

# A Complete Bibliography of Publications in *Supercomputing Frontiers and Innovations*

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## Title word cross-reference

3 [MKYZ16, SJMLJ17].

**2** [LPL<sup>+</sup>15]. **2.0** [CHC<sup>+</sup>16]. **2014** [RNL15].

**Accelerated** [DHK<sup>+</sup>14]. **Acceleration** [CGBS<sup>+</sup>15, KM15, YY17]. **Access** [vWEH<sup>+</sup>16]. **acoustic** [MKYZ16]. **across** [CHC<sup>+</sup>16]. **adaptive** [DK14]. **Agent** [SJMLJ17]. **Agent-Based** [SJMLJ17]. **Aggregates** [NPM15]. **agnostic** [FOL<sup>+</sup>14, MHW<sup>+</sup>16]. **Algebra** [DAA<sup>+</sup>15]. **Algebraic** [YTK14]. **Algorithm** [AFK<sup>+</sup>16, MKYZ16]. **Algorithmic** [VAD15, MOD15]. **Algorithms** [CDP<sup>+</sup>15]. **AlgoWiki** [AFK<sup>+</sup>16, VAD15]. **Analysis**

[LPL<sup>+</sup>15, SG16, TKOM17, Moh14].

**Analytical** [KKL14]. **Analyzing** [Kun16].

**Application**

[JVT16, NS16, YY17, vWEH<sup>+</sup>16].

**Applications**

[MBC<sup>+</sup>15, SWAB14, CGBS<sup>+</sup>15, GRS16].

**Approach**

[Gus16, HE17, VMC<sup>+</sup>14, ACM<sup>+</sup>14, EDDZ16].

**Approaches** [KLAJ16]. **Architecture**

[BS17, FOL<sup>+</sup>14]. **Architectures**

[AOML<sup>+</sup>15, LCHC15, VMC<sup>+</sup>14].

**Arithmetic** [GY17]. **art** [Moh14].

**Artificial** [SK16]. **Asian** [SPJ17].

**Assessment** [LCHC15]. **Astrophysics**

[GKS<sup>+</sup>14]. **Autonomic** [HPC<sup>+</sup>15]. **Aware**

[AOML<sup>+</sup>15, VMC<sup>+</sup>14, KBG16].

