## Xavier Défago

## List of Publications by Year in descending order

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82 1,726 12 31 papers citations h-index g-index

88 88 88 776
all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Resilient Real-Valued Consensus in Spite of Mobile Malicious Agents on Directed Graphs. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 586-603.	5.6	12
2	Priority inheritance with backtracking for iterative multi-agent path finding. Artificial Intelligence, 2022, 310, 103752.	5.8	12
3	Active Modular Environment for Robot Navigation. , 2021, , .		1
4	Self-stabilizing gathering of mobile robots under crash or Byzantine faults. Distributed Computing, 2020, 33, 393-421.	0.8	10
5	Resilient Consensus against Mobile Malicious Agents. IFAC-PapersOnLine, 2020, 53, 3409-3414.	0.9	4
6	Using Model Checking to Formally Verify Rendezvous Algorithms for Robots with Lights in Euclidean Space., 2020,,.		3
7	Fault-Tolerant Mobile Robots. Lecture Notes in Computer Science, 2019, , 234-251.	1.3	5
8	Approximate QoS Rule Derivation Based on Root Cause Analysis for Cloud Computing., 2019,,.		6
9	Priority Inheritance with Backtracking for Iterative Multi-agent Path Finding. , 2019, , .		25
10	Amoeba Exploration: Coordinated Exploration with Distributed Robots., 2018,,.		3
11	Optimally Gathering Two Robots. , 2018, , .		16
12	Tight bound on mobile Byzantine Agreement. Theoretical Computer Science, 2016, 609, 361-373.	0.9	14
13	Flocking with Oblivious Robots. Lecture Notes in Computer Science, 2016, , 94-108.	1.3	3
14	Causal Order, Logical Clocks, State Machine Replication. , 2016, , 283-286.		0
15	Atomic Broadcast. , 2016, , 155-160.		O
16	Communicating Reliably in Multihop Dynamic Networks Despite Byzantine Failures. , 2015, , .		8
17	Reliability prediction for component-based software systems: Dealing with concurrent and propagating errors. Science of Computer Programming, 2015, 97, 426-457.	1.9	23
18	Discovering and Assessing Fine-Grained Metrics in Robot Networks Protocols. , 2014, , .		19

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19	Mitigating the Spread of a Virus in the Internet. , 2014, , .		O
20	Understanding the Power of Stigmergy of Anonymous Agents in Discrete Environments. , 2014, , .		0
21	Tight Bound on Mobile Byzantine Agreement. Lecture Notes in Computer Science, 2014, , 76-90.	1.3	6
22	Decreasing the Locks by Isolating the Concurrent Execution in Microprotocol Framework. , 2013, , .		0
23	A taxonomy of congestion control techniques for TCP in wired and wireless networks. , 2013, , .		3
24	Reliability Prediction for Component-Based Software Systems with Architectural-Level Fault Tolerance Mechanisms. , 2013, , .		10
25	The Gathering Problem for Two Oblivious Robots with Unreliable Compasses. SIAM Journal on Computing, 2012, 41, 26-46.	1.0	70
26	A Fast and Robust Optimistic Total Order Broadcast for Online Video Games. , 2012, , .		0
27	Reliability Prediction for Component-Based Systems: Incorporating Error Propagation Analysis and Different Execution Models. , 2012, , .		13
28	Exploration and Surveillance in Multi-robots Networks. , 2011, , .		4
29	Fault-tolerant flocking for a group of autonomous mobile robots. Journal of Systems and Software, 2011, 84, 29-36.	4.5	38
30	The cost of probabilistic agreement in oblivious robot networks. Information Processing Letters, 2010, 110, 431-438.	0.6	17
31	Self-stabilized Flocking of a Group of Mobile Robots under Memory Corruption. , 2009, , .		1
32	Using eventually consistent compasses to gather memory-less mobile robots with limited visibility. ACM Transactions on Autonomous and Adaptive Systems, 2009, 4, 1-27.	0.8	52
33	Fault-Tolerant Flocking of Mobile Robots with Whole Formation Rotation. , 2009, , .		7
34	A novel numerical algorithm based on self-tuning controller to support TCP flows. Mathematics and Computers in Simulation, 2008, 79, 1178-1188.	4.4	7
35	Non-uniform circle formation algorithm for oblivious mobile robots with convergence toward uniformity. Theoretical Computer Science, 2008, 396, 97-112.	0.9	89
36	An energy efficient routing scheme for mobile wireless sensor networks. , 2008, , .		49

