Juan TouriÃ±o

List of Publications by Year
in descending order

124	1,129	567247 15	552766 26
papers	citations	h-index	g-index

132	132	132	862
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Parallel-FST: A feature selection library for multicore clusters. Journal of Parallel and Distributed Computing, 2022, 169, 106-116.	4.1	1
2	Optimizing Coherence Traffic in Manycore Processors Using Closed-Form Caching/Home Agent Mappings. IEEE Access, 2021, 9, 28930-28945.	4.2	0
3	Representing Integer Sequences Using Piecewise-Affine Loops. Mathematics, 2021, 9, 2368.	2.2	0
4	A Parallel Tool for the Identification of Differentially Methylated Regions in Genomic Analyses. Engineering Proceedings, 2021, 7, 44.	0.4	0
5	RGen: Data Generator for Benchmarking Big Data Workloads. Engineering Proceedings, 2021, 7, 13.	0.4	0
6	Performance Optimization of a Parallel Error Correction Tool. Engineering Proceedings, 2021, 7, .	0.4	0
7	SMusket: Spark-based DNA error correction on distributed-memory systems. Future Generation Computer Systems, 2020, 111, 698-713.	7.5	8
8	Real-time resource scaling platform for Big Data workloads on serverless environments. Future Generation Computer Systems, 2020, 105, 361-379.	7.5	12
9	Acceleration of a Feature Selection Algorithm Using High Performance Computing. Proceedings (mdpi), 2020, 54, .	0.2	1
10	Enabling Hardware Affinity in JVM-Based Applications: A Case Study for Big Data. Lecture Notes in Computer Science, 2020, , 31-44.	1.3	1
11	Power Budgeting of Big Data Applications in Container-based Clusters. , 2020, , .		2
12	Affine Modeling of Program Traces. IEEE Transactions on Computers, 2019, 68, 294-300.	3.4	4
13	Simulating the Network Activity of Modern Manycores. IEEE Access, 2019, 7, 81195-81210.	4.2	4
14	Effect of Distributed Directories in Mesh Interconnects. , 2019, , .		8
15	Parallel feature selection for distributed-memory clusters. Information Sciences, 2019, 496, 399-409.	6.9	9
16	Performance Evaluation of Big Data Analysis. , 2019, , 1265-1271.		0
17	BDEv 3.0: Energy efficiency and microarchitectural characterization of Big Data processing frameworks. Future Generation Computer Systems, 2018, 86, 565-581.	7.5	22
18	Enhancing in-memory efficiency for MapReduce-based data processing. Journal of Parallel and Distributed Computing, 2018, 120, 323-338.	4.1	6

#	Article	IF	Citations
19	BDWatchdog: Real-time monitoring and profiling of Big Data applications and frameworks. Future Generation Computer Systems, 2018, 87, 420-437.	7.5	10
20	Performance Evaluation of Big Data Analysis. , 2018, , 1-6.		2
21	Optimization of Real-World MapReduce Applications With Flame-MR: Practical Use Cases. IEEE Access, 2018, 6, 69750-69762.	4.2	1
22	HSRA: Hadoop-based spliced read aligner for RNA sequencing data. PLoS ONE, 2018, 13, e0201483.	2.5	12
23	Big Data-Oriented PaaS Architecture with Disk-as-a-Resource Capability and Container-Based Virtualization. Journal of Grid Computing, 2018, 16, 587-605.	3.9	3
24	MarDRe: efficient MapReduce-based removal of duplicate DNA reads in the cloud. Bioinformatics, 2017, 33, 2762-2764.	4.1	12
25	Flame-MR: An event-driven architecture for MapReduce applications. Future Generation Computer Systems, 2016, 65, 46-56.	7.5	14
26	Performance evaluation of big data frameworks for large-scale data analytics. , 2016, , .		37
27	Trace-based affine reconstruction of codes. , 2016, , .		11
28	Multithreaded and Spark parallelization of feature selection filters. Journal of Computational Science, 2016, 17, 609-619.	2.9	35
29	MSAProbs-MPI: parallel multiple sequence aligner for distributed-memory systems. Bioinformatics, 2016, 32, 3826-3828.	4.1	38
30	Performance Evaluation of Data-Intensive Computing Applications on a Public IaaS Cloud. Computer Journal, 2016, 59, 287-307.	2.4	4
31	Analysis and evaluation of MapReduce solutions on an HPC cluster. Computers and Electrical Engineering, 2016, 50, 200-216.	4.8	15
32	Parallel Pairwise Epistasis Detection on Heterogeneous Computing Architectures. IEEE Transactions on Parallel and Distributed Systems, 2016, 27, 2329-2340.	5.6	16
33	Locality-Aware Automatic Parallelization for GPGPU with OpenHMPP Directives. International Journal of Parallel Programming, 2016, 44, 620-643.	1.5	6
34	Lowâ€latency Java communication devices on RDMAâ€enabled networks. Concurrency Computation Practice and Experience, 2015, 27, 4852-4879.	2.2	0
35	Nonblocking collectives for scalable Java communications. Concurrency Computation Practice and Experience, 2015, 27, 1169-1187.	2.2	0
36	MREv: An Automatic MapReduce Evaluation Tool for Big Data Workloads. Procedia Computer Science, 2015, 51, 80-89.	2.0	7