**Backup** [Gua16]. **Based**

[SJMLJ17, EDDZ16, KM15, KNI17]. **Basis** [JVT16]. **Beating** [GY17]. **become** [RNL15]. **beyond** [BS17]. **Big** [ACM<sup>+</sup>14, MST<sup>+</sup>14, BAL17]. **body** [NS16]. **Borderless** [BCH<sup>+</sup>15]. **Bridge** [LCHC15]. **calculation** [NS16]. **Case** [KM15, NPM15, KLAJ16]. **Cell** [MBS<sup>+</sup>16]. **Center** [NPM15]. **CFD** [YY17]. **Challenge** [BAL17]. **Challenges** [BBB<sup>+</sup>15, BMM<sup>+</sup>15, Moh14]. **Chebfun** [EDDZ16]. **Cholesky** [AFK<sup>+</sup>16]. **Climate** [KKL16, FOL<sup>+</sup>14]. **Cloud** [BCH<sup>+</sup>15, LCHC15]. **Cluster** [JVT16, RNL15]. **clusters** [Las14]. **Co** [GKS<sup>+</sup>14]. **Co-design** [GKS<sup>+</sup>14]. **Collective** [HM14]. **Combinatorial** [KLAJ16]. **Communication** [HM14, KBG16, YTK14]. **Complexity** [YTK14]. **Compression** [KKL16, SCH<sup>+</sup>14]. **Computation** [Gus16]. **Computations** [AOML<sup>+</sup>15]. **computer** [LDFK16]. **Computing** [AABC15, BCH<sup>+</sup>15, BMM<sup>+</sup>15, CHC<sup>+</sup>16, Gua16, KLY<sup>+</sup>17, SPJ17, SCH<sup>+</sup>14, SAB17, Las14, MBC<sup>+</sup>15, SKAB14]. **concept** [NDL<sup>+</sup>17]. **Congestion** [MVL<sup>+</sup>16]. **Consumption** [SWAB14]. **continents** [CHC<sup>+</sup>16]. **continual** [NS16]. **Convergence** [BAL17]. **Cooling** [MDS<sup>+</sup>16, LDFK16]. **Core** [Jen17a, KLAJ16]. **coupled** [ACM<sup>+</sup>14]. **CPU** [MBS<sup>+</sup>16, SG16, UWK<sup>+</sup>16]. **Create** [SPJ17]. **Creating** [MOD15]. **Critical** [MLC15]. **CSC** [RNL15]. **CUDA** [NS16]. **cultural** [EDDZ16]. **D** [MKYZ16, SJMLJ17]. **Data** [ACM<sup>+</sup>14, BCH<sup>+</sup>15, Chi15, EDDZ16, Gua16, KNI17, KKL16, Kun16, MST<sup>+</sup>14, SCH<sup>+</sup>14, SG16, MHW<sup>+</sup>16, BAL17]. **data-structure** [MHW<sup>+</sup>16]. **Database** [SPJ17]. **Databases** [WD16]. **Decomposition** [AFK<sup>+</sup>16, JVT16]. **Defined** [Gua16]. **Dense** [AOML<sup>+</sup>15, DAA<sup>+</sup>15]. **Design** [HE17, KLY<sup>+</sup>17, GKS<sup>+</sup>14]. **Development** [BDG<sup>+</sup>17, VO17]. **Different** [TKOM17]. **direct** [DK14]. **Discovery** [TWEL17]. **Distance** [AOML<sup>+</sup>15]. **Distance-Aware** [AOML<sup>+</sup>15]. **Distribute** [SPJ17]. **distributing** [CHC<sup>+</sup>16]. **Do** [MDS<sup>+</sup>16]. **Domain** [JVT16]. **Driven** [DHK<sup>+</sup>14]. **Dynamic** [MVL<sup>+</sup>16]. **E-scale** [Gua16]. **Early** [DK14]. **Easy** [vWEH<sup>+</sup>16]. **EBD** [MST<sup>+</sup>14]. **edge** [KCK<sup>+</sup>16, MOD15]. **Effects** [CHHBS17]. **Efficiency** [BBB<sup>+</sup>15, MDS<sup>+</sup>16, RNL15]. **Efficient** [KM15, CDP<sup>+</sup>15]. **Embedded** [KM15]. **Encyclopedia** [VAD15]. **Energy** [AABC15, BBB<sup>+</sup>15, CDP<sup>+</sup>15, HM14, KM15, MDS<sup>+</sup>16, SWAB14, TWEL17]. **Energy-Efficient** [KM15, CDP<sup>+</sup>15]. **Environment** [HPC<sup>+</sup>15, TKOM17]. **equations** [MKYZ16]. **Era** [SCH<sup>+</sup>14]. **Evaluation** [KNI17, DK14]. **Example** [Jen17a]. **Exascale** [CGG<sup>+</sup>14, Chi15, DFG<sup>+</sup>15, HPC<sup>+</sup>15, KKL14, MLC15, NZS16, SCH<sup>+</sup>14, SKAB14]. **Expenses** [KKL14]. **Exploration** [Chi15, KNI17, UWK<sup>+</sup>16]. **Exploring** [CHHBS17]. **Extract** [WD16]. **Extreme** [BDG<sup>+</sup>17, BS17, HE17, TWEL17, MST<sup>+</sup>14]. **Extreme-scale** [BDG<sup>+</sup>17]. **Fabric** [BCH<sup>+</sup>15]. **Facing** [BAL17]. **Factorizations** [DHK<sup>+</sup>14]. **factors** [RGL14]. **Fast** [YTK14]. **Fault** [Gua16]. **feasibility** [KBG16]. **Features** [VAD15]. **few** [NS16]. **few-body** [NS16]. **Feynman** [NS16]. **field** [MKYZ16]. **File** [Kun16]. **Fine** [BS17]. **Fine-Grain** [BS17]. **First** [VMC<sup>+</sup>14, LDFK16]. **Flight** [YY17]. **Floating** [GY17]. **Flow** [VO17]. **Fold** [SJMLJ17]. **Fonton** [BS17]. **Foreword** [MD15]. **Formats** [Kun16]. **Foundations** [BDG<sup>+</sup>17]. **Fourier** [JVT16]. **FPGA** [KM15]. **FPGA-based** [KM15]. **FPGAs** [LDFK16]. **Framework**

[KNI17, VO17, DTKV15]. **Freely** [SPJ17]. **fundamental** [RGL14]. **Fusion** [TWEL17]. **future** [Moh14].

