Nian-Feng Tzeng

List of Publications by Year
in descending order

72 papers	694 citations	840119 11 h-index	676716 22 g-index
72 all docs	72 docs citations	72 times ranked	495 citing authors

#	Article	IF	Citations
1	Novel self-configurable positioning technique for multihop wireless networks. IEEE/ACM Transactions on Networking, 2005, 13, 609-621.	2.6	74
2	Cost-Efficient and Robust On-Demand Video Transcoding Using Heterogeneous Cloud Services. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 556-571.	4.0	57
3	RFID Support for Accurate 3D Localization. IEEE Transactions on Computers, 2013, 62, 1447-1459.	2.4	42
4	Efficient resource placement in hypercubes using multiple-adjacency codes. IEEE Transactions on Computers, 1994, 43, 23-33.	2.4	34
5	SYN-MAC: A Distributed Medium Access Control Protocol for Synchronized Wireless Networks. Mobile Networks and Applications, 2005, 10, 627-637.	2.2	33
6	Effective Cost Reduction for Elastic Clouds under Spot Instance Pricing Through Adaptive Checkpointing. IEEE Transactions on Computers, 2015, 64, 396-409.	2.4	32
7	Energy-efficient scheme for multiprocessor-based router linecards. , 2006, , .		31
8	Resource allocation in cube network systems based on the covering radius. IEEE Transactions on Parallel and Distributed Systems, 1996, 7, 328-342.	4.0	29
9	TCAM-Based Forwarding Engine with Minimum Independent Prefix Set (MIPS) for Fast Updating. , 2006, , .		25
10	Cross-Layer Protocol Design and Optimization for Delay/Fault-Tolerant Mobile Sensor Networks (DFT-MSN's). IEEE Journal on Selected Areas in Communications, 2008, 26, 809-819.	9.7	25
11	Decentralized QoS-Aware Checkpointing Arrangement in Mobile Grid Computing. IEEE Transactions on Mobile Computing, 2010, 9, 1173-1186.	3.9	25
12	HaRP: Rapid Packet Classification via Hashing Round-Down Prefixes. IEEE Transactions on Parallel and Distributed Systems, 2011, 22, 1105-1119.	4.0	21
13	AoI and Throughput Tradeoffs in Routing-aware Multi-hop Wireless Networks. , 2020, , .		18
14	A Boolean expression-based approach for maximum incomplete subcube identification in faulty hypercubes. IEEE Transactions on Parallel and Distributed Systems, 1997, 8, 1171-1183.	4.0	17
15	Dynamic processor allocation in hypercube computers. Computer Architecture News, 1990, 18, 40-49.	2.5	17
16	Protocol Design and Optimization for Delay/Fault-Tolerant Mobile Sensor Networks. , 2007, , .		16
17	Adaptive Incremental Checkpointing via Delta Compression for Networked Multicore Systems. , 2013, , .		13
18	A circular list based mutual exclusion scheme for large shared-memory multiprocessors. IEEE Transactions on Parallel and Distributed Systems, 1997, 8, 628-639.	4.0	12

#	Article	IF	Citations
19	Fast compaction in hypercubes. IEEE Transactions on Parallel and Distributed Systems, 1998, 9, 50-56.	4.0	11
20	Boosting or Hindering: AoI and Throughput Interrelation in Routing-Aware Multi-Hop Wireless Networks. IEEE/ACM Transactions on Networking, 2021, 29, 1008-1021.	2.6	11
21	Minimum-Cost Data Delivery in Heterogeneous Wireless Networks. IEEE Transactions on Vehicular Technology, 2007, 56, 3511-3523.	3.9	9
22	Bufferless Network-on-Chips With Bridged Multiple Subnetworks for Deflection Reduction and Energy Savings. IEEE Transactions on Computers, 2020, 69, 577-590.	2.4	9
23	MAC-SCC: medium access control with a separate control channel for multihop wireless networks. , 0, , .		8
24	Balance-Based Energy-Efficient Communication Protocols forWireless Sensor Networks. , 2006, , .		8
25	Coherence-centric logging and recovery for home-based software distributed shared memory. , 0, , .		7
26	Coherence-based coordinated checkpointing for software distributed shared memory systems. , 0, , .		7
27	Coalescing and Deduplicating Incremental Checkpoint Files for Restore-Express Multi-Level Checkpointing. IEEE Transactions on Parallel and Distributed Systems, 2018, 29, 2713-2727.	4.0	7
28	Subcube determination in faulty hypercubes. IEEE Transactions on Computers, 1997, 46, 871-879.	2.4	6
29	An Efficient and Scalable Prioritized MAC Protocol (PMAC) for Backbone Communication in Wireless Sensor Networks. , 2009, , .		6
30	Deflection Containment for Bufferless Network-on-Chips. , 2016, , .		6
31	Empirical Evaluation of Incomplete Hypercube Systems. , 1993, , .		5
32	Lazy logging and prefetch-based crash recovery in software distributed shared memory systems. , 0, , .		5
33	A Reliable and Cost-Effective Sand Monitoring System on the Field Programmable Gate Array (FPGA). IEEE Transactions on Instrumentation and Measurement, 2013, 62, 1870-1881.	2.4	5
34	NUDA: Non-Uniform Directory Architecture for Scalable Chip Multiprocessors. IEEE Transactions on Computers, 2018, 67, 740-747.	2.4	5
35	Efficient determination of maximum incomplete subcubes in hypercubes with faults. IEEE Transactions on Computers, 1996, 45, 1303-1308.	2.4	4
36	Local Topology Assisted XOR Coding in Wireless Mesh Networks. , 2008, , .		4

