent scale transition model: the geometric mean versus the classical arithmetic average. *Zeitschrift für Angewandte Mathematik und Mechanik*, 91(9):689–698, 2011. CODEN ZAM-MAX. ISSN 0044-2267 (print), 1521-4001 (electronic).

- Fournier:1999:EGA**
- [Fou99] Richard Fournier. Extensions of the geometric–arithmetic means inequality to a disc of the complex plane. *Mathematical Inequalities & Applications*, 2(1):19–24, 1999. ISSN 1331-4343 (print), 1848-9966 (electronic).
- Foster:1984:AHM**
- [FP84] D. M. E. Foster and G. M. Phillips. The arithmetic–harmonic mean. *Mathematics of Computation*, 42(165):183–191, January 1984. CODEN MCM-PAF. ISSN 0025-5718 (print), 1088-6842 (electronic).
- Feng:2008:MVS**
- [FT08] Bao Qi Feng and Andrew Tonge. Matrix versions of some refinements of the arithmetic–geometric mean inequality. *Journal of Mathematical Sciences. Advances and Applications*, 1(2):243–264, 2008. ISSN 0974-5750.
- Furuta:1994:NAG**
- [Fur94] Takayuki Furuta. A note on the arithmetic–geometric mean inequality for every unitarily invariant matrix norm. *Linear Algebra and its Applications*, 208–209(??):223–228, 1994. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/0024379594904391>.
- Furuichi:2014:OIA**
- [Fur14] Shigeru Furuichi. Operator inequalities among arithmetic mean, geometric mean and harmonic mean. *Journal of Mathematical Inequalities*, 8(3):669–672, 2014. ISSN 1846-579x (print), 1848-9575 (electronic).
- Gaines:1967:AMG**
- [Gai67] Fergus Gaines. Classroom notes: On the arithmetic mean–geometric mean inequality. *American Mathematical Monthly*, 74(3):305–306, March 1967. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Gao:2015:DWM**
- [Gao15] Peng Gao. On a discrete weighted mixed arithmetic–geometric mean inequality. *Mathematical Inequalities & Applications*, 18(3):941–947, 2015. ISSN 1331-4343 (print), 1848-9966 (electronic).
- Garvan:1994:CMI**
- [Gar94] Frank Garvan. Cubic modular identities of Ramanujan, hypergeometric functions and analogues of the arithmetic–geometric mean iteration. In *The Rademacher legacy to mathematics (University Park, PA, 1992)*, volume 166 of *Contemp. Math.*, pages 245–264. Amer. Math. Soc., Providence, RI, 1994.
- Gasharov:1997:SFT**
- [Gas97] Vesselin Gasharov. Symmetric functions and the theorem of the arithmetic and geometric means. *J. Combin. Math. Combin. Comput.*, 25:91–95, 1997. ISSN 0835-3026.

- Gauss:1866:W**
- [Gau66] Carl Friedrich Gauss. *Werke*, volume 3. Koniglichen Gesellschaft der Wissenschaften, Göttingen, Germany, 1866. ???? pp.
- Gauss:1917:OPG**
- [Gau17] Carl Friedrich Gauss. De origine proprietatibusque generalibus numerorum mediorum aritmet. geometricorum. (Latin) []. In *Werke*, volume X-1, page ?? Koniglichen Gesellschaft der Wissenschaften, Göttingen, Germany, 1917.
- Gauss:1992:AGM**
- [Gau92] Karl F. Gauss. La media aritmético geométrica [the arithmetic–geometric mean] (de origine proprietati busque generalis numerorum mediorum aritmeticorum–geometricorum). *Bol. Mat.*, 23(1–2):69–79, 1992. CODEN BOMAD4. ISSN 0120-0380 (print), 2357-6529 (electronic). URL <http://revistas.unal.edu.co/index.php/bolma/article/view/18204>. Translated from the Latin original by Fabio Hernando Ortiz.
- Gaudry:2002:CCS**
- [Gau02] Pierrick Gaudry. A comparison and a combination of SST and AGM algorithms for counting points of elliptic curves in characteristic 2. In *International Conference on the Theory and Application of Cryptology and Information Security: ASIACRYPT 2002: Advances in Cryptology — ASIACRYPT 2002*, volume 2501 of *Lecture Notes in Computer Science*, pages 311–327. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic). URL <http://link.springer.de/link/service/series/0558/bibs/2501/25010311.htm>; <http://link.springer.de/link/service/series/0558/papers/2501/25010311.pdf>.
- Gauss:2011:W**
- [Gau11] Carl Friedrich Gauss. *Werke*, volume 3 of *Cambridge library collection. Mathematics*. Cambridge University Press, Cambridge, UK, 2011. ISBN 1-108-03225-7 (paperback), 1-139-05824-X (e-book). 514 pp. LCCN ????
- Gencev:2018:PIB**
- [Gen18] Marian Gencev. On a proof of the inequality between the arithmetic and geometric means. *American Mathematical Monthly*, 125(7):650–652, 2018. CODEN AM-MYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- Georgakis:2002:IAG**
- [Geo02] Constantine Georgakis. On the inequality for the arithmetic and geometric means. *Mathematical Inequalities & Applications*, 5(2): 215–218, 2002. ISSN 1331-4343 (print), 1848-9966 (electronic).
- Geppert:1928:TAG**
- [Gep28] Harald Geppert. Zur Theorie des arithmetisch–geometrischen

- Mittels. (German) [On the theory of the arithmetic–geometric mean]. *Mathematische Annalen*, 99(1):162–180, December 1928. CODEN MAANA3. ISSN 0025-5831 (print), 1432-1807 (electronic). URL <http://link.springer.com/article/10.1007/BF01459092>.
- [GHT11] Ibrahim Halil Gumus, Omar Hirzallah, and Necati Taskara. Singular value inequalities for the arithmetic, geometric and Heinz means of matrices. *Linear Multilinear Algebra*, 59(12):1383–1392, 2011. CODEN LNMLAZ. ISSN 0308-1087 (print), 1563-5139 (electronic).
- [Gla76] Ronald E. Glaser. The ratio of the geometric mean to the arithmetic mean for a random sample from a gamma distribution. *Journal of the American Statistical Association*, 71(354):480–487, 1976. CODEN JSTNAL. ISSN 0162-1459 (print), 1537-274x (electronic). URL [http://links.jstor.org/sici?sici=0162-1459\(197606\)71:354<480:TROTGGM>2.0.CO;2-I&origin=MSN](http://links.jstor.org/sici?sici=0162-1459(197606)71:354<480:TROTGGM>2.0.CO;2-I&origin=MSN).
- [GM03] E. Gluskin and V. Milman. Note on the geometric–arithmetic mean inequality. *Lecture Notes in Mathematics*, 1807:131–135, 2003. CODEN LNMAA2. ISBN 3-540-00485-8 (print), 3-540-36428-5 (e-book). ISSN 0075-8434 (print), 1617-9692 (electronic). URL http://link.springer.com/chapter/10.1007/978-3-540-36428-3_11/.
- [GM17] Martin Griffiths and Des MacHale. On arithmetic–geometric-mean polynomials. *International Journal of Mathematical Education in Science and Technology*, 48(1):111–117, 2017. CODEN IJMEBM. ISSN 0020-739x (print), 1464-5211 (electronic).
- [GQ03] Bai-Ni Guo and Feng Qi. Inequalities and monotonicity of the ratio for the geometric means of a positive arithmetic sequence with arbitrary difference. *Tamkang Journal of Mathematics*, 34(3):261–270, 2003. ISSN 0049-2930 (print), 2073-9826 (electronic).
- [GSWC12] Wei-Ming Gong, Ying-Qing Song, Miao-Kun Wang, and Yu-Ming Chu. A sharp double inequality between Seiffert, arithmetic, and geometric means. *Abstract and Applied Analysis*, pages 684834:1–684834:7, 2012. ISSN 1085-3375 (print), 1687-0409 (electronic).
- [GT13] I. Halil Gumus and Necati Taskara. The improved arithmetic–geometric mean inequalities for matrix norms. *Applied Mathematical Sciences (Ruse)*, 7(29–

- 32):1439–1446, 2013. ISSN 1312-885x (print), 1314-7552 (electronic).
- [GT20] Cole Graham and Tadashi Tokieda. An entropy proof of the arithmetic mean-geometric mean inequality. *American Mathematical Monthly*, 127(6):545–546, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [GZCS16] Zhi-Jun Guo, Yan Zhang, Yu-Ming Chu, and Ying-Qing Song. Sharp bounds for Neuman means in terms of geometric, arithmetic and quadratic means. *Journal of Mathematical Inequalities*, 10(2):301–312, 2016. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Had12] Apostolos Hadjidimos. Irreducibility and extensions of Ostrowski’s Theorem. *Linear Algebra and its Applications*, 436(7):2156–2168, 2012. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379511007786>.
- [Haj20] Mowaffaq Hajja. 104.17 More proofs of the AM–GM inequality. *The Mathematical Gazette*, 104(560):318–326, July 2020. CODEN MAG-AAS. ISSN 0025-5572 (print), 2056-6328 (electronic). URL <https://www.cambridge.org/core/journals/mathematical-gazette/article/10417-more-proofs-of-the-amgm-inequality/089FD8AFA839D001F8C8BDC97E438896>.
- [Hao93] Zhi Chuan Hao. A refinement of the arithmetic–geometric means inequality. *J. Math. Res. Exposition*, 13(1):84–88, 1993. CODEN SYPIET. ISSN 1000-341X.
- [Hao00] Zhi Chuan Hao. A combinatorial inequality for the arithmetic and geometric means. *Guizhou Shifan Daxue Xuebao Ziran Kexue Ban*, 18(1):28–31, 2000. ISSN 1004-5570.
- [Har91] Hiroshi Haruki. New characterizations of the arithmetic–geometric mean of Gauss and other well-known mean values. *Publicationes Mathematicae Debrecen*, 38(3–4):323–332, 1991. CODEN PUMAAR. ISSN 0033-3883 (print), 2064-2849 (electronic).
- [Has13a] Mehdi Hassani. On the arithmetic–geometric mean inequality. *Tamkang Journal of Mathematics*, 44(4):453–456, 2013. ISSN 0049-2930 (print), 2073-9826 (electronic).
- [Has13b] Mehdi Hassani. On the ratio of the arithmetic and geometric