**Game** [GY17]. **Generation** [MST<sup>+</sup>14]. **Genome** [LPL<sup>+</sup>15]. **Genomic** [BCH<sup>+</sup>15, SPJ17]. **Global** [BCH<sup>+</sup>15]. **GPU** [YY17]. **GPUs** [JVT16]. **Grain** [BS17]. **Graph** [KM15]. **graphs** [MOD15]. **Green500** [RNL15]. **greenest** [RNL15]. **ground** [NS16]. **GUI** [vWEH<sup>+</sup>16].

**Hardware** [TKOM17, MHW<sup>+</sup>16]. **hardware-independent** [MHW<sup>+</sup>16]. **Harvesting** [NPM15]. **Haswell** [LCHC15]. **HCA** [KBG16]. **heritage** [EDDZ16]. **Heterogeneous** [DAA<sup>+</sup>15, Las14, LPL<sup>+</sup>15]. **hierarchical** [Las14]. **High** [BCH<sup>+</sup>15, CHC<sup>+</sup>16, SPJ17, SAB17]. **Higher** [MDS<sup>+</sup>16]. **HPC** [BAL17, CGBS<sup>+</sup>15, LCHC15, SK16, SWAB14, TWEL17, vWEH<sup>+</sup>16]. **HPCG** [Jen17a]. **Human** [LPL<sup>+</sup>15]. **Hybrid** [MBS<sup>+</sup>16, Las14].

**I/O** [SK16]. **ICON** [VO17]. **Illustrated** [Kun16]. **imaging** [EDDZ16, GRS16]. **impact** [SG16]. **Implementation** [KLY<sup>+</sup>17, FOL<sup>+</sup>14, MBS<sup>+</sup>16]. **Implementing** [HM14]. **Improve** [MDS<sup>+</sup>16]. **In-Situ** [KNI17, VO17]. **independent** [MHW<sup>+</sup>16]. **Inescapable** [NZS16]. **InfiniBand** [DK14, LCHC15, MVL<sup>+</sup>16]. **InfiniCloud** [BCH<sup>+</sup>15, CHC<sup>+</sup>16]. **InfiniCortex** [BCH<sup>+</sup>15, NDL<sup>+</sup>17]. **Inflammation** [SJMLJ17]. **Infrastructure** [MST<sup>+</sup>14]. **INMOST** [DTKV15]. **Insect** [YY17]. **Instances** [LCHC15]. **integral** [MKYZ16]. **integrals** [NS16]. **Integration** [VO17]. **Intel** [LCHC15]. **interconnect** [MOD15]. **ISAAC** [MHW<sup>+</sup>16].

**Kit** [BDG<sup>+</sup>17].

**L** [RNL15]. **L-CSC** [RNL15]. **Langford** [KLAJ16]. **Large** [KLY<sup>+</sup>17, NPM15, NZS16, VO17, DK14]. **Large-Scale** [NZS16, VO17, DK14]. **Law** [BS17]. **Leading** [KCK<sup>+</sup>16]. **Leading-edge** [KCK<sup>+</sup>16]. **Level** [MDS<sup>+</sup>16]. **Leveraging** [BCH<sup>+</sup>15]. **Library** [KBG16]. **Light** [NPM15]. **Light-Harvesting** [NPM15]. **Linear** [DAA<sup>+</sup>15]. **Liquid** [MDS<sup>+</sup>16, LDFK16]. **list** [RNL15]. **Live** [SSG<sup>+</sup>15]. **Local** [JVT16].

