Vasileios A Karyotis

List of Publications by Year
in descending order

72	557	623734 14	752698 20
papers	citations	h-index	g-index

72	72	72	491
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Software Defined Radio Cross-Layer Resource Allocation Approach for Cognitive Radio Networks: From Theory to Practice. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 740-755.	7.9	60
2	Temporal Dynamics of Information Diffusion in Twitter: Modeling and Experimentation. IEEE Transactions on Computational Social Systems, 2018, 5, 256-264.	4.4	39
3	A novel framework for mobile attack strategy modelling and vulnerability analysis in wireless ad hoc networks. International Journal of Security and Networks, 2006, 1, 255.	0.2	26
4	Malware-Propagative Mobile Ad Hoc Networks: Asymptotic Behavior Analysis. Journal of Computer Science and Technology, 2008, 23, 389-399.	1.5	26
5	Evolutionary Dynamics of Complex Communications Networks. , 0, , .		26
6	Network Tomography for Efficient Monitoring in SDN-Enabled 5G Networks and Beyond: Challenges and Opportunities. IEEE Communications Magazine, 2021, 59, 70-76.	6.1	22
7	A Review of Advanced Algebraic Approaches Enabling Network Tomography for Future Network Infrastructures. Future Internet, 2020, 12, 20.	3.8	21
8	A hyperbolic space analytics framework for big network data and their applications. IEEE Network, 2016, 30, 11-17.	6.9	19
9	Exploiting socio-physical network interactions via a utility-based framework for resource management in mobile social networks. IEEE Wireless Communications, 2014, 21, 10-17.	9.0	18
10	On the optimal, fair and channel-aware cognitive radio network reconfiguration. Computer Networks, 2013, 57, 1739-1757.	5.1	17
11	Macroscopic Malware Propagation Dynamics for Complex Networks With Churn. IEEE Communications Letters, 2015, 19, 577-580.	4.1	17
12	ENERDGE: Distributed Energy-Aware Resource Allocation at the Edge. Sensors, 2022, 22, 660.	3.8	17
13	Diffusion Models for Information Dissemination Dynamics in Wireless Complex Communication Networks. Journal of Complex Systems, 2013, 2013, 1-13.	0.7	15
14	Design, Development, and Evaluation of 5G-Enabled Vehicular Services: The 5G-HEART Perspective. Sensors, 2022, 22, 426.	3.8	15
15	Topology Enhancements in Wireless Multihop Networks: A Top-Down Approach. IEEE Transactions on Parallel and Distributed Systems, 2012, 23, 1344-1357.	5.6	14
16	Markov Random Fields for Malware Propagation: The Case of Chain Networks. IEEE Communications Letters, 2010, 14, 875-877.	4.1	12
17	A Markov Random Field framework for channel assignment in Cognitive Radio networks. , 2012, , .		12
18	Strategy evolution of information diffusion under time-varying user behavior in generalized networks. Computer Communications, 2017, 100, 91-103.	5.1	10

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19	Autonomic Network Management and Cross-Layer Optimization in Software Defined Radio Environments. Future Internet, 2019, 11, 37.	3.8	10
20	A Markov Random Field Framework for Modeling Malware Propagation in Complex Communications Networks. IEEE Transactions on Dependable and Secure Computing, 2019, 16, 551-564.	5.4	10
21	Hyperbolic Embedding for Efficient Computation of Path Centralities and Adaptive Routing in Large-Scale Complex Commodity Networks. IEEE Transactions on Network Science and Engineering, 2017, 4, 140-153.	6.4	9
22	Big Data Clustering via Community Detection and Hyperbolic Network Embedding in IoT Applications. Sensors, 2018, 18, 1205.	3.8	8
23	5G for Vehicular Use Cases: Analysis of Technical Requirements, Value Propositions and Outlook. IEEE Open Journal of Intelligent Transportation Systems, 2021, 2, 73-96.	4.8	8
24	Risk-based attack strategies for mobile ad hoc networks under probabilistic attack modeling framework. Computer Networks, 2007, 51, 2397-2410.	5.1	7
25	Socially-Inspired Topology Improvements in Wireless Multi-Hop Networks. , 2010, , .		7
26	Exploiting social features for improving cognitive radio infrastructures and social services via combined MRF and back pressure cross-layer resource allocation. Computational Social Networks, 2014, 1, .	2.1	7
27	Improving the Utility of Polygenic Risk Scores as a Biomarker for Alzheimerâ€™s Disease. Cells, 2021, 10, 1627.	4.1	7
28	Analysis and control of information diffusion dictated by user interest in generalized networks. Computational Social Networks, 2015, 2, 18.	2.1	6
29	5G Network Requirement Analysis and Slice Dimensioning for Sustainable Vehicular Services. , 2021, , .		6
30	A Distance-based Agglomerative Clustering Algorithm for Multicast Network Tomography. , 2020, , .		5
31	On the malware spreading over non-propagative wireless ad hoc networks. , 2007, , .		4
32	A Cross-Layer-Based Topology Control Framework for Wireless Multihop Networks. IEEE Transactions on Vehicular Technology, 2012, 61, 2858-2864.	6.3	4
33	A Spatio-Stochastic Framework for Cross-Layer Design in Cognitive Radio Networks. IEEE Transactions on Parallel and Distributed Systems, 2014, 25, 2762-2771.	5.6	4
34	Cross-Layer Based Resource Management Frameworks for Mobile Cognitive Radio Networks. Modeling and Optimization in Science and Technologies, 2014, , 285-322.	0.7	4
35	A Component-Based Cross-Layer Framework for Software Defined Wireless Networks. , 2016, , .		4
36	Sensing and monitoring of information diffusion in complex online social networks. Peer-to-Peer Networking and Applications, 2019, 12, 604-619.	3.9	4

