Nir Shavit

List of Publications by Year
in descending order

57 papers	4,115 citations	257101 24 h-index	301761 39 g-index
57 all docs	57 docs citations	57 times ranked	1373 citing authors

#	Article	IF	Citations
1	Foundations of shared memory. , 2021, , 75-102.		0
2	Transactional programming. , 2021, , 467-496.		0
3	Mutual exclusion. , 2021, , 21-47.		0
4	Connectomes across development reveal principles of brain maturation. Nature, 2021, 596, 257-261.	13.7	205
5	Learning Guided Electron Microscopy with Active Acquisition. Lecture Notes in Computer Science, 2020, , 77-87.	1.0	2
6	Inherent limitations of hybrid transactional memory. Distributed Computing, 2018, 31, 167-185.	0.7	2
7	A Multicore Path to Connectomics-on-Demand. , 2017, , .		8
8	A Multicore Path to Connectomics-on-Demand. ACM SIGPLAN Notices, 2017, 52, 267-281.	0.2	3
9	The computability of relaxed data structures: queues and stacks as examples. Distributed Computing, 2016, 29, 395-407.	0.7	13
10	Transactional Memory. , 2016, , 2246-2249.		0
11	The SprayList: a scalable relaxed priority queue. ACM SIGPLAN Notices, 2015, 50, 11-20.	0.2	16
12	The SprayList: a scalable relaxed priority queue. , 2015, , .		55
13	The Computability of Relaxed Data Structures: Queues and Stacks as Examples. Lecture Notes in Computer Science, 2015, , 414-428.	1.0	6
14	Transactional Memory. , 2015, , 1-4.		1
15	Reduced Hardware NOrec. ACM SIGPLAN Notices, 2015, 50, 59-71.	0.2	3
16	Sparse sign-consistent Johnson–Lindenstrauss matrices: Compression with neuroscience-based constraints. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16872-16876.	3.3	11
17	StackTrack. , 2014, , .		42
18	The big data challenges of connectomics. Nature Neuroscience, 2014, 17, 1448-1454.	7.1	194

#	Article	IF	Citations
19	Reduced hardware transactions. , 2013, , .		31
20	On the Inherent Sequentiality of Concurrent Objects. SIAM Journal on Computing, 2012, 41, 519-536.	0.8	30
21	Data structures in the multicore age. Communications of the ACM, 2011, 54, 76-84.	3.3	159
22	Towards Consistency Oblivious Programming. Lecture Notes in Computer Science, 2011, , 65-79.	1.0	22
23	A scalable lock-free stack algorithm. Journal of Parallel and Distributed Computing, 2010, 70, 1-12.	2.7	105
24	TLRW. , 2010, , .		60
25	Flat combining and the synchronization-parallelism tradeoff. , 2010, , .		232
26	Nonblocking k-Compare-Single-Swap. Theory of Computing Systems, 2009, 44, 39-66.	0.7	2
27	Software transactional memory: Where do we come from? What are we? Where are we going?. , 2009, , .		1
28	An optimistic approach to lock-free FIFO queues. Distributed Computing, 2008, 20, 323-341.	0.7	30
29	Solo-valency and the cost of coordination. Distributed Computing, 2008, 21, 43-54.	0.7	3
30	Maintaining Consistent Transactional States without a Global Clock. Lecture Notes in Computer Science, 2008, , 131-140.	1.0	32
31	A Lazy Concurrent List-Based Set Algorithm. Parallel Processing Letters, 2007, 17, 411-424.	0.4	25
32	Understanding Tradeoffs in Software Transactional Memory. , 2007, , .		55
33	Toward a Topological Characterization of Asynchronous Complexity. SIAM Journal on Computing, 2006, 36, 457-497.	0.8	24
34	Predictive log-synchronization. Operating Systems Review (ACM), 2006, 40, 305-315.	1.5	3
35	A dynamic-sized nonblocking work stealing deque. Distributed Computing, 2006, 18, 189-207.	0.7	40
36	Transactional Locking II. Lecture Notes in Computer Science, 2006, , 194-208.	1.0	631

#	ARTICLE	IF	CITATIONS
37	Using elimination to implement scalable and lock-free FIFO queues. , 2005, , .		73
38	A scalable lock-free stack algorithm. , 2004, , .		143
39	Concurrent Data Structures. Chapman & Hall/CRC Computer and Information Science Series, 2004, , 47-1-47-30.	0.4	32
40	Nonblocking k-compare-single-swap. , 2003, , .		29
41	On the Uncontended Complexity of Consensus. Lecture Notes in Computer Science, 2003, , 45-59.	1.0	24
42	Non-blocking steal-half work queues. , 2002, , .		64
43	Towards a practical snapshot algorithm. Theoretical Computer Science, 2001, 269, 163-201.	0.5	22
44	Combining Funnels: A Dynamic Approach to Software Combining. Journal of Parallel and Distributed Computing, 2000, 60, 1355-1387.	2.7	62
45	Reactive Diffracting Trees. Journal of Parallel and Distributed Computing, 2000, 60, 853-890.	2.7	27
46	The topological structure of asynchronous computability. Journal of the ACM, 1999, 46, 858-923.	1.8	394
47	Combining funnels. , 1998, , .		9
48	On the space complexity of randomized synchronization. Journal of the ACM, 1998, 45, 843-862.	1.8	79
49	Bounded Concurrent Time-Stamping. SIAM Journal on Computing, 1997, 26, 418-455.	0.8	61
50	Software transactional memory. Distributed Computing, 1997, 10, 99-116.	0.7	290
51	Linearizable counting networks. Distributed Computing, 1996, 9, 193-203.	0.7	37
52	Diffracting trees. ACM Transactions on Computer Systems, 1996, 14, 385-428.	0.6	95
53	Scalable concurrent counting. ACM Transactions on Computer Systems, 1995, 13, 343-364.	0.6	39
54	A bounded first-in, first-enabled solution to the l -exclusion problem. ACM Transactions on Programming Languages and Systems, 1994, 16, 939-953.	1.7	37

#	Article	IF	Citations
55	Are wait-free algorithms fast?. Journal of the ACM, 1994, 41, 725-763.	1.8	57
56	Counting networks. Journal of the ACM, 1994, 41, 1020-1048.	1.8	134
57	Atomic snapshots of shared memory. Journal of the ACM, 1993, 40, 873-890.	1.8	361