James S Plank

List of Publications by Year
in descending order

69 papers	2,154 citations	471509 17 h-index	414414 32 g-index
70 all docs	70 docs citations	70 times ranked	929 citing authors

#	Article	IF	Citations
1	Analyzing Market-Based Resource Allocation Strategies for the Computational Grid. International Journal of High Performance Computing Applications, 2001, 15, 258-281.	3.7	317
2	Diskless checkpointing. IEEE Transactions on Parallel and Distributed Systems, 1998, 9, 972-986.	5.6	260
3	A tutorial on Reed-Solomon coding for fault-tolerance in RAID-like systems. Software - Practice and Experience, 1997, 27, 995-1012.	3.6	169
4	Checkpointing for peta-scale systems: a look into the future of practical rollback-recovery. IEEE Transactions on Dependable and Secure Computing, 2004, 1, 97-108.	5.4	143
5	Processor Allocation and Checkpoint Interval Selection in Cluster Computing Systems. Journal of Parallel and Distributed Computing, 2001, 61, 1570-1590.	4.1	77
6	ickp: a consistent checkpointer for multicomputers. IEEE Parallel and Distributed Technology, 1994, 2, 62-67.	0.6	73
7	Grid Resource Allocation and Control Using Computational Economies. , 0, , 747-771.		71
8	An end-to-end approach to globally scalable network storage. , 2002, , .		62
9	Memory exclusion: optimizing the performance of checkpointing systems. Software - Practice and Experience, 1999, 29, 125-142.	3.6	56
10	CLIP. , 1997, , .		55
11	An evolutionary optimization framework for neural networks and neuromorphic architectures. , 2016, , .		51
12	Sector-Disk (SD) Erasure Codes for Mixed Failure Modes in RAID Systems. ACM Transactions on Storage, 2014, 10, 1-17.	2.1	50
13	Note: Correction to the 1997 tutorial on Reed-Solomon coding. Software - Practice and Experience, 2005, 35, 189-194.	3.6	45
14	Fault-Tolerant Matrix Operations for Networks of Workstations Using Diskless Checkpointing. Journal of Parallel and Distributed Computing, 1997, 43, 125-138.	4.1	44
15	Construction of Partial MDS and Sector-Disk Codes With Two Global Parity Symbols. IEEE Transactions on Information Theory, 2016, 62, 2673-2681.	2.4	44
16	Evolutionary Optimization for Neuromorphic Systems. , 2020, , .		42
17	The TENNLab Exploratory Neuromorphic Computing Framework. IEEE Letters of the Computer Society, 2018, 1, 17-20.	1.0	41
18	A tutorial on Reed–Solomon coding for fault-tolerance in RAID-like systems. , 1997, 27, 995.		39

#	ARTICLE	IF	CITATIONS
19	Managing data storage in the network. IEEE Internet Computing, 2001, 5, 50-58.	3.3	37
20	The Raid-6 Liber8Tion Code. International Journal of High Performance Computing Applications, 2009, 23, 242-251.	3.7	37
21	ALGORITHMS FOR HIGH PERFORMANCE, WIDE-AREA DISTRIBUTED FILE DOWNLOADS. Parallel Processing Letters, 2003, 13, 207-223.	0.6	35
22	A New Minimum Density RAID-6 Code with a Word Size of Eight. , 2008, , .		28
23	The Internet Backplane Protocol: a study in resource sharing. Future Generation Computer Systems, 2003, 19, 551-561.	7.5	24
24	NeoN: Neuromorphic control for autonomous robotic navigation. , 2017, , .		23
25	Efficient Encoding Schedules for XOR-Based Erasure Codes. IEEE Transactions on Computers, 2014, 63, 2259-2272.	3.4	22
26	An efficient checkpointing method for multicomputers with wormhole routing. International Journal of Parallel Programming, 1991, 20, 159-180.	1.5	21
27	Deploying fault tolerance and taks migration with NetSolve. Future Generation Computer Systems, 1999, 15, 745-755.	7.5	20
28	DANNA 2. , 2018, , .		20
29	An efficient XOR-scheduling algorithm for erasure codes encoding. , 2009, , .		19
30	An end-to-end approach to globally scalable programmable networking. , 2003, , .		15
31	DANNA: A neuromorphic software ecosystem. Biologically Inspired Cognitive Architectures, 2016, 17, 49-56.	0.9	15
32	Intelligent Reservoir Generation for Liquid State Machines using Evolutionary Optimization. , 2019, , .		15
33	A Unified Hardware/Software Co-Design Framework for Neuromorphic Computing Devices and Applications. , 2017, , .		13
34	Partial MDS (PMDS) and Sector-Disk (SD) codes that tolerate the erasure of two random sectors. , 2014, , .		12
35	Design of Superconducting Optoelectronic Networks for Neuromorphic Computing. , 2018, , .		12
36	Minimum density RAID-6 codes. ACM Transactions on Storage, 2011, 6, 1-22.	2.1	11