- means of the prime numbers and the number e . *International Journal of Number Theory*, 9(6):1593–1603, September 2013. ISSN 1793-0421 (print), 1793-7310 (electronic). URL <https://www.worldscientific.com/doi/10.1142/S1793042113500450>. [Her72]
- Hassani:2014:AGM**
- [Has14] Mehdi Hassani. On the arithmetic–geometric means of positive integers and the number e . *Appl. Math. E-Notes*, 14:250–255, 2014. ISSN 1607-2510.
- Hayashi:2009:NCA**
- [Hay09] Tomohiro Hayashi. Non-commutative arithmetic–geometric mean inequality. *Proceedings of the American Mathematical Society*, 137(10):3399–3406, 2009. CODEN PAMYAR. ISSN 0002-9939 (print), 1088-6826 (electronic). [Hir07]
- He:2012:OIB**
- [HC12] Zai-Yin He and Yu-Ming Chu. Optimal inequalities between one-parameter mean and the combination of arithmetic, geometric and harmonic means. *Pacific Journal of Applied Mathematics*, 4(3):149–154, 2012. ISSN 1941-3963. [Hir16]
- Heinrich:1981:VAG**
- [Hei81] H. Heinrich. Eine Verallgemeinerung des arithmetisch-geometrischen Mittels. (German) [A generalization of the arithmetic–geometric mean]. *Zeitschrift für Angewandte Mathematik und Mechanik*, 61(6):265–267, 1981. CODEN ZAMMAX. ISSN 0044-2267 (print), 1521-4001 (electronic).
- Hering:1972:GAG**
- Franz Hering. A generalization of the arithmetic–geometric mean inequality and an application to finite sequences of zeros and ones. *Israel Journal of Mathematics*, 11(1):14–30, 1972. CODEN ISJMAP. ISSN 0021-2172 (print), 1565-8511 (electronic). URL <http://link.springer.com/article/10.1007/BF02761445>.
- Hirschhorn:2007:GI**
- M. D. Hirschhorn. The AM–GM inequality. *The Mathematical Intelligencer*, 29(4):7–??, ??? 2007. CODEN MAINDC. ISSN 0343-6993 (print), 1866-7414 (electronic).
- Hirzallah:2016:SVC**
- Omar Hirzallah. Singular values of convex functions of operators and the arithmetic–geometric mean inequality. *Journal of Mathematical Analysis and Applications*, 433(2):935–947, 2016. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X15007635>.
- Hiai:1999:CVM**
- Fumio Hiai and Hideki Kosaki. Comparison of various means for operators. *Journal of functional*

- analysis*, 163(2):300–323, 1999. CODEN JFUAAW. ISSN 0022-1236 (print), 1096-0783 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022123698933754>. [Hor95]
- [HM86] S. Huda and Rahul Mukerjee. Edgeworth series expansion for the distribution of the log of the ratio of arithmetic mean to geometric mean. *Pakistan J. Statist.*, 2(2):69–72, 1986.
- [HM89] Guy Henniart and Jean-François Mestre. Moyenne arithmético-géométrique p -adique. (French) [p -Adic arithmetic-geometric mean]. *Comptes rendus de l'Académie des sciences. Série I, Mathématique*, 308(13):391–395, 1989. CODEN CASMEI. ISSN 0249-6291.
- [Hof16] Heiko Hoffmann. Weighted AM–GM inequality via elementary multivariable calculus. *College Mathematics Journal*, 47(1):56–58, January 2016. CODEN ???? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.4169/college.math.j.47.1.56>.
- [Hol06] Finbarr Holland. An inequality between compositions of weighted arithmetic and geometric means. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 7(5):Article 159, 8, 2006. ISSN 1443-5756.
- [Horn95] Roger A. Horn. Norm bounds for Hadamard products and an arithmetic-geometric mean inequality for unitarily invariant norms. *Linear Algebra and its Applications*, 223–224(1–3):355–361, July ??, 1995. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/002437959400034B>. Special issue honoring Miroslav Fiedler and Vlastimil Pták.
- [Hun27] Edward V. Huntington. Sets of independent postulates for the arithmetic mean, the geometric mean, the harmonic mean, and the root-mean-square. *Transactions of the American Mathematical Society*, 29(1):1–22, 1927. CODEN TAMTAM. ISSN 0002-9947 (print), 1088-6850 (electronic).
- [Hun56] John Hunter. A generalization of the inequality of the arithmetic-geometric means. *Proc. Glasgow Math. Assoc.*, 2:149–158, 1956.
- [Holland2006] Finbarr Holland. An inequality between compositions of weighted arithmetic and geometric means. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 7(5):Article 159, 8, 2006. ISSN 1443-5756.
- [Hurler1988] Donal Hurley. Recent computations of π . *Irish Mathematical Society Bulletin*, 21(?):38–44, 1988. ISSN 0791-5578.

- [HZQ12] Chuanjiang He, Limin Zou, and Shahid Qaisar. On improved arithmetic–geometric mean and Heinz inequalities for matrices. *Journal of Mathematical Inequalities*, 6(3):453–459, 2012. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Jam14] G. J. O. Jameson. An approximation to the arithmetic–geometric mean. *The Mathematical Gazette*, 98(541):85–95, March 2014. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).
- [IKW16] Arie Israel, Felix Krahmer, and Rachel Ward. An arithmetic–geometric mean inequality for products of three matrices. *Linear Algebra and its Applications*, 488(??):1–12, January 1, 2016. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379515005285>.
- [IP17] Bruno Iannazzo and Margherita Porcelli. The Riemannian Barzilai–Borwein method with nonmonotone line search and the matrix geometric mean computation. *IMA Journal of Numerical Analysis*, 38(1):495–517, April 2017. CODEN IJNADH. ISSN 0272-4979 (print), 1464-3642 (electronic).
- [Ito08] Takashi Ito. Mixed arithmetic and geometric means and related inequalities. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 9(3):Article 65, 21, 2008. ISSN 1443-5756.
- [Jar08] Frazer Jarvis. Higher genus arithmetic–geometric means. *The Ramanujan Journal*, 17(1):1–17, 2008. CODEN RAJOF9. ISSN 1382-4090 (print), 1572-9303 (electronic).
- [JK99] James E. Joseph and Myung H. Kwack. The arithmetic–mean–geometric–mean inequality derived from closed polynomial functions. *Missouri J. Math. Sci.*, 11(2):103–106, 1999. ISSN 0899-6180.
- [Kan88] Yasumasa Kanada. Vectorization of multiple-precision arithmetic program and 201,326,000 decimal

digits of π calculation. In Martin and Lundstrom [ML88], pages 117–128. CODEN ???? ISBN 0-8186-0882-X (v. 1; paper), 0-8186-8882-3 (v. 1; case), 0-8186-4882-1 (v. 1: microfiche) 0-8186-8923-4 (v. 2), 0-8186-5923-X (v. 2: microfiche), 0-8186-8923-4 (v. 2: case). ISSN ???? LCCN QA76.5 .S894 1988. Two volumes. IEEE catalog number 88CH2617-9. IEEE Computer Society Order Number 882.

Kanada:2016:VMP

[Kan16] Yasumasa Kanada. Vectorization of multiple-precision arithmetic program and 201,326,000 decimal digits of pi calculation (1988). In Bailey and Borwein [BB16a], pages 151–164. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.

Karmer:1993:MPC

[Kar93] W. Karmer. Multiple-precision computations with result verification. In Adams and Kulisch [AK93], pages 325–356. ISBN 0-12-044210-8. LCCN QA76.S368 1993.

Katsuura:2003:GAG

[Kat03] Hidefumi Katsuura. Generalizations of the arithmetic–geometric mean inequality and a three dimensional puzzle. *College Mathematics Journal*, 34(4):280–282, September 2003. CODEN ???? ISSN 0746-8342 (print), 1931-

1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.2003.11922018>.

Kedlaya:1994:PMA

[Ked94] Kiran Kedlaya. Proof of a mixed arithmetic-mean, geometric-mean inequality. *American Mathematical Monthly*, 101(4):355–357, 1994. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

King:1921:SNF

[Kin21] Louis Vessot King. On some new formulae for the numerical calculation of the mutual induction of coaxial circles. *Proceedings of the Royal Society of London. Series A, Containing Papers of a Mathematical and Physical Character*, 100(702):60–66, October 4, 1921. ISSN 0950-1207 (print), 2053-9150 (electronic). URL <http://www.jstor.org/stable/93861>. This is the first known publication of the AGM method, discovered by the author in 1913, for computing Jacobian elliptic functions. See also [Kin24, Kin07].

King:1924:DNC

[Kin24] Louis Vessot King. *On the Direct Numerical Calculation of Elliptic Functions and Integrals*. Cambridge University Press, Cambridge, UK, 1924. viii + 42 pp. LCCN QA343.

King:2007:DNC

[Kin07] Louis Vessot King. *On the Direct Numerical Calculation of Elliptic*

Functions and Integrals. Mellon Press, 2007. ISBN 1-4067-4226-0. 56 pp.

Kittaneh:1992:NAG

[Kit92]

Fuad Kittaneh. A note on the arithmetic-geometric-mean inequality for matrices. *Linear Algebra and its Applications*, 171: 1–8, 1992. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Kittaneh:1994:SOI

[Kit94]

Fuad Kittaneh. On some operator inequalities. *Linear Algebra and its Applications*, 208–209(??):19–28, 1994. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379594904278>.

Kittaneh:1999:SNI

[Kit99]

Fuad Kittaneh. Some norm inequalities for operators. *Bulletin canadien de mathématiques = Canadian Mathematical Bulletin*, 42(1):87–96, March 1999. CODEN CMBUA3. ISSN 0008-4395 (print), 1496-4287 (electronic).

Kosheleva:2009:GNJ

[KK09]

O. Kosheleva and V. Kreinovich. Guesstimation: a new justification of the geometric mean heuristic. *Applied Mathematical Sciences (Ruse)*, 3(47):2335–2342, 2009. ISSN 1312-885x (print), 1314-7552 (electronic). URL <http://www.cs.utep.edu/vladik/2009/tr09-10.pdf>;

http://www.openj-gate.com/Browse/ArticleList.aspx?Journal_id=124136&issue_id=1153557.

