Luiz F M Vieira

List of Publications by Year
in descending order

87 papers	2,419 citations	567281 15 h-index	315739 38 g-index
87 all docs	87 docs citations	87 times ranked	1703 citing authors

#	Article	IF	Citations
1	Visible Light Communication: Concepts, Applications and Challenges. IEEE Communications Surveys and Tutorials, 2019, 21, 3204-3237.	39.4	317
2	Geographic and Opportunistic Routing for Underwater Sensor Networks. IEEE Transactions on Computers, 2016, 65, 548-561.	3.4	264
3	Pressure Routing for Underwater Sensor Networks. , 2010, , .		157
4	Localization with Dive'N'Rise (DNR) beacons for underwater acoustic sensor networks. , 2007, , .		120
5	AUV-Aided Localization for Underwater Sensor Networks. , 2007, , .		114
6	Underwater Wireless Sensor Networks. ACM Computing Surveys, 2019, 51, 1-36.	23.0	110
7	Programmable Networksâ€"From Software-Defined Radio to Software-Defined Networking. IEEE Communications Surveys and Tutorials, 2015, 17, 1102-1125.	39.4	91
8	Fast Packet Processing with eBPF and XDP. ACM Computing Surveys, 2021, 53, 1-36.	23.0	89
9	GEDAR: Geographic and opportunistic routing protocol with Depth Adjustment for mobile underwater sensor networks. , 2014, , .		86
10	Design guidelines for opportunistic routing in underwater networks. , 2016, 54, 40-48.		83
11	Phero-trail: a bio-inspired location service for mobile underwater sensor networks. IEEE Journal on Selected Areas in Communications, 2010, 28, 553-563.	14.0	61
12	A novel void node recovery paradigm for long-term underwater sensor networks. Ad Hoc Networks, 2015, 34, 144-156.	5.5	55
13	AUV-Aided Localization for Underwater Sensor Networks. , 2007, , .		54
14	Scheduling nodes in wireless sensor networks: a Voronoi approach. , 2003, , .		49
15	NanoRouter: A Quantum-dot Cellular Automata Design. IEEE Journal on Selected Areas in Communications, 2013, 31, 825-834.	14.0	49
16	DCR: Depth-Controlled Routing protocol for underwater sensor networks. , 2013, , .		46
17	Robust Serial Nanocommunication With QCA. IEEE Nanotechnology Magazine, 2015, 14, 464-472.	2.0	42
18	Performance and trade-offs of opportunistic routing in underwater networks. , 2012, , .		37

#	Article	IF	Citations
19	EnOR: Energy balancing routing protocol for underwater sensor networks. , 2017, , .		37
20	Performance modeling and analysis of void-handling methodologies in underwater wireless sensor networks. Computer Networks, 2017, 126, 1-14.	5.1	30
21	TCAM/CAM-QCA: (Ternary) Content Addressable Memory using Quantum-dot Cellular Automata. Microelectronics Journal, 2015, 46, 563-571.	2.0	25
22	Mobile Matrix: Routing under mobility in IoT, IoMT, and Social IoT. Ad Hoc Networks, 2018, 78, 84-98.	5.5	24
23	Fundamental limits on end-to-end throughput of network coding in multi-rate and multicast wireless networks. Computer Networks, 2013, 57, 3267-3275.	5.1	23
24	Modeling and Analysis of Opportunistic Routing in Low Duty-Cycle Underwater Sensor Networks. , 2015, , .		22
25	Transmission power control-based opportunistic routing for wireless sensor networks. , 2014, , .		21
26	CodeDrip: Improving data dissemination for wireless sensor networks with network coding. Ad Hoc Networks, 2017, 54, 42-52.	5.5	18
27	Underwater Sensor Networks for Smart Disaster Management. IEEE Consumer Electronics Magazine, 2020, 9, 107-114.	2.3	18
28	Performance of Network-Coding in Multi-Rate Wireless Environments for Multicast Applications. , 2007, , .		16
29	Water ping: ICMP for the internet of underwater things. Computer Networks, 2019, 152, 54-63.	5.1	15
30	A Joint Anypath Routing and Duty-Cycling Model for Sustainable Underwater Sensor Networks. IEEE Transactions on Sustainable Computing, 2019, 4, 314-325.	3.1	15
31	CodeDrip: Data Dissemination Protocol with Network Coding for Wireless Sensor Networks. Lecture Notes in Computer Science, 2014, , 34-49.	1.3	15
32	A genetic algorithm for the minimum cost localization problem in wireless sensor networks. , 2013, , .		14
33	Autonomous Wireless Lake Monitoring. Computing in Science and Engineering, 2018, 20, 66-75.	1.2	14
34	SewerSnort: A drifting sensor for in situ Wastewater Collection System gas monitoring. Ad Hoc Networks, 2013, 11, 1456-1471.	5.5	13
35	Modeling the sleep interval effects in duty-cycled underwater sensor networks. , 2016, , .		13
36	Link probability, node degree and coverage in three-dimensional networks. Ad Hoc Networks, 2016, 37, 153-159.	5.5	13