**Machines** [DFG<sup>+</sup>15]. **Making** [NZS16]. **Management** [MVL<sup>+</sup>16]. **Many** [KLAJ16]. **Many-Core** [KLAJ16]. **Matrix** [AOML<sup>+</sup>15, Jen17a]. **Measurement** [AABC15, Moh14]. **mechanisms** [CGBS<sup>+</sup>15]. **Medicine** [SPJ17]. **Memory** [HM14, KYG17, MS14]. **merging** [EDDZ16]. **Message** [Jen17b]. **method** [MKYZ16, MBS<sup>+</sup>16, NS16, YTK14]. **Methods** [GKS<sup>+</sup>14]. **MOD** [MOD15]. **Model** [AFK<sup>+</sup>16, DHK<sup>+</sup>14, SKAB14]. **Model-Driven** [DHK<sup>+</sup>14]. **modeling** [DTKV15, MKYZ16]. **Models** [DAA<sup>+</sup>15, Jen17a, FOL<sup>+</sup>14]. **Module** [Jen17a]. **Molecular** [NPM15]. **Monitoring** [SG16]. **monochromatic** [MKYZ16]. **Moore** [BS17]. **MPI** [CGBS<sup>+</sup>15, Gua16, KBG16]. **Multi** [NPM15]. **Multi-Scale** [NPM15]. **Multicore** [DHK<sup>+</sup>14]. **Multipole** [YTK14].

**Necessary** [SPJ17]. **Neo** [LPL<sup>+</sup>15]. **Neo-heterogeneous** [LPL<sup>+</sup>15]. **Nesus** [BBB<sup>+</sup>15, BMM<sup>+</sup>15]. **Networks** [MVL<sup>+</sup>16, SK16, DK14]. **Neural** [SK16]. **Next** [MST<sup>+</sup>14]. **Non** [Gua16]. **Non-stop** [Gua16]. **November** [RNL15]. **NR** [Gua16]. **NR-MPI** [Gua16]. **nuclei** [NS16]. **NUMA** [AOML<sup>+</sup>15]. **Numbers** [Gus16]. **Numerical** [GKS<sup>+</sup>14, DTKV15].

**O** [SK16]. **Observable** [NZS16]. **offloading**

- [KBG16]. **One** [DHK<sup>+</sup>14]. **One-Sided** [DHK<sup>+</sup>14]. **Open** [VAD15]. **OpenStack** [BCH<sup>+</sup>15]. **Operations** [HM14]. **Opportunities** [BMM<sup>+</sup>15, MS14]. **Optimization** [LPL<sup>+</sup>15]. **Optimizing** [Jen17a, RNL15]. **Own** [GY17].
- Paradigms** [DFG<sup>+</sup>15]. **Parallel** [AFK<sup>+</sup>16, DTKV15, DAA<sup>+</sup>15, GKS<sup>+</sup>14, KBG16, MKYZ16, VAD15, Las14, Moh14]. **Parallelized** [LPL<sup>+</sup>15]. **Particle** [KNI17, UWK<sup>+</sup>16, MBS<sup>+</sup>16]. **Particle-in-Cell** [MBS<sup>+</sup>16]. **Patterns** [HE17]. **PDE** [Jen17a]. **Year** [MST<sup>+</sup>14]. **Performance** [BCH<sup>+</sup>15, BS17, CHHBS17, CHC<sup>+</sup>16, HPC<sup>+</sup>15, KNI17, LCHC15, MLC15, SK16, SPJ17, SG16, SAB17, TWEL17, TKOM17, FOL<sup>+</sup>14, Moh14, RGL14, SKAB14]. **Phenomena** [VO17]. **Phi** [MBS<sup>+</sup>16]. **Photosynthetic** [NPM15]. **Physics** [GKS<sup>+</sup>14]. **Pipeline** [LPL<sup>+</sup>15]. **Plasma** [GKS<sup>+</sup>14, MBS<sup>+</sup>16]. **platform** [DTKV15]. **platforms** [Las14]. **Point** [GY17]. **Population** [SPJ17]. **Portability** [TWEL17]. **Portable** [MLC15, FOL<sup>+</sup>14]. **Posit** [GY17]. **possible** [SG16]. **Power** [SWAB14, RNL15]. **Precision** [SPJ17]. **Predicting** [SK16, SWAB14]. **prediction** [RGL14]. **Preparing** [KCK<sup>+</sup>16]. **Problem** [KLAJ16]. **Problems** [KM15, KLAJ16, MS14]. **Processing** [AFK<sup>+</sup>16, KYG17, KCK<sup>+</sup>16, TKOM17]. **Processing-in-Memory** [KYG17]. **Processing-in-Storage** [KYG17]. **Production** [NDL<sup>+</sup>17, WD16]. **Programmer** [Gua16]. **Programming** [DFG<sup>+</sup>15, DAA<sup>+</sup>15, KLY<sup>+</sup>17, LPL<sup>+</sup>15, SSG<sup>+</sup>15]. **Project** [AFK<sup>+</sup>16, BBB<sup>+</sup>15, BMM<sup>+</sup>15]. **Proof** [NDL<sup>+</sup>17]. **Proof-of-concept** [NDL<sup>+</sup>17]. **Properties** [Kun16, SG16]. **Protocol** [Jen17b]. **PULSAR** [KLY<sup>+</sup>17].
- Radical** [Gus16]. **Ray** [UWK<sup>+</sup>16]. **Re** [LPL<sup>+</sup>15]. **Re-sequencing** [LPL<sup>+</sup>15]. **Real** [Gus16]. **Receive** [Jen17b]. **Reconfigurable** [LDFK16]. **removal** [MOD15]. **Rendering** [KNI17]. **Repair** [SJMLJ17]. **Require** [DFG<sup>+</sup>15]. **requirements** [KBG16]. **Research** [MS14]. **Resilience** [BMM<sup>+</sup>15, CGG<sup>+</sup>14, HE17]. **Resilient** [Gua16]. **Resources** [vWEH<sup>+</sup>16]. **Restore** [Gua16]. **routing** [DK14]. **Runtime** [HM14, KNI17, SAB17, VMC<sup>+</sup>14]. **Runtime-Aware** [VMC<sup>+</sup>14]. **Runtimes** [DFG<sup>+</sup>15].
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**Supercomputing** [NPM15]. **Supporting** [Gua16]. **Survey** [AABC15, SCH<sup>+</sup>14, SAB17]. **sustainable** [CGBS<sup>+</sup>15]. **System** [BMM<sup>+</sup>15, KLY<sup>+</sup>17, MVL<sup>+</sup>16, MDS<sup>+</sup>16]. **Systems** [BBB<sup>+</sup>15, CDP<sup>+</sup>15, DHK<sup>+</sup>14, DAA<sup>+</sup>15, Gua16, KKL14, MS14, NZS16, SAB17, LDFK16].

