

Matthias Korch

List of Publications by Year in descending order

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papers

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1937685

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20
times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Generation of logic designs for efficiently solving ordinary differential equations on field programmable gate arrays. <i>Software - Practice and Experience</i> , 2023, 53, 27-52.	3.6	2
2	An in-depth introduction of multi-workgroup tiling for improving the locality of explicit one-step methods for ODE systems with limited access distance on GPUs. <i>Concurrency Computation Practice and Experience</i> , 2021, 33, e6016.	2.2	4
3	Improving locality of explicit one-step methods on GPUs by tiling across stages and time steps. <i>Future Generation Computer Systems</i> , 2020, 102, 889-901.	7.5	2
4	Implementation and Optimization of a 1D2V PIC Method for Nonlinear Kinetic Models on GPUs. , 2020, , .		0
5	Multi-workgroup Tiling to Improve the Locality of Explicit One-Step Methods for ODE Systems with Limited Access Distance on GPUs. <i>Lecture Notes in Computer Science</i> , 2020, , 3-12.	1.3	2
6	Accelerating explicit ODE methods on GPUs by kernel fusion. <i>Concurrency Computation Practice and Experience</i> , 2018, 30, e4470.	2.2	7
7	Exploiting Limited Access Distance for Kernel Fusion Across the Stages of Explicit One-Step Methods on GPUs. , 2018, , .		3
8	Parallelization of Particle-in-Cell Codes for Nonlinear Kinetic Models from Mathematical Physics. , 2013, , .		2
9	MAP: Mobile Assistance Platform with a VM Type Selection Ability. , 2013, , .		0
10	Diamond-Like Tiling Schemes for Efficient Explicit Euler on GPUs. , 2012, , .		2
11	Locality Improvement of Data-Parallel Adams-Bashforth Methods through Block-Based Pipelining of Time Steps. <i>Lecture Notes in Computer Science</i> , 2012, , 563-574.	1.3	3
12	Scalability and locality of extrapolation methods on large parallel systems. <i>Concurrency Computation Practice and Experience</i> , 2011, 23, 1789-1815.	2.2	8
13	Parallel Low-Storage Runge-Kutta Solvers for ODE Systems with Limited Access Distance. <i>International Journal of High Performance Computing Applications</i> , 2011, 25, 236-255.	3.7	8
14	Memory-Intensive Applications on a Many-Core Processor. , 2011, , .		5
15	Storage space reduction for the solution of systems of ordinary differential equations by pipelining and overlapping of vectors. , 2010, , .		1
16	Applicability of dynamic selection of implementation variants of sequential iterated Runge-Kutta methods. , 2010, , .		1
17	Mixed-Parallel Implementations of Extrapolation Methods with Reduced Synchronization Overhead for Large Shared-Memory Computers. , 2010, , .		1
18	Scalability of Time- and Space-Efficient Embedded Runge-Kutta Solvers for Distributed Address Space. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
19	A comparison of task pools for dynamic load balancing of irregular algorithms. Concurrency Computation Practice and Experience, 2004, 16, 1-47.	2.2	43
20	Influence of Locality on the Scalability of Method-and System-Parallel Explicit Peer Methods. , 0, , .		3