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37	Future Network Traffic Matrix Synthesis and Estimation Based on Deep Generative Models. , 2021, , .		4
38	CoveR: An Information Diffusion Aware Approach for Efficient Recommendations Under User Coverage Constraints. IEEE Transactions on Computational Social Systems, 2021, 8, 894-905.	4.4	4
39	On the Asymptotic Behavior of Malware-Propagative Mobile Ad Hoc Networks. , 2007, , .		3
40	An Opportunistic Combined Power and Rate Allocation Approach in CDMA Ad Hoc Networks. , 2008, , .		3
41	Analytic stochastic propagation model for urban streets. IET Microwaves, Antennas and Propagation, 2010, 4, 91.	1.4	3
42	Time-based cross-layer adaptations in wireless cognitive radio ad hoc networks. , 2011, , .		3
43	Wireless multi-hop network topology control optimization and trade-off analysis. , 2012, , .		3
44	Discovering and exploiting spectrum power correlations in cognitive radio networks: an experimentally driven approach. Eurasip Journal on Wireless Communications and Networking, 2014, 2014, .	2.4	3
45	Utility Decisions for QoE-QoS Driven Applications in Practical Mobile Broadband Networks. , 2018, , .		3
46	Optimal Resource Allocation in Multihop Wireless Networks Relying on Energy Harvesting. IEEE Communications Letters, 2021, 25, 224-228.	4.1	3
47	Demo Proposal: Tele-Operated Support over 4G/5G Mobile Communications. , 2021, , .		3
48	Towards self-managing systems inspired by economic organizations. , 2010, , .		2
49	On topology control and non-uniform node deployment in ad hoc networks. , 2010, , .		2
50	A socially-driven topology improvement framework with applications in content distribution and trust management. Journal of Internet Services and Applications, 2011, 2, 113-127.	2.1	2
51	Comparison of efficient random walk strategies for wireless multi-hop networks. Computer Communications, 2011, 34, 1258-1267.	5.1	2
52	A path-based recommendations approach for online systems via hyperbolic network embedding. , 2017, , .		2
53	Scalable Community Detection for Complex Data Graphs via Hyperbolic Network Embedding and Graph Databases. IEEE Transactions on Network Science and Engineering, 2021, 8, 1269-1282.	6.4	2
54	Stochastic Ray Propagation for Two Parallel Urban Streets: Exact and Approximate Results. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 381-384.	4.0	1

#	Article	IF	Citations
55	On the problem of joint power and rate control in CDMA ad hoc networks. , 2008, , .		1
56	On the Tradeoff between MAC-Layer and Network-Layer Topology-Controlled Malware Spreading Schemes in Ad Hoc and Sensor Networks. , 2009, , .		1
57	Enhanced service provisioning in wireless multi-hop networks via socially-driven inverse topology control. , 2010, , .		1
58	Topology control in multi-channel cognitive radio networks with non-uniform node arrangements. , 2011, , .		1
59	User interest dictated information diffusion over generalized networks. , 2015, , .		1
60	Hyperbolic Traffic Load Centrality for large-scale complex communications networks. , 2016, , .		1
61	Socio-Aware Recommendations Under Complex User Constraints. IEEE Transactions on Computational Social Systems, 2021, 8, 377-387.	4.4	1
62	Evaluation of Malware Spreading in Wireless Multihop Networks with Churn. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2014, , 63-74.	0.3	1
63	Topology Inference and Link Parameter Estimation Based on End-to-End Measurements. Future Internet, 2022, 14, 45.	3.8	1
64	Enhancing trust establishment in wireless multi-hop networks via preferential attachment. , 2011, , .		0
65	An MRF cross-layer resource allocation approach with back-pressure features for QoS in dynamic social and cognitive communications. , 2014, , .		0
66	On the Impact of Network Evolution on NUM Resource Allocation Problems in Wireless Multihop Networks. Lecture Notes in Computer Science, 2015, , 62-75.	1.3	0
67	On the Evolution of Complex Network Topology Under Network Churn. Lecture Notes in Computer Science, 2016, , 227-240.	1.3	0
68	On the Energy-Efficient Coverage of Network Regions with Convex Opaque Obstacles. , 2018, , .		0
69	Enhancing Community Detection for Big Sensor Data Clustering via Hyperbolic Network Embedding. , 2018, , .		0
70	Mathematical Models for Malware Propagation. Security and Communication Networks, 2019, 2019, 1-2.	1.5	0
71	A Realistic Evaluation of MRF-based Resource Allocation for SDR Cognitive Radio Networks. , 2019, , .		0
72	Topology-Aware Hybrid Random Walk Protocols for Wireless Multihop Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2010, , 107-118.	0.3	0