Kittaneh:2012:IAG

[KKLP12]

Fuad Kittaneh, Mario Krnić, Neda Lovričević, and Josip Pečarić. Improved arithmetic-geometric and Heinz means inequalities for Hilbert space operators. *Publicationes Mathematicae Debrecen*, 80(3-4):465–478, 2012. CODEN PUMAAR. ISSN 0033-3883 (print), 2064-2849 (electronic).

Kanas:1996:UCC

[KL96]

Stanisława Kanas and Adam Lecko. Univalence criteria connected with arithmetic and geometric means. II. *Zeszyty Nauk. Politech. Rzeszowskiej Mat.*, 20: 49–59, 1996. ISSN 1232-7867.

Kanas:1998:UCC

[KL98]

S. Kanas and A. Lecko. Univalence criteria connected with arithmetic and geometric means. I. In *Transform methods & special functions, Varna '96*, pages 201–209. Bulgarian Acad. Sci., Sofia, 1998.

Kim:2007:CIH

[KL07]

Sejong Kim and Yongdo Lim. A converse inequality of higher order weighted arithmetic and geometric means of positive definite operators. *Linear Algebra and its Applications*, 426(2–3): 490–496, October 15, 2007. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (elec-

tronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379507002455>.

Kum:2012:GMP

- [KL12] Sangho Kum and Yongdo Lim. [KLS00] A geometric mean of parameterized arithmetic and harmonic means of convex functions. *Abstract and Applied Analysis*, pages 836804:1–836804:15, 2012. ISSN 1085-3375 (print), 1687-0409 (electronic).

Klamkin:1968:ICA

- [Kla68] Murray S. Klamkin. Inequalities concerning the arithmetic, geometric and harmonic means. *The Mathematical Gazette*, 52: 156–157, 1968. CODEN MAG-AAS. ISSN 0025-5572 (print), 2056-6328 (electronic).

Kim:2009:SCI

- [KLL09] Sejong Kim, Hosoo Lee, and Yongdo Lim. A sharp converse inequality of three weighted arithmetic and geometric means of positive definite operators. *Mathematical Inequalities & Applications*, 12(3):519–523, 2009. ISSN 1331-4343 (print), 1848-9966 (electronic).

Kim:2011:MGM

- [KLL11] Sejong Kim, Jimmie Lawson, and Yongdo Lim. The matrix geometric mean of parameterized, weighted arithmetic and harmonic means. *Linear Algebra and its Applications*, 435(9): 2114–2131, November 1, 2011.

CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Kwon:2000:ATB

- E. G. Kwon, S. T. Lee, and K. H. Shon. An additional term between arithmetic mean and geometric mean. *Bull. Korean Math. Soc.*, 37(2):285–289, 2000. ISSN 1015-8634.

Kinjo:2010:AAG

- [KM10] Kensaku Kinjo and Yuken Miyasaka. 2-Adic arithmetic-geometric mean and elliptic curves. *Interdisciplinary Information Sciences*, 16(1):5–15, 2010. ISSN 1340-9050 (print), 1347-6157 (electronic).

Kinjo:2012:HSA

- [KM12] Kensaku Kinjo and Yuken Miyasaka. Hypergeometric series and arithmetic-geometric mean over 2-adic fields. *International Journal of Number Theory*, 8(3): 831–844, May 2012. ISSN 1793-0421 (print), 1793-7310 (electronic). URL <https://www.worldscientific.com/doi/10.1142/S1793042112500480>.

Kinjo:2013:HSA

- [KM13] Kensaku Kinjo and Yuken Miyasaka. Hypergeometric series and arithmetic-geometric mean over 2-adic fields. In *Algebraic number theory and related topics 2011*, RIMS Kôkyûroku Bessatsu, B44, pages 99–110. Res. Inst. Math. Sci. (RIMS), Kyoto, 2013.

- Krafft:1979:RGA**
- [KMS79] Olaf Krafft, Rudolf Mathar, and Martin Schaefer. A refined geometric–arithmetic means inequality for integers. In *Numerische Methoden bei graphentheoretischen und kombinatorischen Problemen, Band 2 (Tagung, Math. Forschungsinst., Oberwolfach, 1978)*, volume 46 of *Internat. Ser. Numer. Math.*, pages 216–223. Birkhäuser, Basel–Boston, Mass., 1979. [KP96a]
- Kaufmann:1996:IBMa**
- Matt Kaufmann and Paolo Pecchiari. Interaction with the Boyer–Moore theorem prover: a tutorial study using the arithmetic–geometric mean theorem. In Zhang [Zha96], pages 181–222. ISBN 94-010-7250-7 (print), 94-009-1675-2 (e-book). LCCN Q334-342. URL http://link.springer.com/chapter/10.1007/978-94-009-1675-3_6.
- Knockaert:2003:BUB**
- [Kno03] Luc Knockaert. Best upper bounds based on the arithmetic–geometric mean inequality. *Archives of Inequalities and Applications.*, 1(1):85–90, 2003. ISSN 1542-6149. [KP96b]
- Kober:1958:AGM**
- [Kob58] H. Kober. On the arithmetic and geometric means and on Hölder’s inequality. *Proceedings of the American Mathematical Society*, 9:452–459, 1958. CODEN PAM-YAR. ISSN 0002-9939 (print), 1088-6826 (electronic). [Kra93]
- Kosaki:1998:AGM**
- [Kos98] Hideki Kosaki. Arithmetic–geometric mean and related inequalities for operators. *Journal of functional analysis*, 156(2):429–451, 1998. CODEN JFUAAW. ISSN 0022-1236 (print), 1096-0783 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022123698932584>. [KS00]
- Kramer:1993:MPC**
- Walter Krämer. Multiple-precision computations with result verification. In *Mathematics in Science and Engineering: Scientific Computing with Automatic Result Verification*, volume 189, pages 325–356. Elsevier BV, Amsterdam, The Netherlands, 1993.
- Kwon:2000:AGM**
- Ern Gun Kwon and Kwang Ho Shon. On the arithmetic–geometric mean inequality. In *Finite or infinite dimensional com-*

plex analysis (Fukuoka, 1999), volume 214 of *Lecture Notes in Pure and Appl. Math.*, pages 233–235. Dekker, New York, 2000.

Koike:2007:IFP

[KS07]

Kenji Koike and Hironori Shiga. Isogeny formulas for the Picard modular form and a three terms arithmetic geometric mean. *Journal of Number Theory*, 124(1):123–141, May 2007. CODEN JNUTA9. ISSN 0022-314X (print), 1096-1658 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022314X06002058>. ■

Koike:2008:EGA

[KS08]

Kenji Koike and Hironori Shiga. An extended Gauss AGM and corresponding Picard modular forms. *Journal of Number Theory*, 128(7):2097–2126, July 2008. CODEN JNUTA9. ISSN 0022-314X (print), 1096-1658 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022314X08000218>. ■

Lagrange:1868:X

[Lag68]

Joseph-Louis Lagrange. In *Œuvres. (French) [Works]*, pages 253–312. Gauthier-Villars, Paris, France, 1868.

Landsberg:1978:TPI

[Lan78]

P. T. Landsberg. A thermodynamic proof of the inequality between arithmetic and geometric mean. *Physics Letters A*, 67(1):1, 1978. CODEN PY-

LAAG. ISSN 0031-9163 (print), 1873-2410 (electronic).

Latala:1999:EBG

Rafał Latała. On the equivalence between geometric and arithmetic means for log-concave measures. In *Convex geometric analysis (Berkeley, CA, 1996)*, volume 34 of *Math. Sci. Res. Inst. Publ.*, pages 123–127. Cambridge Univ. Press, Cambridge, 1999.

Long:2010:OIG

Bo-Yong Long and Yu-Ming Chu. Optimal inequalities for generalized logarithmic, arithmetic, and geometric means. *Journal of Inequalities and Applications*, pages 806825:1–806825:10, 2010. ISSN 1025-5834.

Long:2011:OGL

Bo-Yong Long and Yu-Ming Chu. Optimal generalized logarithmic mean bounds for the geometric combination of arithmetic and harmonic means. *J. Indones. Math. Soc.*, 17(2):85–96, 2011. ISSN 2086-8952.

Lehmer:1970:CCM

D. H. Lehmer. On the compounding of certain means. *Notices of the American Mathematical Society*, 17(??):634–635, 1970. CODEN AMNOAN. ISSN 0002-9920 (print), 1088-9477 (electronic).

Lehmer:1971:CCM

D. H. Lehmer. On the compounding of certain means.

[Lat99]

[LC10]

[LC11]

[Leh70]

[Leh71]

- Journal of Mathematical Analysis and Applications*, 36(1): 183–200, October 1971. CODEN JMANAK. ISSN 0022-247X (print), 1096-0813 (electronic). URL <https://www.sciencedirect.com/science/article/pii/0022247X71900291>. [LL11]
- [Lek09] John Lekner. Axially symmetric charge distributions and the arithmetic–geometric mean. *Journal of Electrostatics*, 67(6):880–885, 2009. CODEN JOELDH. ISSN 0304-3886 (print), 1873-5738 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0304388609001806>. [LM70]
- [LGSC13] Baoyu Liu, Weiming Gong, Yingqing Song, and Yuming Chu. Sharp bounds for Seiffert mean in terms of arithmetic and geometric means. *Int. J. Math. Anal. (Ruse)*, 7(33-36): 1765–1773, 2013. ISSN 1312-8876.
- [Lin91] G. S. Lingappaiah. Distribution of the ratio of geometric mean to arithmetic mean in a sample from a two-piece double exponential distribution. *Math. Balkanica (N.S.)*, 5(1):76–80, 1991. ISSN 0205-3217.
- [Liu94] Zhi Guo Liu. The geometric, logarithmic, and arithmetic mean inequalities in n variables. *J. Chengdu Univ. Natur. Sci.*, 13(1): 37–41, 1994. ISSN 1004-5422.
- Lekko:2011:DSA**
- A. Lecko and M. Lecko. Differential subordinations of arithmetic and geometric means of some functionals related to a sector. *International Journal of Mathematics and Mathematical Sciences*, pages 205845:1–205845:19, 2011. ISSN 0161-1712 (print), 1687-0425 (electronic).
- Loewner:1970:DBG**
- Charles Loewner and Henry B. Mann. On the difference between the geometric and the arithmetic mean of n quantities. *Advances in Mathematics*, 5:472–473 (1970), 1970. CODEN ADMTA4. ISSN 0001-8708 (print), 1090-2082 (electronic).
- Luther:1996:CAG**
- [Lor08] Wolfram Luther and Werner Otten. The complex arithmetic–geometric mean and multiple-precision matrix functions. In Alefeld et al. [AFL96], pages 52–58. ISBN 3-05-501737-4. ISSN 0138-3019. LCCN QA76.95 .I575 1995.
- Lorentzen:2008:CDR**
- [Lor08] Lisa Lorentzen. Convergence and divergence of the Ramanujan AGM fraction. *The Ramanujan Journal*, 16(1):83–95, May 2008. ISSN 1382-4090 (print), 1572-9303 (electronic).
- Lekner:2009:ASC**
- Liu:2013:SBS**
- Lingappaiah:1991:DRG**
- Liu:1994:GLA**