#	Article	IF	Citations
37	Volatile STT-RAM Scratchpad Design and Data Allocation for Low Energy. Transactions on Architecture and Code Optimization, 2015, 11, 1-26.	2.0	16
38	The HPS3 Service: Reduction of Cost and Transfer Time for Storing Data on Clouds. , 2014, , .		0
39	A 2D algorithm with asymmetric workload for the UPC conjugate gradient method. Journal of Supercomputing, 2014, 70, 816-829.	3.6	0
40	FastMPJ: a scalable and efficient Java message-passing library. Cluster Computing, 2014, 17, 1031-1050.	5.0	8
41	A parallelizing compiler for multicore systems. , 2014, , .		2
42	Generalâ€purpose computation on GPUs for high performance cloud computing. Concurrency Computation Practice and Experience, 2013, 25, 1628-1642.	2.2	17
43	Web-GIS tool for the management of rural land markets. Earth Science Informatics, 2013, 6, 209-226.	3.2	8
44	Parallel simulation of Brownian dynamics on shared memory systems with OpenMP and Unified Parallel C. Journal of Supercomputing, 2013, 65, 1050-1062.	3.6	1
45	Performance evaluation of sparse matrix products in UPC. Journal of Supercomputing, 2013, 64, 100-109.	3.6	2
46	Evaluation of messaging middleware for high-performance cloud computing. Personal and Ubiquitous Computing, 2013, 17, 1709-1719.	2.8	7
47	The Servet 3.0 benchmark suite: Characterization of network performance degradation. Computers and Electrical Engineering, 2013, 39, 2483-2493.	4.8	2
48	Compiler-Assisted Checkpointing of Parallel Codes: The Cetus and LLVM Experience. International Journal of Parallel Programming, 2013, 41, 782-805.	1.5	1
49	Analysis of I/O Performance on an Amazon EC2 Cluster Compute and High I/O Platform. Journal of Grid Computing, 2013, 11, 613-631.	3.9	15
50	Performance analysis of HPC applications in the cloud. Future Generation Computer Systems, 2013, 29, 218-229.	7.5	85
51	Design and Implementation of an Extended Collectives Library for Unified Parallel C. Journal of Computer Science and Technology, 2013, 28, 72-89.	1.5	2
52	Parallel Brownian dynamics simulations with the message-passing and PGAS programming models. Computer Physics Communications, 2013, 184, 1191-1202.	7.5	2
53	A novel compiler support for automatic parallelization on multicore systems. Parallel Computing, 2013, 39, 442-460.	2.1	18
54	Java in the High Performance Computing arena: Research, practice and experience. Science of Computer Programming, 2013, 78, 425-444.	1.9	70

