Stephan Olariu

List of Publications by Year
in descending order

135 papers	3,088 citations	331670 21 h-index	214800 47 g-index
139 all docs	139 docs citations	139 times ranked	2092 citing authors

#	Article	IF	Citations
1	Security challenges in vehicular cloud computing. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 284-294.	8.0	216
2	Enhancing VANET Performance by Joint Adaptation of Transmission Power and Contention Window Size. IEEE Transactions on Parallel and Distributed Systems, 2011, 22, 1528-1535.	5.6	198
3	Taking VANET to the clouds. International Journal of Pervasive Computing and Communications, 2011, 7, 7-21.	1.3	186
4	Datacenter at the Airport: Reasoning about Time-Dependent Parking Lot Occupancy. IEEE Transactions on Parallel and Distributed Systems, 2012, 23, 2067-2080.	5.6	150
5	SmartParking: A Secure and Intelligent Parking System. IEEE Intelligent Transportation Systems Magazine, 2011, 3, 18-30.	3.8	141
6	Towards Autonomous Vehicular Clouds. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 1-16.	0.3	137
7	A Probabilistic Analysis of Link Duration in Vehicular Ad Hoc Networks. IEEE Transactions on Intelligent Transportation Systems, 2011, 12, 1227-1236.	8.0	134
8	Taking VANET to the clouds. , 2010, , .		113
9	ANSWER: AutoNomouS netWorked sEnsoR system. Journal of Parallel and Distributed Computing, 2007, 67, 111-124.	4.1	106
10	TDMA cluster-based MAC for VANETs (TC-MAC). , 2012, , .		77
11	A Survey of Vehicular Cloud Research: Trends, Applications and Challenges. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 2648-2663.	8.0	72
12	Towards autonomous vehicular clouds. EAI Endorsed Transactions on Mobile Communications and Applications, 2011, 11, e2.	0.5	72
13	A survey of vehicular communications for traffic signal optimization. Vehicular Communications, 2015, 2, 70-79.	4.0	56
14	Data-Centric Protocols for Wireless Sensor Networks. , 2005, , 417-456.		47
15	Dynamic Adaptation of Joint Transmission Power and Contention Window in VANET. , 2009, , .		47
16	Randomized Leader Election Protocols in Radio Networks with no Collision Detection. Lecture Notes in Computer Science, 2000, , 362-373.	1.3	46
17	Guest Editorial Special Issue on Wireless Sensor and Actuator Networks. IEEE Transactions on Automatic Control, 2011, 56, 2244-2246.	5.7	44
18	Reasoning About Mean Time to Failure in Vehicular Clouds. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 751-761.	8.0	40

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19	ASPIRE: An Agent-Oriented Smart Parking Recommendation System for Smart Cities. IEEE Intelligent Transportation Systems Magazine, 2019, 11, 48-61.	3.8	40
20	A simple linear-time algorithm for computing the center of an interval graph. International Journal of Computer Mathematics, 1990, 34, 121-128.	1.8	38
21	Fast computer vision algorithms for reconfigurable meshes. Image and Vision Computing, 1992, 10, 610-616.	4.5	34
22	A Survey of Enabling Technologies for Smart Communities. Smart Cities, 2021, 4, 54-77.	9.4	33
23	Towards Fault-Tolerant Job Assignment in Vehicular Cloud. , 2015, , .		32
24	Smart Parking Systems: Reviewing the Literature, Architecture and Ways Forward. Smart Cities, 2021, 4, 623-642.	9.4	31
25	OPERA: Opportunistic packet relaying in disconnected Vehicular Ad Hoc Networks. , 2008, , .		28
26	A Novel Deterministic Sampling Scheme with Applications to Broadcast-Efficient Sorting on the Reconfigurable Mesh. Journal of Parallel and Distributed Computing, 1996, 32, 215-222.	4.1	27
27	Vehicle-to-Vehicle Connectivity and Communication Framework for Vehicular Ad-Hoc Networks. , 2014, , .		27
28	SIMULATING ENHANCED MESHES, WITH APPLICATIONS. Parallel Processing Letters, 1993, 03, 59-70.	0.6	26
29	NOTICE: An Architecture for the Notification of Traffic Incidents. IEEE Vehicular Technology Conference, 2008, , .	0.4	26
30	SmartParking: A Secure and Intelligent Parking System Using NOTICE. , 2008, , .		23
31	Reasoning About Job Completion Time in Vehicular Clouds. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 1762-1771.	8.0	22
32	Enhancing Reliability and Availability through Redundancy in Vehicular Clouds. IEEE Transactions on Cloud Computing, 2021, 9, 1061-1074.	4.4	21
33	Integrating Stability Estimation into Quality of Service Routing in Mobile Ad-hoc Networks. IEEE International Workshop on Quality of Service, 2006, , .	0.0	20
34	Towards Providing Scalable and Robust Privacy in Vehicular Networks. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 1896-1906.	5.6	20
35	A unifying look at clustering in mobile ad hoc networks. Wireless Communications and Mobile Computing, 2004, 4, 623-637.	1.2	19
36	On a Variant of the Mobile Observer Method. IEEE Transactions on Intelligent Transportation Systems, 2017, 18, 441-449.	8.0	18