- [LQ15] **Leng:2015:SUB**
Tuo Leng and Xiaolin Qin. The sharp upper bound for the ratio between the arithmetic and the geometric mean. *Mathematical Inequalities & Applications*, 18(3):975–980, 2015. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [LR07] **Lehavi:2007:EFA**
D. Lehavi and C. Ritzenthaler. An explicit formula for the arithmetic–geometric mean in genus 3. *Experimental Mathematics*, 16(4):421–440, 2007. CODEN 1058-6458 (print), 1944-950x (electronic). URL <http://projecteuclid.org/euclid.em/1204836513>.
- [Luc95] **Lucht:1995:AGM**
Lutz G. Lucht. On the arithmetic–geometric mean inequality. *American Mathematical Monthly*, 102(8):739–740, October 1995. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [LZ06] **Liu:2006:OTA**
Lei Liu and Jian Hua Zhang. An operator-trace arithmetic–geometric mean inequality. *J. Baoji Univ. Arts Sci. Math. Colloq. Chin. Univ.*, 3B(3B):208–209, 2006. ISSN 1007-1261.
- [Mah20] **Mahmoudi:2020:GIG**
M. G. Mahmoudi. The AM–GM inequality via gradient. *College Mathematics Journal*, 51(2):141–143, 2020. CODEN 1931-1346 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/full/10.1080/07468342.2020.1697605>.
- [Mal98] **Maligranda:1998:WHI**
Lech Maligranda. Why Hölder’s Inequality should be called Rogers’ Inequality. *Mathematical Inequalities & Applications*, 1(1):69–83, 1998. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [Mal12] **Maligranda:2012:GIE**
Lech Maligranda. The AM–GM inequality is equivalent to the Bernoulli inequality. *The Mathematical Intelligencer*, 34(1):1–2, 2012. CODEN MAINDC. ISSN 0343-6993 (print), 1866-7414 (electronic).
- [Mar88] **Martins:1988:AGM**
J. S. Martins. Arithmetic and geometric means, an application to Lorentz sequence spaces. *Mathematische Nachrichten*, 139:281–288, 1988. CODEN MTMNAQ. ISSN 0025-584X.
- [Mat93] **Mathias:1993:AGH**
Roy Mathias. An arithmetic–geometric–harmonic mean inequality involving Hadamard products. *Linear Algebra and its Applications*, 184:71–78, 1993. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Mathias:1995:EAG

- [Mat95a] Roy Mathias. Erratum: “An arithmetic–geometric–harmonic mean inequality involving Hadamard products” [Linear Algebra Appl. **184** (1993), 71–78; MR1209383 (94b:15019)]. *Linear Algebra and its Applications*, 220:4, 1995. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic).

Matsuda:1995:IPM

- [Mat95b] Takashi Matsuda. An inductive proof of a mixed arithmetic–geometric mean inequality. *American Mathematical Monthly*, 102 (7):634–637, August/September 1995. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Matejicka:2010:POO

- [Mat10] Ladislav Matejíčka. Proof of one optimal inequality for generalized logarithmic, arithmetic, and geometric means. *Journal of Inequalities and Applications*, pages 902432:1–902432:5, 2010. ISSN 1025-5834.

Mercer:2003:RAG

- [Mer03] Peter R. Mercer. Refined arithmetic, geometric and harmonic mean inequalities. *Rocky Mountain Journal of Mathematics*, 33 (4):1459–1464, 2003. CODEN RMJMAE. ISSN 0035-7596 (print), 1945-3795 (electronic).

Morita:1971:CLG

- [MH71] Tohru Morita and Tsuyoshi Horiguchi. Calculation of the

lattice Green’s function for the bcc, fcc, and rectangular lattices. *Journal of Mathematical Physics*, 12(6):986–992, June 1971. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL http://jmp.aip.org/resource/1/jmapaq/v12/i6/p986_s1.

Morita:1972:CAG

Tohru Morita and Tsuyoshi Horiguchi. Convergence of the arithmetic–geometric mean procedure for the complex variables and the calculation of the complete elliptic integrals with complex modulus. *Numerische Mathematik*, 20(5):425–430, October 1972. CODEN NUMMA7. ISSN 0029-599X (print), 0945-3245 (electronic). URL <http://www.springerlink.com/openurl.asp?genre=article&issn=0029-599X&volume=20&issue=5&page=425>.

Mihesan:2005:RPT

Vasile Miheșan. Rado and Popoviciu type inequalities for pseudo arithmetic and geometric means. *International Journal of Pure and Applied Mathematics*, 23(3):293–297, 2005. ISSN 1311-8080 (print), 1314-3395 (electronic).

Minassian:1987:NAG

Donald P. Minassian. Notes: The arithmetic–geometric mean inequality revisited: Elementary calculus and negative numbers. *American Mathematical Monthly*, 94(10):977–978, December 1987.

[MH72]

[Mih05]

[Min87]

CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).

Mitrinovic:1966:ICA

- [Mit66] D. S. Mitrinović. An inequality concerning the arithmetic and geometric means. *The Mathematical Gazette*, 50:310–311, 1966. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).

Mitrovic:1970:SII

- [Mit70] Žarko Mitrović. Some inequalities involving elementary symmetric function and arithmetic and geometric means. *The Mathematical Gazette*, 54:155–157, 1970. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).

Martin:1988:SPN

- [ML88] Joanne L. Martin and Stephen F. Lundstrom, editors. *Supercomputing '88: proceedings, November 14–18, 1988, Orlando, Florida*, volume 2. IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 1988. ISBN 0-8186-0882-X (v. 1; paper), 0-8186-8882-3 (v. 1; case), 0-8186-4882-1 (v. 1: microfiche) 0-8186-8923-4 (v. 2), 0-8186-5923-X (v. 2: microfiche), 0-8186-8923-4 (v. 2: case). LCCN QA76.5 .S894 1988. Two volumes. IEEE catalog number 88CH2617-9. IEEE Computer Society Order Number 882.

Meany:1971:BRB

- [MNC71] R. K. Meany, S. A. Nelson, and B. C. Carlson. Book review: *An Inequality of Mixed Arithmetic and Geometric Means* (B. C. Carlson). *SIAM Review*, 13(2):253–255, 1971. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Molnar:2011:CMM

- [Mol11] Lajos Molnár. Continuous maps on matrices transforming geometric mean to arithmetic mean. *Ann. Univ. Sci. Budapest. Sect. Comput.*, 35:217–222, 2011. ISSN 0138-9491.

Monhor:2003:AGM

- [Mon03] D. Monhor. The arithmetic-geometric mean and the elliptic mean error. *Acta Geodaetica et Geophysica Hungarica*, 38(1):??, February 2003. CODEN AGGHFW. ISSN 1217-8977 (print), 1587-1037 (electronic). URL <http://link.springer.com/article/10.1556/AGeod.38.2003.1.8>.

Montuchi:1988:BTE

- [MP88] Paolo Montuchi and Warren Page. Behold! Two extremum problems (and the Arithmetic-Geometric Mean Inequality). *College Mathematics Journal*, 19(4):347, September 1988. CODEN ????? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.1988.11973136>.

- [MPŠ08] **Micic:2008:IIA**
 Jadranka Mičić, Josip Pečarić, and Vidosava Šimić. Inequalities involving the arithmetic and geometric operator means. *Mathematical Inequalities & Applications*, 11(3):415–430, 2008. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [MT10] **Matsumoto:2010:AGM**
 Keiji Matsumoto and Tomohide Terasoma. Arithmetic–geometric means for hyperelliptic curves and Calabi–Yau varieties. *International Journal of Mathematics*, 21(7):939–949, 2010. ISSN 0129-167X.
- [Mur97] **Murthy:1997:AMG**
 Amarnath Murthy. On the arithmetic mean geometric mean inequality—another two short proofs. *Math. Ed. (Siwan)*, 31(2):118–120, 1997. ISSN 0047-6269.
- [MV10] **Maksa:2010:ETF**
 Gyula Maksa and Adrienn Varga. The equivalence of two functional equations involving the arithmetic mean, the geometric mean and their Gauss composition. *Aequationes Mathematicae*, 80(1-2):173–179, 2010. CODEN AEMABN. ISSN 0001-9054 (print), 1420-8903 (electronic).
- [MW12] **Maze:2012:NWH**
 Gérard Maze and Urs Wagner. A note on the weighted harmonic–geometric–arithmetic means inequalities. *Mathematical Inequalities & Applications*, 15(1):15–26, 2012. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [Naj13] **Najafi:2013:SRK**
 Hamed Najafi. Some results on Kwong functions and related inequalities. *Linear Algebra and its Applications*, 439(9):2634–2641, 2013. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379513004175>.
- [Nak01] **Nakamura:2001:AAA**
 Yoshimasa Nakamura. Algorithms associated with arithmetic, geometric and harmonic means and integrable systems. *Journal of Computational and Applied Mathematics*, 131(1–2):161–174, June 1, 2001. CODEN JCAMDI. ISSN 0377-0427 (print), 1879-1778 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0377042700003162>.
- [Nan46] **Nanjundiah:1946:IRA**
 T. S. Nanjundiah. Inequalities relating to arithmetic and geometric means. I, II. *Half-Yearly J. Mysore Univ. Sect. B., N.S.*, 6:63–77, 107–113, 1946.
- [Nan80] **Nandi:1980:EDN**
 S. B. Nandi. On the exact distribution of a normalized ratio of the weighted geometric mean to the unweighted arithmetic mean in samples from gamma distributions. *Journal of*

