Volker Turau

List of Publications by Year
in descending order

49 papers	327 citations	1162889 8 h-index	940416 16 g-index
50 all docs	50 docs citations	50 times ranked	195 citing authors

#	Article	IF	Citations
1	Linear self-stabilizing algorithms for the independent and dominating set problems using an unfair distributed scheduler. Information Processing Letters, 2007, 103, 88-93.	0.4	61
2	Perpetual Data Collection with Energy-Harvesting Sensor Networks. ACM Transactions on Sensor Networks, 2014, 11, 1-45.	2.3	42
3	Efficient transformation of distance-2 self-stabilizing algorithms. Journal of Parallel and Distributed Computing, 2012, 72, 603-612.	2.7	25
4	Fault tolerance in wireless sensor networks through self-stabilisation. International Journal of Communication Networks and Distributed Systems, 2009, 2, 78.	0.3	19
5	A fault-containing self-stabilizing <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:mrow><mml:mo>(</mml:mo><mml:mn>3</mml:mn><mml:mo>â‰</mml:mo><mml:mfrac><mml:mrow><mml: algorithm for vertex cover in anonymous networks. Theoretical Computer Science, 2011, 412, 4361-4371.	0.5	13
6	Adaptive energy-harvest profiling to enhance depletion-safe operation and efficient task scheduling. Sustainable Computing: Informatics and Systems, 2012, 2, 43-56.	1.6	12
7	Techniken zur Realisierung Web-basierter Anwendungen. Informatik-Spektrum, 1999, 22, 3-12.	1.0	11
8	Scalable Routing for Topic-Based Publish/Subscribe Systems Under Fluctuations. , 2017, , .		10
9	Multipleâ€Dispatching Based on Automata. Theory and Practice of Object Systems, 1995, 1, 41-59.	0.8	8
10	Cascading failures in complex networks caused by overload attacks. Journal of Heuristics, 2019, 25, 837-859.	1.1	8
11	Database research at IPSI. SIGMOD Record, 1992, 21, 133-138.	0.7	8
12	A self-stabilizing algorithm for constructing weakly connected minimal dominating sets. Information Processing Letters, 2009, 109, 763-767.	0.4	6
13	SELF-STABILIZING VERTEX COVER IN ANONYMOUS NETWORKS WITH OPTIMAL APPROXIMATION RATIO. Parallel Processing Letters, 2010, 20, 173-186.	0.4	6
14	Online energy assessment with supercapacitors and energy harvesters. Sustainable Computing: Informatics and Systems, 2014, 4, 10-23.	1.6	6
15	Holistic Simulation Approach for Optimal Operation of Smart Integrated Energy Systems under Consideration of Resilience, Economics and Sustainability. Infrastructures, 2021, 6, 150.	1.4	6
16	Fault-Containing Self-Stabilization in Asynchronous Systems with Constant Fault-Gap. , 2010, , .		5
17	Fault-containing self-stabilization in asynchronous systems with constant fault-gap. Distributed Computing, 2012, 25, 207-224.	0.7	5
18	A self-stabilizing algorithm for edge monitoring in wireless sensor networks. Information and Computation, 2017, 254, 367-376.	0.5	5