#	ARTICLE	IF	CITATIONS
37	ON THE POWER OF TWO-DIMENSIONAL PROCESSOR ARRAYS WITH RECONFIGURABLE BUS SYSTEMS. Parallel Processing Letters, 1991, 01, 29-34.	0.6	17
38	Cluster Maintenance in Mobile Ad-hoc Networks. Cluster Computing, 2005, 8, 111-118.	5.0	17
39	On the <i>L</i>(<i>h</i>, <i>k</i>)â€labeling of coâ€comparability graphs and circularâ€arc graphs. Networks, 2009, 53, 27-34.	2.7	17
40	A Survey of Parking Solutions for Smart Cities. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 10012-10029.	8.0	16
41	A Novel Approach to Reduce Traffic Chaos in Emergency and Evacuation Scenarios. Vehicular Technology Conference-Fall (VTC-FALL), Proceedings, IEEE, 2007, , .	0.0	15
42	HexNet: Hexagon-based localization technique for wireless sensor networks. , 2009, , .		15
43	Providing VANET position integrity through filtering. , 2009, , .		15
44	Vehicular Clouds: A Survey and Future Directions. Studies in Big Data, 2018, , 435-463.	1.1	15
45	Asynchronous Corona Training Protocols in Wireless Sensor and Actor Networks. IEEE Transactions on Parallel and Distributed Systems, 2009, 20, 1216-1230.	5.6	14
46	Toward Efficient Task Management in Wireless Sensor Networks. IEEE Transactions on Computers, 2011, 60, 1638-1651.	3.4	14
47	Data Integrity Evaluation in Cloud Database-as-a-Service. , 2013, , .		14
48	Enhancing dependability through redundancy in military vehicular clouds. , 2015, , .		14
49	Vehicular Crowdsourcing for Congestion Support in Smart Cities. Smart Cities, 2021, 4, 662-685.	9.4	14
50	A modified TC-MAC protocol for multi-hop cluster communications in VANETs. , 2013, , .		13
51	Towards real-time density estimation using vehicle-to-vehicle communications. Transportation Research Part B: Methodological, 2020, 138, 435-456.	5.9	13
52	Enhanced Simulated Annealing Technique for the Single-Row Routing Problem. Journal of Supercomputing, 2002, 21, 285-302.	3.6	12
53	An efficient geographic location-based security mechanism for vehicular adhoc networks. , 2009, , .		12
54	Enhancing Automatic Incident Detection Techniques Through Vehicle To Infrastructure Communication. , 2008, , .		11

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55	Towards Enhanced RSSI-Based Distance Measurements and Localization in WSNs. , 2009, , .		11
56	Communication protocols in FRIEND: A cyber-physical system for traffic Flow Related Information Aggregation and Dissemination. , 2013, , .		11
57	On the homogeneous representation of interval graphs. Journal of Graph Theory, 1991, 15, 65-80.	0.9	10
58	Q-Win â€" A New Admission and Handoff Management Scheme for Multimedia LEO Satellite Networks. Telecommunication Systems, 2003, 22, 151-168.	2.5	10
59	Cross-layer location verification enhancement in vehicular networks. , 2010, , .		10
60	A study of beaconing mechanism for vehicle-to-infrastructure communications. , 2012, , .		10
61	A tight estimate of job completion time in vehicular clouds. IEEE Transactions on Cloud Computing, 2018, , 1-1.	4.4	10
62	A durable sensor enabled lifeline support for firefighters. , 2008, , .		9
63	On aggregating information in actor networks. Mobile Computing and Communications Review, 2014, 18, 85-96.	1.7	9
64	Physical Layer Aspects of Information Exchange in the NOTICE Architecture. IEEE Intelligent Transportation Systems Magazine, 2015, 7, 8-18.	3.8	9
65	Toward Approximating Job Completion Time in Vehicular Clouds. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 3168-3177.	8.0	9
66	Single-row mapping and transformation of connected graphs. Journal of Supercomputing, 2007, 39, 73-89.	3.6	8
67	Tiling-Based Localization Scheme for Sensor Networks Using a Single Beacon. , 2008, , .		8
68	Automatic Incident Detection In VANETs: A Bayesian Approach. , 2009, , .		8
69	A Secure and Privacy Aware Data Dissemination For The Notification of Traffic Incidents. , 2009, , .		8
70	Design and Evaluation of a Fuzzy Cooperative Caching Scheme for MANETs. , 2010, , .		8
71	Vehicular Clouds Research. , 2017, , .		8
72	Big Data in the Parking Lot. , 2017, , 425-450.		8