- the American Statistical Association*, 75(369):217–220, 1980. CODEN JSTNAL. ISSN 0003-1291. URL [http://links.jstor.org/sici?sici=0162-1459\(198003\)75:369<217:OTEDOA>2.0.CO;2-M&origin=MSN](http://links.jstor.org/sici?sici=0162-1459(198003)75:369<217:OTEDOA>2.0.CO;2-M&origin=MSN). [Nel89]
- Nussbaum:1988:AGM**
- [NC88] Roger D. Nussbaum and Joel E. Cohen. The arithmetic–geometric mean and its generalizations for noncommuting linear operators. *Annali della Scuola normale superiore di Pisa, Classe di scienze*, 15(2):239–308 (1989), 1988. CODEN PSNAAL. ISSN 0391-173x (print), 2036-2145 (electronic). URL http://www.numdam.org/item?id=ASNSP_1988_4_15_2_239_0.
- Nussbaum:1990:CPG**
- [NC90] Roger D. Nussbaum and Joel E. Cohen. Convexity properties of generalizations of the arithmetic–geometric mean. *Numerical Functional Analysis and Optimization*, 11(1–2):33–44, 1990. CODEN NFAODL. ISSN 0163-0563.
- Nelsen:1987:PWH**
- [Nel87] Roger B. Nelsen. Proof without words: The harmonic mean–geometric mean–arithmetic mean–root mean square inequality. *Mathematics Magazine*, 60(3):158, 1987. CODEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor.org/stable/2689561?origin=pubexport>.
- Nelsen:1989:RMS**
- Roger B. Nelsen. The root mean square–arithmetic mean–geometric mean–harmonic mean inequality. *College Mathematics Journal*, 20(3):231, May 1989. CODEN ????? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.1989.11973236>.
- Nelsen:1995:PWA**
- [Nel95] Roger B. Nelsen. Proof without Words: The Arithmetic–Logarithmic–Geometric Mean Inequality. *Mathematics Magazine*, 68(4):305, 1995. CODEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor.org/stable/2690586?origin=pubexport>.
- Nelsen:2015:PWT**
- [Nel15] Roger B. Nelsen. Proof without words: a trigonometric proof of the arithmetic mean–geometric mean inequality. *College Mathematics Journal*, 46(1):42, January 2015. CODEN ????? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.4169/college.math.j.46.1.42>.
- Neuman:1996:TIA**
- [Neu96] Edward Neuman. Three inequalities for the arithmetic, identric, and geometric means. *SIAM Review*, 38(2):315, ????? 1996. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

- Newman:1985:SVF**
- [New85] D. J. Newman. A simplified version of the fast algorithms of Brent and Salamin. *Mathematics of Computation*, 44(169): 207–210, January 1985. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).
- Newman:2016:SVF**
- [New16] D. J. Newman. A simplified version of the fast algorithms of Brent and Salamin (1985). In Bailey and Borwein [BB16a], pages 97–102. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.mylibrary.com?id=941862>.
- Nishiwada:1988:HSA**
- [Nis88] Kimimasa Nishiwada. A holomorphic structure of the arithmetic–geometric mean of Gauss. *Proceedings of the Japan Academy of Sciences. Series A. Mathematical Sciences*, 64(9):322–324, 1988. CODEN PJAADT. ISSN 0386-2194. URL <http://projecteuclid.org/euclid.pja/1195513088>.
- Nishiwada:1994:HSA**
- [Nis94] Kimimasa Nishiwada. Holomorphic structure of the arithmetic–geometric mean of Gauss. II. *Proceedings of the Japan Academy of Sciences. Series A. Mathematical Sciences*, 70(5):119–122, 1994. CODEN PJAADT. ISSN 0386-2194. URL <http://projecteuclid.org/euclid.pja/1195511045>.
- Nishiwada:1997:AAG**
- [Nis97] Kimimasa Nishiwada. Algorithm of the arithmetic–geometric mean and its complex limits. *Hokkaido Mathematical Journal*, 26(3):541–564, 1997. CODEN HMAJDN. ISSN 0385-4035.
- Nishimura:2015:NPL**
- [Nis15] Ryo Nishimura. New properties of the lemniscate function and its transformation. *Journal of Mathematical Analysis and Applications*, 427(1):460–468, 2015. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X15001870>.
- Ouyang:2013:OPL**
- [OC13] Liang-Yuh Ouyang and Chun-Tao Chang. Optimal production lot with imperfect production process under permissible delay in payments and complete backlogging. *International Journal of Production Economics*, 144(2):610–617, 2013. CODEN JPCEYE. ISSN 0925-5273 (print), 1873-7579 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0925527313001916>.
- Osler:2014:RFR**
- [OC14] Thomas J. Osler and Tirupathi R. Chandrupatla. 98.23 recursive formulas related to the Arithmetic–Geometric Mean.

- The Mathematical Gazette*, 98 (543):484–486, November 2014. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).
- [Ono83] Takashi Ono. A generalization of Gauss’ theorem on arithmetic–geometric means. *Proceedings of the Japan Academy of Sciences. Series A. Mathematical Sciences*, 59(4):154–157, 1983. CODEN PJAADT. ISSN 0386-2194. URL <http://projecteuclid.org/euclid.pja/1195515639>.
- [Opp65] Alexander Oppenheim. On inequalities connecting arithmetic means and geometric means of two sets of three positive numbers. *The Mathematical Gazette*, 49:160–162, 1965. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).
- [Opp68] A. Oppenheim. On inequalities connecting arithmetic means and geometric means of two sets of three positive numbers. II. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No.*, 210-228:21–24, 1968. ISSN 0522-8441.
- [O’S68] Siobhan O’Shea. Mathematical notes: The arithmetic geometric mean inequality. *American Mathematical Monthly*, 75(10):1092–1093, December 1968. CO-
- DEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [Osl15] Thomas J. Osler. A product of nested radicals for the AGM. *American Mathematical Monthly*, 122(9):886–887, November 2015. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL <http://www.jstor.org/stable/10.4169/amer.math.monthly.122.9.886>.
- [OT04] Horiana Ovesea-Tudor. Univalence criteria connected with arithmetic and geometric means. *Studia Univ. Babeş-Bolyai Math.*, 49(1):55–62, 2004. ISSN 0252-1938.
- [Par65] Leopold Alexander Pars. *A Treatise on Analytical Dynamics*. Heinemann, London, UK, 1965. xxi + 641 pp.
- [Par68] Leopold Alexander Pars. *A Treatise on Analytical Dynamics*. Heinemann, London, UK, 1968. ISBN 0-435-52690-1. xxi + 641 pp.
- [Par79] Leopold Alexander Pars. *A Treatise on Analytical Dynamics*. Ox Bow Press, Woodbridge, CT, USA, 1979. ISBN 0-918024-07-2. xxi + 641 pp. LCCN QA845 .P32 1979.

- [Pas71] **Passy:1971:GWM**
 U. Passy. Generalized weighted mean programming. *SIAM Journal on Applied Mathematics*, 20(4):763–778, June 1971. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).
- [Peč95] **Pecaric:1995:RSA**
 Josip Pečarić. On a recent sharpening of the arithmetic mean—geometric mean inequality. *Utilitas Mathematica*, 48:3–4, 1995. CODEN UTMADA. ISSN 0315-3681.
- [Pee89] **Peetre:1989:GAG**
 Jaak Peetre. Generalizing the arithmetic geometric mean—a hapless computer experiment. *International Journal of Mathematics and Mathematical Sciences*, 12(2):235–245, 1989. ISSN 0161-1712 (print), 1687-0425 (electronic).
- [Pin15] **Pinelis:2015:EUL**
 Iosif Pinelis. Exact upper and lower bounds on the difference between the arithmetic and geometric means. *Bulletin of the Australian Mathematical Society*, 92(1):149–158, 2015. CODEN ALNBAB. ISSN 0004-9727 (print), 1755-1633 (electronic).
- [Pla20] **Plaza:2020:HLA**
 Angel Plaza. Harmonic, logarithmic, and arithmetic means and corollaries. *American Mathematical Monthly*, 127(5):427, 2020. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [PM82] **Perisastry:1982:BRA**
 M. Perisastry and V. N. Murty. Bounds for the ratio of the arithmetic mean to the geometric mean. *Two-Year College Mathematics Journal*, 13(2):160–161, March 1982. CODEN ???? ISSN 0049-4925 (print), 2325-9116 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/00494925.1982.11972600>.
- [PM97] **Pecaric:1997:AMG**
 J. Pečarić and B. Mond. The arithmetic mean—the geometric mean and related matrix inequalities. In *General inequalities, 7 (Oberwolfach, 1995)*, volume 123 of *Internat. Ser. Numer. Math.*, pages 77–91. Birkhäuser, Basel, 1997.
- [PV97] **Pecaric:1997:NPA**
 Josip Pečarić and Sanja Varošanec. A new proof of the arithmetic mean—the geometric mean inequality. *Journal of Mathematical Analysis and Applications*, 215(2):577–578, 1997. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic).
- [QC14] **Qian:2014:OBN**
 Wei-Mao Qian and Yu-Ming Chu. Optimal bounds for Neuman means in terms of geometric, arithmetic and quadratic means. *Journal of Inequalities and Applications*, pages 175:1–175:13, 2014. ISSN 1029-242X.