#	Article	IF	Citations
19	Impacts of domestic electric water heater parameters on demand response. Computer Science - Research and Development, 2017, 32, 49-64.	2.7	5
20	Understanding price functions to control domestic electric water heaters for demand response. Computer Science - Research and Development, 2018, 33, 81-92.	2.7	5
21	Stateless Information Dissemination Algorithms. Lecture Notes in Computer Science, 2020, , 183-199.	1.0	5
22	A dual-radio approach for reliable emergency signaling in critical infrastructure assets with large wireless networks. International Journal of Critical Infrastructure Protection, 2018, 21, 33-46.	2.9	4
23	Computing Fault-Containment Times of Self-Stabilizing Algorithms Using Lumped Markov Chains. Algorithms, 2018, 11, 58.	1.2	4
24	Sending multiple packets per guaranteed time slot in IEEE 802.15.4 DSME : Analysis and evaluation. Internet Technology Letters, 2020, 4, e167.	1.4	4
25	Performance Analysis of the Slot Allocation Handshake in IEEE 802.15.4 DSME. Lecture Notes in Computer Science, 2019, , 102-117.	1.0	4
26	A New Technique for Proving Self-stabilizing under the Distributed Scheduler. Lecture Notes in Computer Science, 2010, , 65-79.	1.0	4
27	Simulative evaluation of demand response approaches for waterbeds. , 2016, , .		3
28	openDSME: Reliable Time-Slotted Multi-Hop Communication for IEEE 802.15.4. EAI/Springer Innovations in Communication and Computing, 2019, , 451-467.	0.9	3
29	Amnesiac Flooding: Synchronous Stateless Information Dissemination. Lecture Notes in Computer Science, 2021, , 59-73.	1.0	3
30	Making Randomized Algorithms Self-stabilizing. Lecture Notes in Computer Science, 2019, , 309-324.	1.0	3
31	The Fortune 500 Web. Computer, 1998, 31, 119-120.	1.2	2
32	Self-stabilizing algorithms for efficient sets of graphs and trees. Information Processing Letters, 2013, 113, 771-776.	0.4	2
33	Appliance commitment for household load scheduling algorithm: A critical review. , 2017, , .		2
34	A Self-stabilizing Algorithm for Edge Monitoring Problem. Lecture Notes in Computer Science, 2014, , 93-105.	1.0	2
35	Self-stabilizing Local k-Placement of Replicas with Minimal Variance. Lecture Notes in Computer Science, 2012, , 16-30.	1.0	2
36	Fixed Points andÂ2-Cycles ofÂSynchronous Dynamic Coloring Processes onÂTrees. Lecture Notes in Computer Science, 2022, , 265-282.	1.0	2

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37	Equality testing for complex objects based on hashing. Data and Knowledge Engineering, 1993, 10, 101-111.	2.1	1
38	Holistic online energy assessment: Feasibility and practical application. , 2012, , .		1
39	Building-linked Location-based Instantaneous Services System. Procedia Computer Science, 2014, 32, 445-452.	1.2	1
40	Self-stabilizing local k-placement of replicas with local minimum variance. Theoretical Computer Science, 2015, 591, 15-27.	0.5	1
41	Calculating retail prices from demand response target schedules to operate domestic electric water heaters. Energy Informatics, 2018, 1, .	1.4	1
42	[1,2]-Domination in generalized Petersen graphs. Discrete Mathematics, Algorithms and Applications, 2019, 11, 1950058.	0.4	1
43	Synchronous Concurrent Broadcasts for Intermittent Channels with Bounded Capacities. Lecture Notes in Computer Science, 2021, , 296-312.	1.0	1
44	A Distributed Algorithm for Finding Hamiltonian Cycles in Random Graphs in $O(\log n)$ Time. Lecture Notes in Computer Science, 2018, , 72-87.	1.0	1
45	Constructing Customized Multi-hop Topologies in Dense Wireless Network Testbeds. Lecture Notes in Computer Science, 2018, , 319-331.	1.0	1
46	On Regular Tree Embeddings. SIAM Journal on Computing, 1999, 29, 288-301.	0.8	0
47	A O(m) Self-Stabilizing Algorithm for Maximal Triangle Partition of General Graphs. Parallel Processing Letters, 2017, 27, 1750004.	0.4	0
48	A $O(\log n)$ Distributed Algorithm to Construct Routing Structures for Pub/Sub Systems. Lecture Notes in Computer Science, 2018, , 65-79.	1.0	0
49	A distributed algorithm for finding Hamiltonian cycles in random graphs in $O(\log n)$ time. Theoretical Computer Science, 2020, 846, 61-74.	0.5	0