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73	Intelligent Highway Infrastructure for Planned Evacuations. Performance, Computing and Communications Conference (IPCCC), IEEE International, 2007, , .	0.0	7
74	A novel parking service using wireless networks. , 2009, , .		7
75	MAPark: A Multi-Agent Auction-Based Parking System in Internet of Things. IEEE Intelligent Transportation Systems Magazine, 2021, 13, 104-115.	3.8	7
76	Friend: A cyber-physical system for traffic flow related information aggregation and dissemination. , 2012, , .		6
77	Peer-to-peer file sharing in VANETs using TC-MAC. , 2013, , .		6
78	Towards Approximating Expected Job Completion Time in Dynamic Vehicular Clouds. , 2019, , .		6
79	Reasoning About a Communication Protocol for Vehicular Cloud Computing Systems. , 2019, , .		6
80	OPTIMAL PARALLEL ENCODING AND DECODING ALGORITHMS FOR TREES. International Journal of Foundations of Computer Science, 1992, 03, 1-10.	1.1	5
81	A constant-time channel-assignment algorithm on reconfigurable meshes. BIT Numerical Mathematics, 1992, 32, 586-597.	2.0	5
82	COMPUTING ON RECONFIGURABLE BUSESâ€"A NEW COMPUTATIONAL PARADIGM. Parallel Processing Letters, 1994, 04, 465-476.	0.6	5
83	Efficiently Recognizing the P 4 -Structure of Trees and of Bipartite Graphs Without Short Cycles. Graphs and Combinatorics, 2000, 16, 381-387.	0.4	5
84	Randomized Initialization Protocols for Radio Networks. , 0, , 195-218.		5
85	Single-Row Transformation of Complete Graphs. Journal of Supercomputing, 2005, 31, 265-279.	3.6	5
86	Modified Hilbert Space-Filling Curve for Ellipsoidal Coverage in Wireless Ad Hoc Sensor Networks. , 2007, , .		5
87	A Tolerant Context-Aware Driver Assistance System for VANETs-Based Smart Cars. , 2010, , .		5
88	Efficient solution of a stochastic SI epidemic system. Journal of Supercomputing, 2012, 62, 1385-1403.	3.6	5
89	Strategies for Sensor Data Aggregation in Support of Emergency Response. , 2014, , .		5
90	A Virtual Infrastructure for Wireless Sensor Networks. , 2005, , 107-140.		4

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91	Optimized-Hilbert for Mobility in Wireless Sensor Networks. , 2007, , .		4
92	Requirements for the Physical Layer of the NOTICE System for Vehicular Communications. , 2009, , .		4
93	Selective mutation accumulation: a computational model of the paternal age effect. Bioinformatics, 2016, 32, 3790-3797.	4.1	4
94	Toward Probabilistic Data Collection in the NOTICE Architecture. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 3354-3363.	8.0	4
95	ASAP. , 2019, , .		4
96	Job Completion Time in Dynamic Vehicular Cloud Under Multiple Access Points. Lecture Notes in Computer Science, 2020, , 96-110.	1.3	4
97	SEE-TREND: SEcurE Traffic-Related EveNt Detection in Smart Communities. Sensors, 2021, 21, 7652.	3.8	4
98	Real-Time Traffic Density Estimation: Putting on-Coming Traffic to Work. IEEE Transactions on Intelligent Transportation Systems, 2023, 24, 1374-1383.	8.0	4
99	On the Dynamic Initialization of Parallel Computers. Journal of Supercomputing, 2000, 15, 5-24.	3.6	3
100	Leader Election Protocols for Radio Networks. , 0, , 219-242.		3
101	Energy-Aware Task Assignment and Data Aggregation Protocols in Wireless Sensor Networks. , 2009, , .		3
102	Enhancing Automatic Incident Detection Using Vehicular Communications. , 2009, , .		3
103	Design and evaluation of Hi-CAST and its variants for safety message dissemination in VANET. , 2013, , .		3
104	Vehicular Clouds. Advances in Computer and Electrical Engineering Book Series, 2018, , 1-29.	0.3	3
105	Approximating Expected Job Completion Time in Dynamic Vehicular Clouds. , 2021, , .		3
106	An nc algorithm to recognize hhd-free graphs. International Journal of Computer Mathematics, 1990, 31, 177-185.	1.8	2
107	Media access using dynamic bandwidth system to improve satellite network uplink performance. Wireless Communications and Mobile Computing, 2003, 3, 225-238.	1.2	2
108	Sequential and Parallel Meta-Heuristics for Solving the Single Row Routing Problem. Cluster Computing, 2004, 7, 123-139.	5.0	2