**Task** [CHHBS17]. **TaskInsight** [CHHBS17]. **Technologies** [MST<sup>+</sup>14, GRS16]. **technology** [NS16]. **Temperatures** [MDS<sup>+</sup>16]. **TH** [LPL<sup>+</sup>15]. **TH-2** [LPL<sup>+</sup>15]. **their** [SG16]. **tomographic** [GRS16]. **Tools** [AABC15, ACM<sup>+</sup>14, Moh14]. **topologies** [MOD15]. **Tracing** [UWK<sup>+</sup>16]. **Tradeoffs** [HM14]. **Transmit** [Jen17b]. **Trends** [BBB<sup>+</sup>15]. **Turbulence** [TWEL17].

**Ultrascale** [AABC15, BBB<sup>+</sup>15, BMM<sup>+</sup>15, CDP<sup>+</sup>15, MBC<sup>+</sup>15]. **Ultrasound** [JVT16]. **Unsteady** [VO17]. **Upcoming** [KCK<sup>+</sup>16]. **update** [CGG<sup>+</sup>14]. **Usage** [SG16]. **Using** [JVT16, SK16, SPJ17, Kun16].

**Variants** [YTK14]. **Visualization** [ACM<sup>+</sup>14, MLC15, SJMLJ17, VO17, WD16, MHW<sup>+</sup>16]. **Vocal** [SJMLJ17]. **Volume** [KNI17].

**Weak** [SWAB14]. **weather** [FOL<sup>+</sup>14]. **within** [BMM<sup>+</sup>15]. **Work** [AOML<sup>+</sup>15]. **Workflows** [BAL17]. **workstations** [Las14]. **world** [RNL15].

**Xeon** [MBS<sup>+</sup>16]. **xSDK** [BDG<sup>+</sup>17].

**Yottabyte** [MST<sup>+</sup>14]. **Yottabyte/Year** [MST<sup>+</sup>14].

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