

P Sadayappan

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

2,536
citations

516710

16
h-index

610901

24
g-index

42
all docs

42
docs citations

42
times ranked

1616
citing authors

#	ARTICLE	IF	CITATIONS
1	NWChem: Past, present, and future. Journal of Chemical Physics, 2020, 152, 184102.	3.0	425
2	Automated derivation of parametric data movement lower bounds for affine programs. , 2020, , .		13
3	Scalable Heterogeneous Execution of a Coupled-Cluster Model with Perturbative Triples. , 2020, , .		3
4	A Code Generator for High-Performance Tensor Contractions on GPUs. , 2019, , .		21
5	A Domain-Specific Compiler for a Parallel Multiresolution Adaptive Numerical Simulation Environment. , 2016, , .		8
6	Compiler/Runtime Framework for Dynamic Dataflow Parallelization of Tiled Programs. Transactions on Architecture and Code Optimization, 2015, 11, 1-30.	2.0	11
7	Automatic parallelization of a class of irregular loops for distributed memory systems. ACM Transactions on Parallel Computing, 2014, 1, 1-37.	1.4	7
8	Predictive Modeling in a Polyhedral Optimization Space. International Journal of Parallel Programming, 2013, 41, 704-750.	1.5	40
9	Adaptive parallel tiled code generation and accelerated auto-tuning. International Journal of High Performance Computing Applications, 2013, 27, 412-425.	3.7	4
10	A framework for load balancing of tensor contraction expressions via dynamic task partitioning. , 2013, , .		15
11	Effective Utilization of Tensor Symmetry in Operation Optimization of Tensor Contraction Expressions. Procedia Computer Science, 2012, 9, 412-421.	2.0	7
12	Dynamic selection of tile sizes. , 2011, , .		20
13	Loop transformations. , 2011, , .		72
14	Loop transformations. ACM SIGPLAN Notices, 2011, 46, 549-562.	0.2	32
15	Predictive modeling in a polyhedral optimization space. , 2011, , .		23
16	Combined Iterative and Model-driven Optimization in an Automatic Parallelization Framework. , 2010, , .		44
17	Compiler-assisted dynamic scheduling for effective parallelization of loop nests on multicore processors. ACM SIGPLAN Notices, 2009, 44, 219-228.	0.2	19
18	Performance Optimization of Tensor Contraction Expressions for Many-Body Methods in Quantum Chemistry. Journal of Physical Chemistry A, 2009, 113, 12715-12723.	2.5	24

#	ARTICLE	IF	CITATIONS
19	A practical automatic polyhedral parallelizer and locality optimizer. , 2008, , .		494
20	Automatic Transformations for Communication-Minimized Parallelization and Locality Optimization in the Polyhedral Model. , 2008, , 132-146.		89
21	A practical automatic polyhedral parallelizer and locality optimizer. ACM SIGPLAN Notices, 2008, 43, 101-113.	0.2	207
22	Automatic code generation for many-body electronic structure methods: the tensor contraction engine. Molecular Physics, 2006, 104, 211-228.	1.7	104
23	Synthesis of High-Performance Parallel Programs for a Class of ab Initio Quantum Chemistry Models. Proceedings of the IEEE, 2005, 93, 276-292.	21.3	134
24	Space-time trade-off optimization for a class of electronic structure calculations. , 2002, , .		37
25	A High-Level Approach to Synthesis of High-Performance Codes for Quantum Chemistry. , 2002, , .		13
26	Space-time trade-off optimization for a class of electronic structure calculations. ACM SIGPLAN Notices, 2002, 37, 177-186.	0.2	5
27	Loop optimization for a class of memory-constrained computations. , 2001, , .		25
28	Towards Automatic Synthesis of High-Performance Codes for Electronic Structure Calculations: Data Locality Optimization. Lecture Notes in Computer Science, 2001, , 237-248.	1.3	22
29	Partitioning graphs on message-passing machines by pairwise mincut. Information Sciences, 1998, 111, 223-237.	6.9	2
30	On Optimizing a Class of Multi-Dimensional Loops with Reduction for Parallel Execution. Parallel Processing Letters, 1997, 07, 157-168.	0.6	62
31	Compiling Array Expressions for Efficient Execution on Distributed-Memory Machines. Journal of Parallel and Distributed Computing, 1996, 32, 155-172.	4.1	69
32	Efficient Index Set Generation for Compiling HPF Array Statements on Distributed-Memory Machines. Journal of Parallel and Distributed Computing, 1996, 38, 237-247.	4.1	20
33	Tiling multidimensional iteration spaces for multicomputers. Journal of Parallel and Distributed Computing, 1992, 16, 108-120.	4.1	138
34	Compile-time techniques for data distribution in distributed memory machines. IEEE Transactions on Parallel and Distributed Systems, 1991, 2, 472-482.	5.6	130
35	Communication-free hyperplane partitioning of nested loops. , 1991, , 186-200.		17
36	Cluster partitioning approaches to mapping parallel programs onto a hypercube. Parallel Computing, 1990, 13, 1-16.	2.1	62

#	ARTICLE	IF	CITATIONS
37	Iterative algorithms for solution of large sparse systems of linear equations on hypercubes. IEEE Transactions on Computers, 1988, 37, 1554-1568.	3.4	101
38	A Parallel Approach To Solving a 3-D Finite Element Problem on a Distributed Memory MIMD Machine. , 0, , .		2
39	Parallel ALPID-3D: A 3-D Metal Forming Program for Parallel Computers. , 0, , .		0
40	A clustered reduced communication element by element preconditioned conjugate gradient algorithm for finite element computations. , 0, , .		1