

Yitzhak Birk

List of Publications by Year in descending order

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Version: 2024-02-01

76
papers

1,499
citations

1040056

9
h-index

501196

28
g-index

77
all docs

77
docs citations

77
times ranked

594
citing authors

#	ARTICLE	IF	CITATIONS
1	Index Coding With Side Information. IEEE Transactions on Information Theory, 2011, 57, 1479-1494.	2.4	374
2	Informed-source coding-on-demand (ISCOD) over broadcast channels. , 0, , .		244
3	Coding on demand by an informed source (ISCOD) for efficient broadcast of different supplemental data to caching clients. IEEE Transactions on Information Theory, 2006, 52, 2825-2830.	2.4	237
4	Index Coding with Side Information. , 2006, , .		161
5	Constrained Flash memory programming. , 2011, , .		38
6	Merge Path - Parallel Merging Made Simple. , 2012, , .		38
7	Using direction and elapsed-time information to reduce the wireless cost of locating mobile units in cellular networks. Wireless Networks, 1995, 1, 403-412.	3.0	35
8	Using Underutilized CPU Resources to Enhance Its Reliability. IEEE Transactions on Dependable and Secure Computing, 2010, 7, 94-109.	5.4	30
9	On the uniform-traffic capacity of single-hop interconnections employing shared directional multichannels. IEEE Transactions on Information Theory, 1993, 39, 186-191.	2.4	26
10	Judicious use of redundant transmissions in multichannel ALOHA networks with deadlines. IEEE Journal on Selected Areas in Communications, 1999, 17, 257-269.	14.0	24
11	Track-pairing: a novel data layout for VOD servers with multi-zone-recording disks. , 0, , .		23
12	A Local Algorithm for Ad Hoc Majority Voting via Charge Fusion. Lecture Notes in Computer Science, 2004, , 275-289.	1.3	22
13	Random RAIDs with selective exploitation of redundancy for high performance video servers. , 0, , .		18
14	Multiple Working Points in Multichannel ALOHA with Deadlines. Wireless Networks, 2002, 8, 5-11.	3.0	17
15	Veracity radius. , 2006, , .		17
16	Bus-oriented interconnection topologies for single-hop communication among multi-transceiver stations. , 0, , .		13
17	Replicate and Bundle (RnB) – A Mechanism for Relieving Bottlenecks in Data Centers. , 2013, , .		12
18	Dynamic reconfiguration architectures for multi-context FPGAs. Computers and Electrical Engineering, 2009, 35, 878-903.	4.8	11

#	ARTICLE	IF	CITATIONS
19	On finding non-intersecting straightline connections of grid points to the boundary. Journal of Algorithms, 1992, 13, 636-656.	0.9	10
20	An empirical analysis of the IEEE-1394 serial bus protocol. IEEE Micro, 2000, 20, 58-65.	1.8	9
21	Coding schemes for multislot messages in multichannel ALOHA with deadlines. IEEE Transactions on Wireless Communications, 2002, 1, 292-301.	9.2	9
22	Power-optimal layout of passive, single-hop, fiber-optic interconnections whose capacity increases with the number of stations. , 0, , .		8
23	Deferred segmentation for wire-speed transmission of large TCP frames over standard GbE networks. , 0, , .		7
24	Efficient Dynamic Aggregation. Lecture Notes in Computer Science, 2006, , 90-104.	1.3	7
25	Fiber-optic bus-oriented single-hop interconnections among multi-transceiver stations. Journal of Lightwave Technology, 1991, 9, 1657-1664.	4.6	6
26	"Supernodes" in Packet Radio Networks Employing Code Division Multiple Access. , 1985, , .		5
27	Selective broadcast interconnection: a novel scheme for fiber-optic local-area networks. Optics Letters, 1985, 10, 629.	3.3	5
28	Selective Broadcast Interconnection (sbi) For Wideband Fiber-Optic Local Area Networks. , 1986, 0585, 179.		5
29	In-kernel integration of operating system and infiniband functions for high performance computing clusters: a DSM example. IEEE Transactions on Parallel and Distributed Systems, 2005, 16, 830-840.	5.6	5
30	A PAB-Based Multi-Prefetcher Mechanism. International Journal of Parallel Programming, 2006, 34, 171-188.	1.5	5
31	Low-complexity two-dimensional data encoding for memory inter-cell interference reduction. , 2012, , .		5
32	Fiber-optic bus-oriented single-hop interconnections among multi-transceiver stations. , 1992, , .		4
33	Efficient exploitation of kernel access to Infiniband: a software DSM example. , 0, , .		4
34	Increasing Deadline-Constrained Throughput in Multi-Channel ALOHA Networks via Non-Stationary Multiple-Power-Level Transmission Policies.. Wireless Networks, 2005, 11, 523-529.	3.0	4
35	Improving communication-phase completion times in HPC clusters through congestion mitigation. , 2009, , .		4
36	Minimal Maximum-Level Programming: Faster memory access via multi-level cell sharing. , 2013, , .		4