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109	SPLAI: Computational Finite Element Model for Sensor Networks. Mobile Information Systems, 2006, 2, 77-92.	0.6	2
110	Hybrid Training with Binary Search Protocol for Wireless Sensor Networks. Mobile Information Systems, 2007, 3, 233-249.	0.6	2
111	MUSAQ: a multimedia session‑aware QoS provisioning scheme for cellular networks. Wireless Communications and Mobile Computing, 2008, 8, 343-354.	1.2	2
112	Energy-based task load balancing in wireless sensor networks. , 2008, , .		2
113	A Weighted-Dissimilarity-Based Anomaly Detection Method for Mobile Wireless Networks. , 2009, , .		2
114	Privacy aware localization in VANET. , 2010, , .		2
115	Towards Building Asset Registry in Emergency Response. , 2014, , .		2
116	The Single Row Routing Problem Revisited: A Solution Based on Genetic Algorithms. VLSI Design, 2002, 14, 123-141.	0.5	2
117	Smart Communities: From Sensors to Internet of Things and to a Marketplace of Services. , 2020, , .		2
118	Constructing bimodal convex hexagons. International Journal of Computer Mathematics, 1990, 35, 1-5.	1.8	1
119	A PRACTICAL PLATFORM FOR CREW EMULATION. Parallel Processing Letters, 1993, 03, 139-145.	0.6	1
120	A COST-OPTIMAL EREW BREADTH-FIRST ALGORITHM FOR ORDERED TREES, WITH APPLICATIONSâˆ—. International Journal of Parallel, Emergent and Distributed Systems, 1995, 5, 187-197.	0.4	1
121	Communal Cooperation in Sensor Networks for Situation Management. , 2006, , .		1
122	Safe Quality of Service Aware Management of Heterogeneous Sensor Networks. Journal of Interconnection Networks, 2006, 07, 179-193.	1.0	1
123	Biology-inspired Architecture for Situation Management. , 2006, , .		1
124	Emergent Behavior in Massively-Deployed Sensor Networks. Mobile Information Systems, 2008, 4, 313-331.	0.6	1
125	On prolonging network lifetime by adjusting sleep/awake cycles in wireless sensor networks. , 2009, , .		1
126	Making traffic-related decisions in FRIEND: A Cyber-Physical System for traffic flow related information aggrEgatioN and Dissemination. , 2013, , .		1

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127	On Probabilistic Data Collection in the NOTICE Architecture. , 2014, , .		1
128	A simple nc algorithm to recognize weakly triangulated graphs. International Journal of Computer Mathematics, 1989, 30, 129-131.	1.8	0
129	A PARALLEL ALGORITHM FOR FOREST RECONSTRUCTION. Parallel Processing Letters, 1992, 02, 157-160.	0.6	0
130	Optimal parallel colouring algorithms for totally decomposable graphs. International Journal of Computer Mathematics, 1993, 48, 1-9.	1.8	0
131	A NEW CHARACTERIZATION OF UNBREAKABLE GRAPHS. International Journal of Foundations of Computer Science, 1993, 04, 193-196.	1.1	0
132	SUB-LOGARITHMIC ALGORITHMS FOR THE LARGEST EMPTY RECTANGLE PROBLEM. Parallel Processing Letters, 1993, 03, 79-85.	0.6	0
133	A Novel Admission Control for Multimedia LEO Satellite Networks. , 0, , 465-484.		0
134	A Theoretical Analysis on the Reliability of Multigenerational IoT. , 2018, , .		0
135	Peer-to-Peer and Content Sharing in Vehicular Ad Hoc Networks. , 2009, , 101-117.		0