#	Article	IF	Citations
55	Design of Scalable Java Communication Middleware for Multi-Core Systems. Computer Journal, 2013, 56, 214-228.	2.4	4
56	Evaluation of Java for General Purpose GPU Computing. , 2013, , .		10
57	Communication avoiding and overlapping for numerical linear algebra. , 2012, , .		9
58	Design and Performance Issues of Cholesky and LU Solvers Using UPCBLAS. , 2012, , .		5
59	UPCBLAS: a library for parallel matrix computations in Unified Parallel C. Concurrency Computation Practice and Experience, 2012, 24, 1645-1667.	2.2	8
60	Design of scalable Java message-passing communications over InfiniBand. Journal of Supercomputing, 2012, 61, 141-165.	3.6	4
61	Automatic mapping of parallel applications on multicore architectures using the Servet benchmark suite. Computers and Electrical Engineering, 2012, 38, 258-269.	4.8	11
62	F-MPJ: scalable Java message-passing communications on parallel systems. Journal of Supercomputing, 2012, 60, 117-140.	3.6	30
63	Sistema de InformaciÃ³n del Banco de Tierras de Galicia. RISTI - Revista Iberica De Sistemas E Tecnologias De Informacao, 2012, .	0.2	3
64	Extending the Globus Information Service with the Common Information Model. , 2011, , .		1
65	Scalable Java Communication Middleware for Hybrid Shared/Distributed Memory Architectures. , 2011, , .		4
66	Design and Implementation of MapReduce Using the PGAS Programming Model with UPC. , 2011, , .		5
67	Design of efficient Java message-passing collectives onÂmulti-core clusters. Journal of Supercomputing, 2011, 55, 126-154.	3.6	7
68	Special issue on â€œTheory and practice ofÂhigh-performance computing, communications, andÂsecurityâ€• Journal of Supercomputing, 2011, 55, 123-125.	3.6	1
69	Device level communication libraries for highâ€performance computing in Java. Concurrency Computation Practice and Experience, 2011, 23, 2382-2403.	2.2	5
70	Dense Triangular Solvers on Multicore Clusters using UPC. Procedia Computer Science, 2011, 4, 231-240.	2.0	4
71	Analysis of Performance-impacting Factors on Checkpointing Frameworks: The CPPC Case Study. Computer Journal, 2011, 54, 1821-1837.	2.4	9
72	CPPC: a compilerâ€assisted tool for portable checkpointing of messageâ€passing applications. Concurrency Computation Practice and Experience, 2010, 22, 749-766.	2.2	41

#	Article	IF	Citations
73	Servet: A benchmark suite for autotuning on multicore clusters. , 2010, , .		18
74	Performance Evaluation of Unified Parallel C Collective Communications. , 2009, , .		5
75	Evaluation of UPC programmability using classroom studies. , 2009, , .		9
76	UPC performance evaluation on a multicore system. , 2009, , .		6
77	Java for high performance computing. , 2009, , .		23
78	NPB-MPJ: NAS Parallel Benchmarks Implementation for Message-Passing in Java. , 2009, , .		15
79	Efficient Java Communication Libraries over InfiniBand. , 2009, , .		2
80	Performance Evaluation of MPI, UPC and OpenMP on Multicore Architectures. Lecture Notes in Computer Science, 2009, , 174-184.	1.3	52
81	A Parallel Numerical Library for UPC. Lecture Notes in Computer Science, 2009, , 630-641.	1.3	3
82	Ontological Configuration Management for Wireless Mesh Routers. Lecture Notes in Computer Science, 2009, , 116-129.	1.3	1
83	Java Fast Sockets: Enabling high-speed Java communications on high performance clusters. Computer Communications, 2008, 31, 4049-4059.	5.1	16
84	Integrating the common information model with MDS4. , 2008, , .		9
85	XARK. ACM Transactions on Programming Languages and Systems, 2008, 30, 1-56.	2.1	26
86	Message from the HPCC 2008 Workshop Chairs. , 2008, , .		0
87	Message from the AHPCN 2008 Symposium Chairs. , 2008, , .		0
88	High Performance Java Sockets for Parallel Computing on Clusters. , 2007, , .		4
89	High Performance Java Remote Method Invocation for Parallel Computing on Clusters. Proceedings - International Symposium on Computers and Communications, 2007, , .	0.0	7
90	Enhancing Fault-Tolerance of Large-Scale MPI Scientific Applications. Lecture Notes in Computer Science, 2007, , 153-161.	1.3	4