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37	HydroNode: A low cost, energy efficient, multi purpose node for underwater sensor networks. , 2012, , .		12
38	CAPTAIN: A data collection algorithm for underwater optical-acoustic sensor networks. Computer Networks, 2020, 171, 107145.	5.1	12
39	OpenFlow data planes performance evaluation. Performance Evaluation, 2021, 147, 102194.	1.2	12
40	Enriching Traffic Information with a Spatiotemporal Model based on Social Media. , 2018, , .		11
41	DYRP-VLC: A dynamic routing protocol for Wireless Ad-Hoc Visible Light Communication Networks. Ad Hoc Networks, 2019, 94, 101941.	5.5	11
42	Automatic MAC protocol selection in wireless networks based on reinforcement learning. Computer Communications, 2020, 149, 312-323.	5.1	11
43	3D MANETs: Link Probability, Node Degree, Network Coverage and applications. , 2011, , .		10
44	Network management through graphs in Software Defined Networks. , 2014, , .		10
45	Mobile Robot Localization in Indoor Environments Using Multiple Wireless Technologies. , 2012, , .		9
46	eXtend collection tree protocol. , 2015, , .		9
47	A Scenario Based Heuristic for the Robust Shortest Path Tree Problem**This work was partially supported by CNPq, CAPES, and FAPEMIG.. IFAC-PapersOnLine, 2016, 49, 443-448.	0.9	9
48	UW-SEEDEX: A Pseudorandom-Based MAC Protocol for Underwater Acoustic Networks. IEEE Transactions on Mobile Computing, 2022, 21, 3402-3413.	5.8	9
49	Survey on the design of underwater sensor nodes. Design Automation for Embedded Systems, 2016, 20, 171-190.	1.0	8
50	Network Coding for 5G Network and D2D Communication. , 2017, , .		8
51	Matrix: Multihop Address allocation and dynamic any-To-any Routing for 6LoWPAN. Computer Networks, 2018, 140, 28-40.	5.1	8
52	The internet of light: Impact of colors in LED-to-LED visible light communication systems. Internet Technology Letters, 2019, 2, e78.	1.9	8
53	Cellular automata-based byte error correction in QCA. Nano Communication Networks, 2020, 23, 100278.	2.9	8
54	CGR: Centrality-based green routing for Low-power and Lossy Networks. Computer Networks, 2017, 129, 117-128.	5.1	7

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55	FWB: Funneling Wider Bandwidth algorithm for high performance data collection in Wireless Sensor Networks. Computer Communications, 2019, 148, 136-151.	5.1	6
56	3DVS: Node scheduling in underwater sensor networks using 3D voronoi diagrams. Computer Networks, 2019, 159, 73-83.	5.1	6
57	HydroNode. , 2012, , .		5
58	Performance of Greedy Forwarding in Geographic Routing for the Internet of Drones. Internet Technology Letters, 2018, 1, e47.	1.9	5
59	Intra and inter-flow link aggregation in SDN. Telecommunication Systems, 2022, 79, 95-107.	2.5	5
60	Wireless scheduling with multiple data rates: From physical interference to disk graphs. Computer Networks, 2016, 106, 64-76.	5.1	4
61	Modeling, Analysis and Simulation of Wireless Power Transfer. , 2017, , .		4
62	Optimal Transmission Range and Charging Time for Qi-Compliant Systems. IEEE Transactions on Power Electronics, 2020, 35, 12765-12772.	7.9	4
63	Grayâ€code adder with parity generator â€" a novel quantumâ€dot cellular automata implementation. IET Circuits, Devices and Systems, 2020, 14, 243-250.	1.4	4
64	A cooperative protocol for pervasive underwater acoustic networks. Wireless Networks, 2021, 27, 1941-1963.	3.0	4
65	CodePLC: A Network Coding MAC Protocol for Power Line Communication. , 2016, , .		3
66	FlushMF: A Transport Protocol Using Multiple Frequencies for Wireless Sensor Network. , 2016, , .		3
67	A fixâ€andâ€optimize heuristic for the minmax regret shortest path arborescence problem under interval uncertainty. International Transactions in Operational Research, 2023, 30, 1120-1143.	2.7	3
68	Dual Radio Networks: Are Two Disjoint Paths Enough?. IEEE Internet of Things Magazine, 2021, 4, 67-71.	2.6	3
69	Wireless multi-rate scheduling: From physical interference to disk graphs. , 2012, , .		2
70	FS-MAC: A flexible MAC platform for wireless networks. , 2018, , .		2
71	SEGMETRIK: Protocol and metrics for advertisement performance tracking in VANETs. Vehicular Communications, 2020, 22, 100212.	4.0	2
72	A Continuous Restricted Boltzmann Machine and Logistic Regression Framework for Circuit Classification. , 2020, , .		2

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73	A dynamic network coding MAC protocol for power line communication. Telecommunication Systems, 2021, 77, 359-375.	2.5	2
74	Routing IPv6 over wireless networks with low-memory devices. , 2013, , .		1
75	Context transmission in personal IoT through an extension of the EPC Tag Data Standard. , 2015, , .		1
76	A MILP-based VND for the min-max regret Shortest Path Tree Problem with interval costs. Electronic Notes in Discrete Mathematics, 2018, 66, 39-46.	0.4	1
77	COPPER: Increasing Underwater Sensor Network Performance Through Nodes Cooperation. , 2018, , .		1
78	Comparison of data center traffic division policies using SDN. , 2018, , .		1
79	DCTP-A and DCTP-I. , 2019, , .		1
80	BloomTime: space-efficient stateful tracking of time-dependent network performance metrics. Telecommunication Systems, 2020, 74, 201-223.	2.5	1
81	Performance evaluation of AODV over CSMA and TSCH. Internet Technology Letters, 0, , e276.	1.9	1
82	Selection of formal verification heuristics for parallel execution. International Journal on Software Tools for Technology Transfer, 2012, 14, 95-108.	1.9	0
83	Data-rate maximization in wireless communication networks. , 2013, , .		0
84	SOAN: Selfâ€organizing aerial networks. Internet Technology Letters, 2019, 2, e104.	1.9	0
85	Routing and Mobility Management in the Internet of Things. , 0, , .		0
86	On Braess's Paradox and Routing Algorithms. Internet Technology Letters, 0, , e334.	1.9	0
87	A Proposal of a Dynamic Routing Multicast Protocol for Visible Light Communication Networks. , 2021, , .		0