#	Article	IF	Citations
37	Heuristics for optimizing matrix-based erasure codes for fault-tolerant storage systems. , 2012, , .		11
38	Memory exclusion: optimizing the performance of checkpointing systems. , 1999, 29, 125.		11
39	XOR's, lower bounds and MDS codes for storage. , 2011, , .		10
40	A Comparison of Neuromorphic Classification Tasks. , 2018, , .		10
41	Middleware for the use of storage in communication. Parallel Computing, 2002, 28, 1773-1787.	2.1	9
42	AN EXPLORATION OF NON-ASYMPTOTIC LOW-DENSITY, PARITY CHECK ERASURE CODES FOR WIDE-AREA STORAGE APPLICATIONS. Parallel Processing Letters, 2007, 17, 103-123.	0.6	9
43	Logistical quality of service in NetSolve. Computer Communications, 1999, 22, 1034-1044.	5.1	8
44	Real-time, concurrent checkpoint for parallel programs. ACM SIGPLAN Notices, 1990, 25, 79-88.	0.2	7
45	An end-to-end approach to globally scalable network storage. Computer Communication Review, 2002, 32, 339-346.	1.8	7
46	Stochasticity and robustness in spiking neural networks. Neurocomputing, 2021, 419, 23-36.	5.9	7
47	Parallel Evolutionary Optimization for Neuromorphic Network Training. , 2016, , .		6
48	An Application Development Platform for neuromorphic computing. , 2016, , .		6
49	An end-to-end approach to globally scalable programmable networking. Computer Communication Review, 2003, 33, 328-339.	1.8	4
50	A programming framework for neuromorphic systems with emerging technologies. , 2017, , .		4
51	Exposed versus Encapsulated Approaches to Grid Service Architecture. Lecture Notes in Computer Science, 2001, , 124-132.	1.3	4
52	Video IBPster. Future Generation Computer Systems, 2003, 19, 861-870.	7.5	3
53	GRANT: Ground-Roaming Autonomous Neuromorphic Targeter. , 2020, , .		3
54	A Software Framework for Comparing Training Approaches for Spiking Neuromorphic Systems. , 2021, , .		3

#	Article	IF	Citations
55	Active and logistical networking for grid computing: the e-Toile architecture. Future Generation Computer Systems, 2005, 21, 199-208.	7.5	2
56	Island model for parallel evolutionary optimization of spiking neuromorphic computing. , 2019, , .		2
57	Computational Techniques for Investigating Information Theoretic Limits of Information Systems. Information (Switzerland), 2021, 12, 82.	2.9	2
58	Benchmark Comparisons of Spike-based Reconfigurable Neuroprocessor Architectures for Control Applications. , 2022, , .		2
59	Extensions and enhancements for the DANNA neuromorphic architecture. , 2016, , .		1
60	High-Level Simulation for Spiking Neuromorphic Computing Systems. , 2018, , .		1
61	Neuromorphic Array Communications Controller to Support Large-Scale Neural Networks. , 2018, , .		1
62	Automated Design of Neuromorphic Networks for Scientific Applications at the Edge. , 2020, , .		1
63	A tutorial on Reedâ€"Solomon coding for fault-tolerance in RAID-like systems. , 1997, 27, 995.		1
64	A Framework to Enable Top-Down Co-Design of Neuromorphic Systems for Real-World Applications. , 2022, , .		1
65	Deploying fault-tolerance and task migration with NetSolve. Lecture Notes in Computer Science, 1998, , 418-432.	1.3	0
66	Structure-based fitness prediction for the variable-structure DANNA neuromorphic architecture. , 2017, , .		0
67	Understanding Selection And Diversity For Evolution Of Spiking Recurrent Neural Networks. , 2018, , .		0
68	Scaled-up Neuromorphic Array Communications Controller (SNACC) for Large-scale Neural Networks. , 2020, , .		0
69	Two-Level Private Information Retrieval. IEEE Journal on Selected Areas in Information Theory, 2022, , 1-1.	2.5	0