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37	A Decentralized and Adaptive Flocking Algorithm for Autonomous Mobile Robots. , 2008, , .		63
38	Dynamic Scheduling Real-Time Task Using Primary-Backup Overloading Strategy for Multiprocessor Systems. IEICE Transactions on Information and Systems, 2008, E91-D, 796-806.	0.7	3
39	Fault-Tolerant Flocking in a k-Bounded Asynchronous System. Lecture Notes in Computer Science, 2008, , 145-163.	1.3	13
40	Causal Order, Logical Clocks, State Machine Replication. , 2008, , 129-131.		0
41	Atomic Broadcast. , 2008, , 73-76.		0
42	Hybrid Overloading and Stochastic Analysis for Redundant Real-time Multiprocessor Systems. , 2007, , .		12
43	Locality-preserving distributed path reservation protocol for asynchronous cooperative mobile robots. , 2007, , .		3
44	Comparative Analysis of QoS and Memory Usage of Adaptive Failure Detectors. , 2007, , .		8
45	Robust Self-Deployment for a Swarm of Autonomous Mobile Robots with Limited Visibility Range. , 2007, , .		1
46	Real-time Task Scheduling Using Extended Overloading Technique for Multiprocessor Systems. , 2007, , .		6
47	Anonymous Stabilizing Leader Election using a Network Sequencer. International Conference on Advanced Networking and Applications, 2007, , .	0.0	0
48	Collision prevention using group communication for asynchronous cooperative mobile robots. International Conference on Advanced Networking and Applications, 2007, , .	0.0	6
49	Gathering Two Stateless Mobile Robots Using Very v. , 2007, , .		5
50	Collision Prevention Platform for a Dynamic Group of Asynchronous Cooperative Mobile Robots. Journal of Networks, 2007, 2, .	0.4	5
51	Hybrid Overloading and Stochastic Analysis for Redundant Real-time Multiprocessor Systems. Proceedings of the IEEE Symposium on Reliable Distributed Systems, 2007, , .	0.0	0
52	An SNMP based failure detection service. Proceedings of the IEEE Symposium on Reliable Distributed Systems, 2006, , .	0.0	14
53	End-to-end consensus using end-to-end channels. , 2006, , .		2
54	Design and Analysis of a Self-Tuning Proportional and Integral Controller for Active Queue Management Routers to Support TCP Flows. , 2006, , .		21

#	Article	IF	Citations
55	Fault-Tolerant and Self-stabilizing Mobile Robots Gathering. Lecture Notes in Computer Science, 2006, , 46-60.	1.3	72
56	Using Eventually Consistent Compasses to Gather Oblivious Mobile Robots with Limited Visibility. Lecture Notes in Computer Science, 2006, , 484-500.	1.3	14
57	LRC-RED: A Self-tuning Robust and Adaptive AQM Scheme. , 2005, , .		1
58	A Brief Comparative Study on Analytical Models of Computer System Dependability and Security. , 2005,		3
59	A Survey of Mobile Agent-Based Fault-Tolerant Technology. , 2005, , .		11
60	Towards a Theory of Self-organization. Lecture Notes in Computer Science, 2005, , 505-506.	1.3	6
61	An Integrated System for Distributed Bioinformatics Environment on Grids. Lecture Notes in Computer Science, 2005, , 8-19.	1.3	5
62	A Single-Pass Online Data Mining Algorithm Combined with Control Theory with Limited Memory in Dynamic Data Streams. Lecture Notes in Computer Science, 2005, , 1119-1130.	1.3	0
63	A Resource-Based Server Performance Control for Grid Computing Systems. Lecture Notes in Computer Science, 2005, , 56-64.	1.3	1
64	Total order broadcast and multicast algorithms. ACM Computing Surveys, 2004, 36, 372-421.	23.0	381
65	Semi-passive replication and Lazy Consensus. Journal of Parallel and Distributed Computing, 2004, 64, 1380-1398.	4.1	14
66	Decomposition of fundamental problems for cooperative autonomous mobile systems. , 2004, , .		4
67	The /spl phi/ accrual failure detector. , 2004, , .		108
68	Circle formation for oblivious anonymous mobile robots with no common sense of orientation. , 2002, , .		88
69	Failure detectors as first class objects. , 1999, , .		60
70	Optimization techniques for replicating CORBA objects. , 1999, , .		6
71	Highly Available Trading System: Experiments with CORBA. , 1998, , 91-104.		2
72	Semi-passive replication. , 0, , .		55

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73	Contention-aware metrics for distributed algorithms: comparison of atomic broadcast algorithms. , 0, , .		21
74	Neko: a single environment to simulate and prototype distributed algorithms. , 0, , .		39
75	Impact of a failure detection mechanism on the performance of consensus. , 0, , .		18
76	Chasing the FLP impossibility result in a LAN: or, How robust can a fault tolerant server be?. , 0, , .		8
77	Time vs. space in fault-tolerant distributed systems. , 0, , .		5
78	Broadcasting messages in fault-tolerant distributed systems: the benefit of handling input-triggered and output-triggered suspicions differently. , 0, , .		16
79	Group communication based on standard interfaces. , 0, , .		6
80	Fault-Tolerant Group Membership Protocols Using Physical Robot Messengers. , 0, , .		1
81	Definition and Specification of Accrual Failure Detectors. , 0, , .		27
82	Information Propagation on the φ Failure Detector. , 0, , .		0