#	Article	IF	Citations
91	Automated and accurate cache behavior analysis for codes with irregular access patterns. Concurrency Computation Practice and Experience, 2007, 19, 2407-2423.	2.2	14
92	Guest Editorial Grid Education and Grid-Based Technologies Applied to Education: Ongoing Activities. IEEE Transactions on Education, 2007, 50, 1-2.	2.4	3
93	Program Behavior Characterization Through Advanced Kernel Recognition. Lecture Notes in Computer Science, 2007, , 237-247.	1.3	2
94	Towards Low-Latency Model-Oriented Distributed Systems Management. Lecture Notes in Computer Science, 2007, , 41-50.	1.3	0
95	Efficient Java Communication Protocols on High-speed Cluster Interconnects. Local Computer Networks (LCN), Proceedings of the IEEE Conference on, 2006, , .	0.0	4
96	Message from HPSEC Workshop Co-chairs. , 2006, , .		0
97	Controller/Precompiler for Portable Checkpointing. IEICE Transactions on Information and Systems, 2006, E89-D, 408-417.	0.7	12
98	Non-blocking Java Communications Support on Clusters. Lecture Notes in Computer Science, 2006, , 256-265.	1.3	0
99	A Grid Portal for an Undergraduate Parallel Programming Course. IEEE Transactions on Education, 2005, 48, 391-399.	2.4	17
100	A GIS web-based tool for the management of the PGI potato of Galicia. Computers and Electronics in Agriculture, 2004, 44, 161-171.	7.7	2
101	A compiler tool to predict memory hierarchy performance of scientific codes. Parallel Computing, 2004, 30, 225-248.	2.1	11
102	A middleware architecture for distributed systems management. Journal of Parallel and Distributed Computing, 2004, 64, 759-766.	4.1	8
103	An Inspector-Executor Algorithm for Irregular Assignment Parallelization. Lecture Notes in Computer Science, 2004, , 4-15.	1.3	12
104	Performance analysis of Java message-passing libraries on fast Ethernet, Myrinet and SCI clusters. , 2003, , .		15
105	Research Article: A GIS-embedded system to support land consolidation plans in Galicia. International Journal of Geographical Information Science, 2003, 17, 377-396.	4.8	46
106	A GSA-based compiler infrastructure to extract parallelism from complex loops. , 2003, , .		14
107	Performance Modeling and Evaluation of Java Message-Passing Primitives on a Cluster. Lecture Notes in Computer Science, 2003, , 29-36.	1.3	0
108	A Compiler Framework to Detect Parallelism in Irregular Codes. Lecture Notes in Computer Science, 2003, , 306-320.	1.3	0

#	Article	IF	Citations
109	Performance analysis of MPI-I/O primitives on a PC cluster. , 2002, , .		1
110	Improving Locality in the Parallelization of Doacross Loops. Lecture Notes in Computer Science, 2002, , 275-279.	1.3	1
111	Irregular Assignment Computations on cc-NUMA Multiprocessors. Lecture Notes in Computer Science, 2002, , 361-369.	1.3	1
112	Towards Detection of Coarse-Grain Loop-Level Parallelism in Irregular Computations. Lecture Notes in Computer Science, 2002, , 289-298.	1.3	0
113	Characterization of message-passing overhead on the AP3000 multicomputer. , 2001, , .		4
114	Efficient parallel numerical solver for the elastohydrodynamic Reynoldsâ€“Hertz problem. Parallel Computing, 2001, 27, 1743-1765.	2.1	3
115	COPA. , 2001, , .		6
116	A parallel approach for solving a lubrication problem in industrial devices. Lecture Notes in Computer Science, 1999, , 1087-1093.	1.3	0
117	Performance Evaluation and Modeling of the Fujitsu AP3000 Message-Passing Librariesâ‹†. Lecture Notes in Computer Science, 1999, , 183-187.	1.3	5
118	A Parallel Algorithm for an Elastohydrodynamic Piezoviscous Lubrication Problem. , 1999, , 191-201.		1
119	Parallel sparse modified Gram-Schmidt QR decomposition. Lecture Notes in Computer Science, 1996, , 646-653.	1.3	2
120	Sparse Householder QR factorization on a mesh. , 0, , .		1
121	Exploiting locality in the run-time parallelization of irregular loops. , 0, , .		4
122	Compiler support for parallel code generation through kernel recognition. , 0, , .		3
123	A Framework Focus on Configuration Modeling and Integration with Transparent Persistence. , 0, , .		1
124	Designing Efficient Java Communications on Clusters. , 0, , .		5