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37	Retired-page utilization in write-once memory — A coding perspective. , 2013, , .		4
38	Optimal VLSI Delay Tuning by Space Tapering With Clock-Tree Application. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 2160-2170.	5.4	4
39	Maximizing delay-constrained throughput in multi-channel DS-CDMA ALOHA networks through power diversity and successive decoding. Wireless Networks, 2009, 15, 1126-1139.	3.0	3
40	Battery and energy management in fleets of switchable battery EVs. , 2011, , .		3
41	Probabilistic performance of write-once memory with Linear Wom codes — Analysis and insights. , 2012, , .		3
42	Sound Covert: A Fast and Silent Communication Channel through the Audio Buffer. , 2017, , .		3
43	Passive CMOS Single Photon Avalanche Diode Imager for a Gun Muzzle Flash Detection System. IEEE Sensors Journal, 2019, 19, 5851-5858.	4.7	3
44	Buffered deflection routing for networks-on-chip. , 2012, , .		3
45	Power-efficient layout of a fiber-optic multistar that permits $\log/\text{sub } 2/ N$ concurrent baseband transmissions among N stations. Journal of Lightwave Technology, 1993, 11, 908-913.	4.6	2
46	Coding and Scheduling Considerations for Peer-to-Peer Storage Backup Systems. , 2007, , .		2
47	Integrating de-duplication and write for increased performance and endurance of Solid-State Drives. , 2010, , .		2
48	Minimal Maximum-Level Programming—Combined Cell Mapping and Coding for Faster MLC Memory. IEEE Journal on Selected Areas in Communications, 2016, 34, 2416-2429.	14.0	2
49	Distributed Memory Integrity Trees. IEEE Computer Architecture Letters, 2018, 17, 159-162.	1.5	2
50	Accurate Shielded Interconnect Delay Estimation by Reconfigurable Ring Oscillator. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 3435-3444.	5.4	2
51	Distributed-and-split data-control extension to SCSI for scalable storage area networks. , 0, , .		1
52	ASC-Based Acceleration in an FPGA with a Processor Core Using Software-Only Skills. , 2006, , .		1
53	TPT-RAID: a High Performance Box-Fault Tolerant Storage System. , 2007, , .		1
54	Rejuvenating ALOHA: Motivation, approaches and insights. , 2010, , .		1

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55	A computationally efficient algorithm for the 2D covariance method. , 2013, , .		1
56	Scheduling directives for shared-memory many-core processor systems. , 2013, , .		1
57	A Data Centric Perspective on Memory Placement. , 2015, , .		1
58	SDSM: Fast and scalable security support for directory-based distributed shared memory. , 2016, , .		1
59	SeM. , 2017, , .		1
60	CMOS Single-Photon Avalanche Diode Pixel Design for a Gun Muzzle Flash Detection Camera. IEEE Transactions on Electron Devices, 2018, 65, 4407-4412.	3.0	1
61	Post-Silicon Analysis of Shielded Interconnect Delays for Useful Skew Clock Design. IEEE Transactions on Electron Devices, 2019, 66, 4875-4882.	3.0	1
62	“Supernodes” in networks employing spread spectrum with code division multiple access. Computer Networks, 1988, 15, 341-357.	1.0	0
63	On-line control and deadlock-avoidance in a page-parallel multiprocessor rasterizer. IEEE Transactions on Parallel and Distributed Systems, 1993, 4, 155-163.	5.6	0
64	The effects of destructive interference and wasted transmissions on the uniform-traffic capacity of non-bus-oriented single-hop interconnections. IEEE/ACM Transactions on Networking, 1996, 4, 442-448.	3.8	0
65	A bucket-interleaving multiplexer for efficient near-on-demand streaming to resource-constrained clients. , 0, , .		0
66	Efficient parallel computation of the estimated covariance matrix. , 2010, , .		0
67	Memory array microarchitecture: Algorithmic techniques for density and performance enhancement. , 2012, , .		0
68	Accelerating duplicate data chunk recognition using NN trained by locality-sensitive hash. , 2014, , .		0
69	Scheduling directives: Accelerating shared-memory many-core processor execution. Parallel Computing, 2014, 40, 90-106.	2.1	0
70	SDSM: Fast and scalable security support for directory-based distributed shared memory. , 2016, , .		0
71	Fast and Scalable Security Support for Directory-Based Distributed Shared Memory. , 2016, , .		0
72	Prototype of real-time single photon avalanche diode-based muzzle flash detector. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
73	Time, Speed, Memory and Energy in Hybrid Data Center Networks – Insights and Some Guidelines. , 2018, , .		0
74	Switch Radix Reduction and Support for Concurrent Bidirectional Traffic in RotorNets. , 2018, , .		0
75	Redundancy and Randomization as Effective Tools for Improving Performance. , 2018, , .		0
76	Cost-Effective Jukebox Storage via Hybrid File-Block Caching. Lecture Notes in Computer Science, 1999, , 173-189.	1.3	0