#	ARTICLE	IF	CITATIONS
37	Design and Implementation of Effective Checkpointing for Multithreaded Applications on Future Clouds. , 2013, , .		4
38	Instant AoI Optimization in IoT Networks with Packet Combination. , 2020, , .		4
39	Cooperative Memory Expansion via OS Kernel Support for Networked Computing Systems. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 2650-2667.	4.0	4
40	Realizing Best Checkpointing Control in Computing Systems. IEEE Transactions on Parallel and Distributed Systems, 2021, 32, 315-329.	4.0	4
41	Analysis of a variant hypercube topology. Computer Architecture News, 1990, 18, 60-70.	2.5	3
42	On Resources Allocation in Binary n-Cube Network Systems. , 1993, , .		3
43	Hardware-assisted design for fast packet forwarding in parallel routers. , 2003, , .		3
44	Improving Application Execution in Multicluster Grids. , 2008, , .		3
45	The Palindrome network for fault-tolerant interconnection. , 0, , .		2
46	On-line task migration in hypercubes through double disjoint paths. IEEE Transactions on Computers, 1997, 46, 379-384.	2.4	2
47	Guided shared trees for efficient multicast in large networks. , 0, , .		2
48	Storage-Efficient Architecture for Routing Tables via Prefix Transformation. , 2007, , .		2
49	An Integrated Grid Portal for Managing Energy Resources. , 2007, , .		2
50	FaSReD: Fast and Scalable Resource Discovery in Support of Multiple Resource Range Requirements for Computational Grids. , 2008, , .		2
51	Compressed Sharer Tracking and Relinquishment Coherence for Superior Directory Efficiency of Chip Multiprocessors. IEEE Transactions on Computers, 2017, 66, 1975-1981.	2.4	2
52	Aggressive release consistency for software distributed shared memory. , 0, , .		1
53	Influence of high-level program structures on branch prediction accuracy. , 0, , .		1
54	Communication performance of a modular high-bandwidth multiprocessor system. , 2007, , .		1

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55	Exact Forwarding Table Partitioning for Efficient TCAM Power Savings. , 2007, , .		1
56	Bounded prefix expansion and compression in support of fast TCAM updating. , 2007, , .		1
57	Proximity-Aware Distributed Mutual Exclusion for Effective Peer-to-Peer Replica Management. , 2009, , .		1
58	Microhotplates for low power, and ultra dense gaseous sensor arrays using recessed silica aerogel for heat insulation. , 2013, , .		1
59	Age of Information Optimization in Multi-Channel Based Multi-Hop Wireless Networks. IEEE Transactions on Mobile Computing, 2022, , 1-15.	3.9	1
60	Issues on the architecture and the design of distributed shared memory systems. , 0, , .		0
61	Lock improvement technique for release consistency in distributed shared memory systems. , 0, , .		0
62	Simultaneous multithreading-based routers. , 0, , .		0
63	Design and evaluation of scalable switching fabrics for high-performance routers. , 0, , .		0
64	Performance evaluation of router switching fabrics. , 0, , .		0
65	DRA: A dependable architecture for high-performance routers. , 0, , .		0
66	STRESS: efficient multicast shared trees via restricted search. , 0, , .		0
67	ADENS: Efficient address determination for mobile grids. , 2007, , .		0
68	Application-Layer Packet Processing through Ethereal Memory. , 2008, , .		0
69	Deploying Virtual Clusters through P2P-based Content Distribution. , 2012, , .		0
70	Protecting Synchronization Mechanisms of Parallel Big Data Kernels via Logging. IEEE Transactions on Computers, 2021, , 1-1.	2.4	0
71	GPU-Assisted Memory Expansion. , 2021, , .		0
72	Active Learning with Multi-granular Graph Auto-Encoder. , 2020, , .		0