- Qian:2015:SBS**
- [QCZ15] Wei-Mao Qian, Yu-Ming Chu, and Xiao-Hui Zhang. Sharp bounds for Sándor mean in terms of arithmetic, geometric and harmonic means. *Journal of Inequalities and Applications*, pages 221:1–221:13, 2015. ISSN 1029-242X.
- Qi:2003:IMRa**
- [Qi03a] Feng Qi. Inequalities and monotonicity of the ratio for the geometric means of a positive arithmetic sequence with unit difference. *Australian Mathematical Society Gazette*, 30(3):142–147, 2003. ISSN 0311-0729 (print), 1326-2297 (electronic).
- Qi:2003:IMRb**
- [Qi03b] Feng Qi. Inequalities and monotonicity of the ratio of the geometric means of a positive arithmetic sequence with unit difference. *International Journal of Mathematical Education in Science and Technology*, 34(4):601–607, 2003. CODEN IJMEBM. ISSN 0020-739x (print), 1464-5211 (electronic).
- Qi:2009:AUP**
- [QS09] Feng Qi and Anthony Sofo. An alternative and united proof of a double inequality for bounding the arithmetic–geometric mean. *Politehn. Univ. Bucharest Sci. Bull. Ser. A Appl. Math. Phys.*, 71(3):69–76, 2009. ISSN 1223-7027.
- Rauch:1942:MPS**
- [Rau42] Stanley Eugene Rauch. *Mapping properties of the second arithmetic mean of the geometric series*. Thesis (Ph.D.), Stanford University, Stanford, CA, USA, 1942. ???? pp. URL <http://search.proquest.com/docview/301867689>.
- Razpet:1986:MAG**
- [Raz86] Marko Razpet. A method of arithmetic–geometric mean. *Obzornik Mat. Fiz.*, 33(6):161–164, 1986. CODEN OBMFAY. ISSN 0473-7446.
- Reyssat:1987:AMA**
- [Rey87] Éric Reyssat. Approximation des moyennes arithmético-géométriques. (French) [Approximation of arithmetic–geometric means]. *L’Enseignement Mathématique. Revue Internationale. 2e Série*, 33(3–4):175–181, 1987. CODEN ENMAAR. ISSN 0013-8584 (print), 2309-4672 (electronic).
- Raissouli:2009:AGH**
- [RLC09] Mustapha Raïssouli, Fatima Leazizi, and Mohamed Chergui. Arithmetic–geometric–harmonic mean of three positive operators. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 10(4):Article 117, 11, 2009. ISSN 1443-5756.
- Roy:1992:CBA**
- [RM92] Dilip Roy and S. P. Mukherjee. Characterizations based on arithmetic, geometric and harmonic

means of failure rates. In *Contributions to stochastics*, pages 178–185. Wiley, New York, 1992.

Rodin:2017:VIA

- [Rod17] Burt Rodin. Variance and the inequality of arithmetic and geometric means. *Rocky Mountain Journal of Mathematics*, 47(2): 637–648, 2017. CODEN RMJ-MAE. ISSN 0035-7596 (print), 1945-3795 (electronic).

Rooin:2003:AIB

- [Roo03] Jamal Rooin. AGM inequality with binomial expansion. *Elemente der Mathematik*, 58(3): 115–117, August 2003. ISSN 0013-6018 (print), 1420-8962 (electronic).

Roy:2003:CBW

- [Roy03] Dilip Roy. Characterization of a bivariate Weibull distribution based on arithmetic, geometric and harmonic means of failure rates. *J. Appl. Statist. Sci.*, 12(3): 191–199, 2003. ISSN 1067-5817.

Ruan:2015:NAG

- [Rua15] Jiechang Ruan. Notes on the arithmetic–geometric mean inequality for singular values. *Ital. J. Pure Appl. Math.*, 35:227–232, 2015. ISSN 1126-8042 (print), 2239-0227 (electronic).

Sabnis:2006:AAG

- [SA06] S. V. Sabnis and G. Agnihothram. Application of arithmetic–geometric mean inequality for construction of reliability test plan for parallel sys-

tems in the presence of covariates. *Economic Quality Control*, 21(2): 219–230, 2006. ISSN 0940-5151 (print), 1869-6147 (electronic).

Solak:2010:NEN

- [SA10] Süleyman Solak and Mine Aytekin. A note on the Euclidean norms of matrices with arithmetic–geometric harmonic means. *Applied Mathematical Sciences (Ruse)*, 4(29-32):1553–1561, 2010. ISSN 1312-885x (print), 1314-7552 (electronic).

Salamin:1976:CUA

- [Sal76] Eugene Salamin. Computation of π using arithmetic–geometric mean. *Mathematics of Computation*, 30(135): 565–570, July 1976. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic). URL <http://www.jstor.org/stable/2005327>. See also [Bre76b, Bre10a].

Sala:1989:TJA

- [Sal89] Kenneth L. Sala. Transformations of the Jacobian amplitude function and its calculation via the arithmetic–geometric mean. *SIAM Journal on Mathematical Analysis*, 20(6):1514–1528, November 1989. CODEN SJMAAH. ISSN 0036-1410 (print), 1095-7154 (electronic).

Salamin:1997:CUA

- [Sal97] Eugene Salamin. Computation of π using arithmetic–geometric mean. In Berggren et al. [BBB97],

- pages 418–423. ISBN 0-387-94924-0. LCCN QA484 .P5 1997. URL http://link.springer.com/chapter/10.1007/978-1-4757-2736-4_46.
- [Sal00] Eugene Salamin. Computation of π using arithmetic–geometric mean. In *Pi: a source book* [BBB00], pages 418–423. ISBN 0-387-98946-3 (hardcover). LCCN QA484 .P5 2000. URL http://link.springer.com/chapter/10.1007/978-1-4757-3240-5_46.
- [Sal04] Eugene Salamin. Computation of π using arithmetic–geometric mean. In Berggren et al. [BBB04], pages 418–423. ISBN 0-387-20571-3. LCCN QA484 .P5 2004. URL http://link.springer.com/chapter/10.1007/978-1-4757-4217-6_46.
- [Sal16] Eugene Salamin. Computation of π using arithmetic–geometric mean (1976). In Bailey and Borwein [BB16a], pages 1–8. ISBN 3-319-32375-X, 3-319-32377-6 (e-book). LCCN QA251. URL <http://docserver.carma.newcastle.edu.au/1716/>; <http://lib.myilibrary.com?id=941862>.
- [Sán90] J. Sándor. On the inequality of the arithmetic and geometric means. *Bul. Ştiinţ. Inst. Politehn. Cluj-Napoca Ser. Mat. Mec. Apl. Construc. Maş.*, 33: 109–112, 1990.
- [Sán96] J. Sándor. On certain inequalities for means, II. *Journal of Mathematical Analysis and Applications*, 199(2):629–635, 1996. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X96901651>.
- [Sán99] József Sándor. On the arithmetic–geometric mean of Gauss. *Octogon Mathematical Magazine*, 7(1):108–115, 1999. ISSN 1222-5657 (print), 2248-1893 (electronic).
- [Saw17] Mehtaab S. Sawhney. A telescoping proof of the AM–GM inequality. *American Mathematical Monthly*, 124(4):356, April 2017. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic). URL <http://www.jstor.org/stable/10.4169/amer.math.monthly.124.4.356>.
- [Sch11] L. Schlesinger. Über Gauss’ Jugendarbeiten zum arithmetisch–geometrischen Mittel. (German) [On Gauss’ youthful work on the arithmetic–geometric mean]. *Jahresbericht der Deutschen*

Mathematiker-Vereinigung (DMV),
20(??):396–403, ??? 1911.

Schaumberger:1978:CPA

- [Sch78] Norman Schaumberger. A calculus proof of the arithmetic-geometric mean inequality. *Two-Year College Mathematics Journal*, 9(1):16–17, January 1978. CODEN ??? ISSN 0049-4925 (print), 2325-9116 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/00494925.1978.11974538>.

Schaumberger:1982:SAP

- [Sch82] Norman Schaumberger. Still another proof of the arithmetic-geometric mean inequality. *Two-Year College Mathematics Journal*, 13(2):159–160, March 1982. CODEN ??? ISSN 0049-4925 (print), 2325-9116 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/00494925.1982.11972599>.

Schoen:1984:HGA

- [Sch84] Robert Schoen. Harmonic, geometric, and arithmetic means in generalized Fibonacci sequences. *Fibonacci Quarterly*, 22(4):354–357, November 1984. CODEN FIBQAU. ISSN 0015-0517. URL <http://www.fq.math.ca/Scanned/22-4/schoen.pdf>.

Schattschneider:1986:PWA

- [Sch86] Doris Schattschneider. Proof without words: The arithmetic mean–geometric mean inequality. *Mathematics Magazine*, 59(1):11, 1986. CO-

DEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor.org/stable/2690011?origin=pubexport>.

Schaumberger:1988:GFA

- [Sch88] Norman Schaumberger. A general form of the arithmetic-geometric mean inequality via the mean value theorem. *College Mathematics Journal*, 19(2):172–173, March 1988. CODEN ??? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.1988.11973110>.

Schaumberger:1989:GI

- [Sch89] Norman Schaumberger. The AM–GM inequality via $x^{1/x}$. *College Mathematics Journal*, 20(4):320, September 1989. CODEN ??? ISSN 0746-8342 (print), 1931-1346 (electronic). URL <http://www.tandfonline.com/doi/abs/10.1080/07468342.1989.11973249>.

Seiffert:1987:WZG

- [Sei87] H.-J. Seiffert. Werte zwischen dem geometrischen und dem arithmetischen Mittel zweier Zahlen. (German) [Values between the geometric and the arithmetic mean of two numbers]. *Elemente der Mathematik*, 42(4):105–107, 1987. ISSN 0013-6018 (print), 1420-8962 (electronic).

Seiffert:1997:TIA

- [Sei97] H. J. Seiffert. Three inequalities for the arithmetic, identric, and geometric means. *SIAM Review*,

- 39(2):330–332, 1997. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic). [Shi11]
- [Sen87] Pranab Kumar Sen. What do the arithmetic, geometric and harmonic means tell us in length-biased sampling? *Statistics & Probability Letters*, 5(2):95–98, 1987. CODEN SPLTDC. ISSN 0167-7152 (print), 1879-2103 (electronic). [Sen:1987:WDA]
- [Seo12] Yuki Seo. The arithmetic-geometric mean inequality in an external formula. *Scientiae Mathematicae Japonicae*, 75(3):299–305, 2012. ISSN 1346-0862. [Seo:2012:AGM]
- [She16] Alemeh Sheikhhosseini. A numerical radius version of the arithmetic-geometric mean of operators. *Filomat*, 30(8):2139–2145, 2016. ISSN 0354-5180. [Sheikhhosseini:2016:NRV]
- [She17] Alemeh Sheikhhosseini. An arithmetic-geometric mean inequality related to numerical radius of matrices. *Konuralp J. Math.*, 5(1):85–91, 2017. ISSN 2147-625X. [Sheikhhosseini:2017:AGM]
- [Shi66] O. Shisha. Geometrical interpretations of the inequalities between the arithmetic, geometric and harmonic means. *Mathematics Magazine*, 39:268–269, 1966. CODEN MAMGA8. ISSN 0011-801x. [Shisha:1966:GII]
- [Shirali:2011:BPG] Shailesh A. Shirali. 95.09 A bootstrapping proof of the AM–GM inequality for three variables. *The Mathematical Gazette*, 95(532):86–87, March 2011. CODEN MA-GAAS. ISSN 0025-5572 (print), 2056-6328 (electronic).
- [Singh:2016:PAL] Paramanand Singh. π (PI) and the AGM: Legendre’s identity. Web site, 2016. URL <https://paramanands.blogspot.com/2009/08/pi-and-the-agm-legendres-identity.html>. [Sin16]
- [Schaumberger:1977:APA] Norman Schaumberger and Bert Kabak. Another proof of the arithmetic-geometric mean inequality. *Pi Mu Epsilon Journal*, 6(6):352–354, 1977. CODEN PMEJBR. ISSN 0031-952x. [SK77]
- [Sole:1998:LCA] P. Solé and P. Loyer. U_n lattices, construction B , and AGM iterations. *European Journal of Combinatorics*, 19(2):227–236, February 1998. CODEN EJOCDI. ISSN 0195-6698 (print), 1095-9971 (electronic). [Sole:1998:LCA]
- [Sampedro:1999:DIP] J. Cruz Sampedro and M. Tetlalmatzi Montiel. A direct inductive proof of the geometric mean–arithmetic mean inequality. *Miscelánea Mat.*, 28:11–15, 1999. ISSN 1665-5478. [SM99]

- [SMY14] **Srivastava:2014:ICE** H. M. Srivastava, N. Magesh, and J. Yamini. Initial coefficient estimates for bi- λ -convex and bi- μ -starlike functions connected with arithmetic and geometric means. *Electron. J. Math. Anal. Appl.*, 2(2):152–162, 2014. ISSN 2090-729X.
- [Sol95] Patrick Sole. D_4 , E_6 , E_8 and the AGM. In Cohen et al. [CGM95], pages 448–455. CODEN LNCS9. ISBN 3-540-60114-7 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA268 .A35 1995. URL <http://www.loc.gov/catdir/enhancements/fy0815/95021560-d.html>.
- [ST94] **Sagae:1994:ULB** Masahiko Sagae and Kunio Tanabe. Upper and lower bounds for the arithmetic–geometric–harmonic means of positive definite matrices. *Linear and Multilinear Algebra*, 37(4):279–282, 1994. CODEN LNMLAZ. ISSN 0308-1087 (print), 1563-5139 (electronic).
- [Ste96] **Stefanski:1996:NAG** L. A. Stefanski. A note on the arithmetic–geometric–harmonic mean inequalities. *The American Statistician*, 50(3):246–247, 1996. CODEN ASTAAJ. ISSN 0003-1305 (print), 1537-2731 (electronic).
- [Stu44] **Stubban:1944:AGM** John Olav Stubban. On the arithmetic and geometric means. *Norsk Mat. Tidsskr.*, 26:116–117, 1944.
- [Sur00] **Sury:2000:AGM** B. Sury. The arithmetic–geometric mean of Gauss: How to find the perimeter of an ellipse. *Resonance*, 5(8):72–83, August 2000. CODEN RESOFE. ISSN 0971-8044 (print), 0973-712X (electronic).
- [Sur01] **Sury:2001:LA** B. Sury. Logarithm and AGM. *Resonance*, 6(11):85–86, November 2001. CODEN RESOFE. ISSN 0971-8044 (print), 0973-712X (electronic).
- [SvS12] **Spandaw:2012:HIG** Jeroen Spandaw and Duco van Straten. Hyperelliptic integrals and generalized arithmetic–geometric mean. *The Ramanujan Journal*, 28(1):61–78, 2012. CODEN RAJOF9. ISSN 1382-4090 (print), 1572-9303 (electronic).
- [SZ13] **Shao:2013:SRI** Zhi Hua Shao and Xiao Ming Zhang. Some results involving upper and lower bounds for the difference of arithmetic mean and geometric mean. *Math. Pract. Theory*, 43(6):206–214, 2013. ISSN 1000-0984.
- [Szy91] **Szyszkowicz:1991:PGL** Mieczyslaw Szyszkowicz. Patterns generated by logical oper-

- ators. *Computers and Graphics*, 15(2):299–300, 1991. CODEN COGRD2. ISSN 0097-8493 (print), 1873-7684 (electronic). [Thu72]
- [Tan06] Inder Jeet Taneja. Generalized arithmetic and geometric mean divergence measure and their statistical aspects. *J. Interdiscip. Math.*, 9(2):249–266, 2006. ISSN 0972-0502. **Taneja:2006:GAG**
- [Tan07] Shinji Tanimoto. A novel operation associated with Gauss’ arithmetic–geometric means. *arXiv.org*. ??(??):1–6, August 27, 2007. URL <https://arxiv.org/pdf/0708.3521.pdf>. [Tka03]
- [Tao06] Yunxing Tao. More results on singular value inequalities of matrices. *Linear Algebra and its Applications*, 416(2–3):724–729, 2006. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379506000024>. [Toa98]
- [TBDS92] John Todd, Bill Braden, Bernard Danloy, and Frank Schmidt. Book review: *Inequality of the AGM and the Logarithmic Mean* (B. C. Carlson and M. Vuorinen). *SIAM Review*, 34(4):653–654, ??? 1992. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic). **Tao:2006:MRS**
- [Tor56] J. Majó Torrent. Note on the extension to the complex field of the arithmetic and the geometric mean. *Gac. Mat., Madrid (1)*, 8: 195–198, 1956. **Todd:1992:BRB**
- [Tra76] J. F. (Joseph Frederick) Traub, editor. *Analytic computational complexity: Proceedings of the Symposium on Analytic Computational Complexity, held by* **Thurston:1972:HGU**
- H. A. Thurston. How good is the usual approximation for the period of a simple pendulum? *The Mathematical Gazette*, 56(??):120–122, ??? 1972. CODEN MAGAAS. ISSN 0025-5572 (print), 2056-6328 (electronic). **Tkachev:2003:EFI**
- Vladimir G. Tkachev. Elliptic functions: Introduction course. Web lecture notes., November 25, 2003. URL <http://users.mai.liu.se/vlatk48/teaching/lect2-agm.pdf>. **Toader:1998:SMV**
- Gh. Toader. Some mean values related to the arithmetic–geometric mean. *Journal of Mathematical Analysis and Applications*, 218(2):358–368, 1998. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X97957668>. **Torrent:1956:NEC**
- [Tra76] J. F. (Joseph Frederick) Traub, editor. *Analytic computational complexity: Proceedings of the Symposium on Analytic Computational Complexity, held by*

- the Computer Science Department, Carnegie-Mellon University, Pittsburgh, Pennsylvania, on April 7–8, 1975.* Academic Press, New York, NY, USA, 1976. ISBN 0-12-697560-4. LCCN QA297 .S915 1975.
- [Tri65] F. G. Tricomi. Sull’algoritmo iterativo del Borchardt e su di una sua generalizzazione. (Italian) [On the iterative algorithm of Borchardt and on one of its generalization]. *Rendiconti del Circolo matematico di Palermo*, 2(14): 85–94, 1965. CODEN RCM-MAR. ISSN 0009-725X (print), 1973-4409 (electronic).
- [Tri66] F. G. Tricomi. Lectures on the use of special functions by calculations with electronic computers. Lecture Series 47, The Institute for Fluid Dynamics and Applied Mathematics, University of Maryland, College Park, College Park, MD, USA, 1966.
- [Tun75] S. H. Tung. On lower and upper bounds of the difference between the arithmetic and the geometric mean. *Mathematics of Computation*, 29(131):834–836, July 1975. CODEN MCMPAF. ISSN 0025-5718 (print), 1088-6842 (electronic).
- [Uch08] Yasuharu Uchida. A simple proof of the geometric–arithmetic mean inequality. *IPAM. Journal of Inequalities in Pure and Applied Mathematics*, 9(2):Article 56, 2, 2008. ISSN 1443-5756.
- [Vas72] Petar M. Vasić. On inequalities connecting arithmetic means and geometric means of two sets of n positive numbers. *Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz.*, 381–409:63–66, 1972. ISSN 0522-8441.
- [Vil14] Mark B. Villarino. The AGM simple pendulum. *arXiv.org*, ??(??):1–19, September 1, 2014. URL <https://arxiv.org/pdf/1202.2782.pdf>.
- [VV94] M. K. Vamanamurthy and M. Vuorinen. Inequalities for means. *Journal of Mathematical Analysis and Applications*, 183(1):155–166, 1994. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X84711371>.
- [Wac00] E. L. Wachspress. Evaluating elliptic functions and their inverses. *Computers and Mathematics with Applications*, 39(3–4):131–136, February 2000. CODEN CMAPDK. ISSN 0898-1221 (print), 1873-7668 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0898122199003399>.

Tricomi:1965:SID**Vasic:1972:ICA****Tricomi:1966:RUS****Villarino:2014:ASP****Vamanamurthy:1994:IM****Tung:1975:LUB****Wachspress:2000:EEF****Uchida:2008:SPG**

- Wang:1999:SLT**
- [Wan99] Liqiu Wang. Second law of thermodynamics and arithmetic-mean–geometric-mean inequality. *Internat. J. Modern Phys. B*, 13(21-22):2791–2793, 1999. ISSN 0217-9792 (print), 1793-6578 (electronic).
- Wang:2012:SDI**
- [WCW12] Miao-Kun Wang, Yu-Ming Chu, and Gen-Di Wang. A sharp double inequality between the Lehmer and arithmetic–geometric means. *Pacific Journal of Applied Mathematics*, 4(1):1–25, 2012. ISSN 1941-3963.
- Wazwaz:1991:MNM**
- [Waz91] Abdul-Majid Wazwaz. Modified numerical methods based on arithmetic and geometric means. *Applied Mathematics Letters*, 4(3):49–52, 1991. CODEN AMLEEL. ISSN 0893-9659 (print), 1873-5452 (electronic).
- Wang:2014:BPE**
- [WCJQ14] Miao-Kun Wang, Yu-Ming Chu, Yue-Ping Jiang, and Song-Liang Qiu. Bounds of the perimeter of an ellipse using arithmetic, geometric and harmonic means. *Mathematical Inequalities & Applications*, 17(1):101–111, 2014. ISSN 1331-4343 (print), 1848-9966 (electronic).
- Wang:2011:SDI**
- [WCW11] Miao-Kun Wang, Yu-Ming Chu, and Gen-Di Wang. A sharp double inequality between the Lehmer and arithmetic–geometric means. *Pacific Journal of Applied Mathematics*, 3(4):281–286, 2011. ISSN 1941-3963. URL https://www.novapublishers.com/catalog/product_info.php?products_id=24770.
- Wilf:1963:SAI**
- [Wil63] Herbert S. Wilf. Some applications of the inequality of arithmetic and geometric means to polynomial equations. *Proceedings of the American Mathematical Society*, 14:263–265, 1963. CODEN PAMYAR. ISSN 0002-9939 (print), 1088-6826 (electronic).
- Wimp:1988:BRP**
- [Wim88] Jet Wimp. Book review: *Pi and the AGM: a Study in Analytic Number Theory and Computational Complexity* (Jonathan M. Borwein and Peter B. Borwein). *SIAM Review*, 30(3):530–533, September 1988. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic). URL <http://www.jstor.org/stable/2030735>.
- Wang:2016:OBG**
- [WQC16] Hua Wang, Wei-Mao Qian, and Yu-Ming Chu. Optimal bounds for Gaussian arithmetic–geometric mean with applications to complete elliptic integral. *Journal of Function Spaces*, pages 3698463:1–3698463:6, 2016. ISSN 2314-8896.

- [Wu05] **Wu:2005:SRE** Shanhe Wu. Some results on extending and sharpening the Weierstrass product inequalities. *Journal of Mathematical Analysis and Applications*, 308(2):689–702, 2005. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0022247X04010157>. ■
- [Wu17] **Wu:2017:NYA** Yanqiu Wu. Note on Young and arithmetic–geometric mean inequalities for matrices. *Ital. J. Pure Appl. Math.*, 37:347–350, 2017. ISSN 1126-8042 (print), 2239-0227 (electronic).
- [WW07] **Walden:2007:HMI** Byron L. Walden and Lesley A. Ward. A harmonic measure interpretation of the arithmetic–geometric mean. *American Mathematical Monthly*, 114(7):610–622, 2007. CODEN AMMYAE. ISSN 0002-9890 (print), 1930-0972 (electronic).
- [WY88] **Wang:1988:IRA** Chung-Shin Wang and Gou Sheng Yang. Inequalities related to the arithmetic and geometric means. *Tamkang Journal of Mathematics*, 19(2):79–86, 1988. ISSN 0049-2930 (print), 2073-9826 (electronic).
- [WZSC14] **Wang:2014:NSC** Hua Wang, Tie-Hong Zhao, Ying-Qing Song, and Yu-Ming Chu. Necessary and sufficient conditions for inequalities between the generalized Muirhead mean and arithmetic, harmonic and geometric means. *Pacific Journal of Applied Mathematics*, 6(3):175–187, 2014. ISSN 1941-3963.
- [XGW13] **Xu:2013:PPM** Bai-Xiang Xu, Yang Gao, and Min-Zhong Wang. Particle packing and the mean theory. *Physics Letters A*, 377(3–4):145–147, 2013. CODEN PYLAAG. ISSN 0375-9601 (print), 1873-2429 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0375960112011772>. ■
- [XHC12] **Xia:2012:OOP** Weifeng Xia, Shouwei Hou, Gendi Wang, and Yuming Chu. Optimal one-parameter mean bounds for the convex combination of arithmetic and geometric means. *J. Appl. Anal.*, 18(2):197–207, 2012. ISSN 1425-6908.
- [Xie02] **Xie:2002:SGA** Ziqing Xie. On the summation of generalized arithmetic–geometric trigonometric series. *Fibonacci Quarterly*, 40(2):128–135, May 2002. CODEN FIBQAU. ISSN 0015-0517. URL <http://www.fq.math.ca/Scanned/40-2/xie.pdf>.
- [Xu15] **Xu:2015:RSP** Qian Xu. Research on Schur-p power-convexity of the quotient of arithmetic mean and geometric mean. *J. Fudan Univ. Nat.*

- Sci.*, 54(3):288–295, 2015. ISSN 0427-7104.
- [Xue17] Jianming Xue. On reverse weighted arithmetic–geometric mean inequalities for two positive operators. *Ital. J. Pure Appl. Math.*, 37:113–116, 2017. ISSN 1126-8042 (print), 2239-0227 (electronic).
- [Yam06] Takeaki Yamazaki. An extension of Kantorovich inequality to n -operators via the geometric mean by Ando–Li–Mathias. *Linear Algebra and its Applications*, 416(2–3):688–695, 2006. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S002437950500604X>.
- [Yam13] T. Yamazaki. An elementary proof of arithmetic–geometric mean inequality of the weighted Riemannian mean of positive definite matrices. *Linear Algebra and its Applications*, 438(4):1564–1569, February 15, 2013. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379511007865>.
- [Yan00] Ling Ou Yang. Arithmetic–geometric mean inequalities for trace of operators. *Math. Theory Appl. (Changsha)*, 20(3):117–120, 2000. ISSN 1006-8074.
- [Yan14] Zhen-Hang Yang. Sharp bounds for Seiffert mean in terms of weighted power means of arithmetic mean and geometric mean. *Mathematical Inequalities & Applications*, 17(2):499–511, 2014. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [YMT10] Kouji Yamamoto, Nobuko Miyamoto, and Sadao Tomizawa. Harmonic, geometric and arithmetic means type uncertainty measures for two-way contingency tables with nominal categories. *Advances and Applications in Statistics*, 17(2):143–159, August 2010. CODEN ????? ISSN 0972-3617. URL <http://www.pphmj.com/abstract/5234.htm>.
- [YSC14] Zhen-Hang Yang, Ying-Qing Song, and Yu-Ming Chu. Sharp bounds for the arithmetic–geometric mean. *Journal of Inequalities and Applications*, pages 192:1–192:13, 2014. ISSN 1029-242X.
- [YY01] Hansheng Yang and Heng Yang. The arithmetic–geometric mean inequality and the constant e . *Mathematics Magazine*, 74(4):321–323, 2001. CODEN MAMGA8. ISSN 0025-570X. URL <http://www.jstor>.

Xue:2017:RWA

Yang:2014:SBS

Yamazaki:2006:EKI

Yamamoto:2010:HGA

Yamazaki:2013:EPA

Yang:2014:SBA

Yang:2001:AGM

- org/stable/2691107?origin=pubexport.
- [YYC08] Cheh-Chih Yeh, Hung-Wen Yeh, and Wenyaw Chan. Some equivalent forms of the arithmetic–geometric mean inequality in probability: a survey. *Journal of Inequalities and Applications*, pages Art. ID 386715, 9, 2008. ISSN 1025-5834.
- [YYWQ14] Lun Yang, Yue-Ying Yang, Qing Wang, and Wei-Mao Qian. The optimal geometric combination bounds for Neuman means of harmonic, arithmetic and contra-harmonic. *Pacific Journal of Applied Mathematics*, 6(4):283–292, 2014. ISSN 1941-3963.
- [ZC15] Hongliang Zuo and Nan Cheng. Improved reverse arithmetic–geometric means inequalities for positive operators on Hilbert space. *Mathematical Inequalities & Applications*, 18(1):51–60, 2015. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [ZFFS14] Hongliang Zuo, Masatoshi Fujii, Jun Ichi Fujii, and Yuki Seo. Upper bound for spectra of Jensen operator and its application to reverse arithmetic–geometric means. *Mathematical Inequalities & Applications*, 17(2):641–648, 2014. ISSN 1331-4343 (print), 1848-9966 (electronic).
- [Yeh:2008:SEF] [ZH15] Limin Zou and Yi Huang. A refinement of the arithmetic–geometric mean inequality. *International Journal of Mathematical Education in Science and Technology*, 46(1):158–160, 2015. CODEN IJMEBM. ISSN 0020-739x (print), 1464-5211 (electronic).
- [Yang:2014:OGC] [Zha96] H. (Hantao) Zhang, editor. *Automated Mathematical Induction*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1996. ISBN 94-010-7250-7 (print), 94-009-1675-2 (e-book). 224 pp. LCCN Q334-342. URL <http://public.eblib.com/choice/publicfullrecord.aspx?p=3102529>.
- [Zuo:2015:IRA] [ZJ15] Limin Zou and Youyi Jiang. Improved arithmetic–geometric mean inequality and its application. *Journal of Mathematical Inequalities*, 9(1):107–111, 2015. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Zuo:2014:UBS] [ZJ16] Limin Zou and Youyi Jiang. A note on interpolation between the arithmetic–geometric mean and Cauchy–Schwarz matrix norm inequalities. *Journal of Mathematical Inequalities*, 10(4):1119–1122, 2016. ISSN 1846-579x (print), 1848-9575 (electronic).
- [Zou:2015:RAG]
- [Zou:2015:IAG]
- [Zou:2016:NIB]

Zou:2017:AGM

- [Zou17] Limin Zou. An arithmetic–geometric mean inequality for singular values and its applications. *Linear Algebra and its Applications*, 528(??):25–32, September 1, 2017. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379516000185>. ■

Zou:2019:UAG

- [Zou19] Limin Zou. Unification of the arithmetic-geometric mean and Hölder inequalities for unitarily invariant norms. *Linear Algebra and its Applications*, 562(??):154–162, February 1, 2019. CODEN LAAPAW. ISSN 0024-3795 (print), 1873-1856 (electronic). URL <http://www.sciencedirect.com/science/article/pii/S0024379518304713>. ■

Zulauf:1986:SFE

- [Zul86] A. Zulauf. Solution of a functional equation by use of weighted arithmetic–geometric means. *Indian Journal of Mathematics*, 28(1):49–56, 1986. CODEN IJOMAL. ISSN 0019-5324.

Zhao:2014:OII

- [ZWCL14] Jianguo Zhao, Junliang Wu, Haisong Cao, and Wenshi Liao. Operator inequalities involving the arithmetic, geometric, Heinz and Heron means. *Journal of Mathematical Inequalities*, 8(4):747–756, 2014. ISSN 1846-579x (print), 1848-9575 (electronic).

Zhang:2011:IGM

- [ZX11] Qian Zhang and Bing Xu. An invariance of geometric mean with respect to generalized quasi-arithmetic means. *Journal of Mathematical Analysis and Applications*, 379(1):65–74, 2011. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic).