Jiahao Dai

List of Publications by Year in descending order

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151 papers	9,259 citations	47006 47 h-index	42399 92 g-index
153 all docs	153 docs citations	153 times ranked	7401 citing authors

#	Article	IF	Citations
1	Space-Air-Ground Integrated Network: A Survey. IEEE Communications Surveys and Tutorials, 2018, 20, 2714-2741.	39.4	634
2	Device-to-Device Communication in LTE-Advanced Networks: A Survey. IEEE Communications Surveys and Tutorials, 2015, 17, 1923-1940.	39.4	541
3	Future Intelligent and Secure Vehicular Network Toward 6G: Machine-Learning Approaches. Proceedings of the IEEE, 2020, 108, 292-307.	21.3	404
4	Networking and Communications in Autonomous Driving: A Survey. IEEE Communications Surveys and Tutorials, 2019, 21, 1243-1274.	39.4	319
5	Collaborative Computation Offloading for Multiaccess Edge Computing Over Fiberâ€“Wireless Networks. IEEE Transactions on Vehicular Technology, 2018, 67, 4514-4526.	6.3	306
6	Computation Offloading for Multi-Access Mobile Edge Computing in Ultra-Dense Networks. IEEE Communications Magazine, 2018, 56, 14-19.	6.1	280
7	Optimizing Space-Air-Ground Integrated Networks by Artificial Intelligence. IEEE Wireless Communications, 2019, 26, 140-147.	9.0	272
8	Smart Resource Allocation for Mobile Edge Computing: A Deep Reinforcement Learning Approach. IEEE Transactions on Emerging Topics in Computing, 2021, 9, 1529-1541.	4.6	252
9	Task Offloading in Vehicular Edge Computing Networks: A Load-Balancing Solution. IEEE Transactions on Vehicular Technology, 2020, 69, 2092-2104.	6.3	246
10	Mobile-Edge Computation Offloading for Ultradense IoT Networks. IEEE Internet of Things Journal, 2018, 5, 4977-4988.	8.7	238
11	UAV-Enhanced Intelligent Offloading for Internet of Things at the Edge. IEEE Transactions on Industrial Informatics, 2020, 16, 2737-2746.	11.3	209
12	Device-to-device communications achieve efficient load balancing in LTE-advanced networks. IEEE Wireless Communications, 2014, 21, 57-65.	9.0	202
13	On the Outage Probability of Device-to-Device-Communication-Enabled Multichannel Cellular Networks: An RSS-Threshold-Based Perspective. IEEE Journal on Selected Areas in Communications, 2016, 34, 163-175.	14.0	184
14	Connecting Intelligent Things in Smart Hospitals Using NB-IoT. IEEE Internet of Things Journal, 2018, 5, 1550-1560.	8.7	173
15	Device-to-device communications for enhancing quality of experience in software defined multi-tier LTE-A networks. IEEE Network, 2015, 29, 46-52.	6.9	172
16	In-Vehicle Network Attacks and Countermeasures: Challenges and Future Directions. IEEE Network, 2017, 31, 50-58.	6.9	169
17	Double Auction-Based Resource Allocation for Mobile Edge Computing in Industrial Internet of Things. IEEE Transactions on Industrial Informatics, 2018, 14, 4692-4701.	11.3	169
18	Envisioning Device-to-Device Communications in 6G. IEEE Network, 2020, 34, 86-91.	6.9	165

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19	Machine Learning Meets Computation and Communication Control in Evolving Edge and Cloud: Challenges and Future Perspective. IEEE Communications Surveys and Tutorials, 2020, 22, 38-67.	39.4	164
20	AI-Enhanced Offloading in Edge Computing: When Machine Learning Meets Industrial IoT. IEEE Network, 2019, 33, 68-74.	6.9	141
21	A Survey on Space-Air-Ground-Sea Integrated Network Security in 6G. IEEE Communications Surveys and Tutorials, 2022, 24, 53-87.	39.4	140
22	Joint Placement of Controllers and Gateways in SDN-Enabled 5G-Satellite Integrated Network. IEEE Journal on Selected Areas in Communications, 2018, 36, 221-232.	14.0	134
23	Smart and Resilient EV Charging in SDN-Enhanced Vehicular Edge Computing Networks. IEEE Journal on Selected Areas in Communications, 2020, 38, 217-228.	14.0	130
24	New Perspectives on Future Smart FiWi Networks: Scalability, Reliability, and Energy Efficiency. IEEE Communications Surveys and Tutorials, 2016, 18, 1045-1072.	39.4	118
25	Task Offloading in UAV-Aided Edge Computing: Bit Allocation and Trajectory Optimization. IEEE Communications Letters, 2019, 23, 538-541.	4.1	113
26	When Machine Learning Meets Privacy in 6G: A Survey. IEEE Communications Surveys and Tutorials, 2020, 22, 2694-2724.	39.4	111
27	When Smart Wearables Meet Intelligent Vehicles: Challenges and Future Directions. IEEE Wireless Communications, 2017, 24, 58-65.	9.0	93
28	Optimal Placement of Cloudlets for Access Delay Minimization in SDN-Based Internet of Things Networks. IEEE Internet of Things Journal, 2018, 5, 1334-1344.	8.7	91
29	Intelligent Task Offloading in Vehicular Edge Computing Networks. IEEE Wireless Communications, 2020, 27, 126-132.	9.0	90
30	Automobile Driver Fingerprinting: A New Machine Learning Based Authentication Scheme. IEEE Transactions on Industrial Informatics, 2020, 16, 1417-1426.	11.3	89
31	Analysis and Optimization of Multiple Unmanned Aerial Vehicle-Assisted Communications in Post-Disaster Areas. IEEE Transactions on Vehicular Technology, 2018, 67, 12049-12060.	6.3	80
32	A Mobility Analytical Framework for Big Mobile Data in Densely Populated Area. IEEE Transactions on Vehicular Technology, 2017, 66, 1443-1455.	6.3	78
33	Joint Resource Allocation and Incentive Design for Blockchain-Based Mobile Edge Computing. IEEE Transactions on Wireless Communications, 2020, 19, 6050-6064.	9.2	71
34	FiWi-Enhanced Vehicular Edge Computing Networks: Collaborative Task Offloading. IEEE Vehicular Technology Magazine, 2019, 14, 45-53.	3.4	69
35	Intelligent Reflecting Surface Enabled Secure Cooperative Transmission for Satellite-Terrestrial Integrated Networks. IEEE Transactions on Vehicular Technology, 2021, 70, 2007-2011.	6.3	69
36	Energy-Aware Computation Offloading and Transmit Power Allocation in Ultradense IoT Networks. IEEE Internet of Things Journal, 2019, 6, 4317-4329.	8.7	67

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37	TSP Security in Intelligent and Connected Vehicles: Challenges and Solutions. IEEE Wireless Communications, 2019, 26, 125-131.	9.0	63
38	Smart Attacks against Intelligent Wearables in People-Centric Internet of Things. , 2016, 54, 44-49.		62
39	Toward Swarm Coordination: Topology-Aware Inter-UAV Routing Optimization. IEEE Transactions on Vehicular Technology, 2020, 69, 10177-10187.	6.3	62
40	Optimal Satellite Gateway Placement in Space-Ground Integrated Networks. IEEE Network, 2018, 32, 32-37.	6.9	58
41	Machine Learning-Enabled Cooperative Spectrum Sensing for Non-Orthogonal Multiple Access. IEEE Transactions on Wireless Communications, 2020, 19, 5692-5702.	9.2	55
42	Toward Intelligent Task Offloading at the Edge. IEEE Network, 2020, 34, 128-134.	6.9	53
43	Intelligent Reflecting Surface Empowered Physical-Layer Security: Signal Cancellation or Jamming?. IEEE Internet of Things Journal, 2022, 9, 1265-1275.	8.7	52
44	Efficient Computation Offloading for Multi-Access Edge Computing in 5G HetNets. , 2018, , .		51
45	Fault Detection and Repairing for Intelligent Connected Vehicles Based on Dynamic Bayesian Network Model. IEEE Internet of Things Journal, 2018, 5, 2431-2440.	8.7	51
46	Toward Robust and Intelligent Drone Swarm: Challenges and Future Directions. IEEE Network, 2020, 34, 278-283.	6.9	51
47	A stochastic geometry analysis of D2D overlaying multi-channel downlink cellular networks. , 2015, , .		48
48	Optimal Satellite Gateway Placement in Space-Ground Integrated Network for Latency Minimization With Reliability Guarantee. IEEE Wireless Communications Letters, 2018, 7, 174-177.	5.0	48
49	Energy Provision Minimization in Wireless Powered Communication Networks With Network Throughput Demand: TDMA or NOMA?. IEEE Transactions on Communications, 2019, 67, 6401-6414.	7.8	48
50	AI-Enhanced Cooperative Spectrum Sensing for Non-Orthogonal Multiple Access. IEEE Wireless Communications, 2020, 27, 173-179.	9.0	48
51	Covert Wireless Communication in IoT Network: From AWGN Channel to THz Band. IEEE Internet of Things Journal, 2020, 7, 3378-3388.	8.7	48
52	Social-Aware Incentive Mechanisms for D2D Resource Sharing in IIoT. IEEE Transactions on Industrial Informatics, 2020, 16, 5517-5526.	11.3	47
53	Attacker Identification and Intrusion Detection for In-Vehicle Networks. IEEE Communications Letters, 2019, 23, 1927-1930.	4.1	46
54	Reliability Assessment for Wireless Mesh Networks Under Probabilistic Region Failure Model. IEEE Transactions on Vehicular Technology, 2011, 60, 2253-2264.	6.3	43

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55	Blockchain-Based Key Management for Heterogeneous Flying Ad Hoc Network. IEEE Transactions on Industrial Informatics, 2021, 17, 7629-7638.	11.3	42
56	Energy Consumption Minimization for FiWi Enhanced LTE-A HetNets with UE Connection Constraint. , 2016, 54, 56-62.		41
57	A Markovian Analysis for Explicit Probabilistic Stopping-Based Information Propagation in Postdisaster Ad Hoc Mobile Networks. IEEE Transactions on Wireless Communications, 2016, 15, 81-90.	9.2	41
58	Trust Management in Industrial Internet of Things. IEEE Transactions on Information Forensics and Security, 2020, 15, 3667-3682.	6.9	41
59	Optimal Probabilistic Caching in Heterogeneous IoT Networks. IEEE Internet of Things Journal, 2020, 7, 3404-3414.	8.7	40
60	Wireless Telematics Systems in Emerging Intelligent and Connected Vehicles: Threats and Solutions. IEEE Wireless Communications, 2018, 25, 113-119.	9.0	39
61	On Intelligent Traffic Control for Large-Scale Heterogeneous Networks: A Value Matrix-Based Deep Learning Approach. IEEE Communications Letters, 2018, 22, 2479-2482.	4.1	39
62	Harvesting and Threat Aware Security Configuration Strategy for IEEE 802.15.4 Based IoT Networks. IEEE Communications Letters, 2019, 23, 2130-2134.	4.1	37
63	Exact throughput capacity under power control in mobile ad hoc networks. , 2012, , .		36
64	Vehicular intelligence in 6G: Networking, communications, and computing. Vehicular Communications, 2022, 33, 100399.	4.0	36
65	Reliable and Energy-Efficient Data Forwarding in Industrial Wireless Sensor Networks. IEEE Systems Journal, 2017, 11, 1424-1434.	4.6	35
66	Coordinated Multipoint-Based Uplink Transmission in Internet of Things Powered by Energy Harvesting. IEEE Internet of Things Journal, 2018, 5, 2585-2595.	8.7	35
67	Distributed Q-Learning Aided Uplink Grant-Free NOMA for Massive Machine-Type Communications. IEEE Journal on Selected Areas in Communications, 2021, 39, 2029-2041.	14.0	34
68	Stochastic Geometric Analysis of Multiple Unmanned Aerial Vehicle-Assisted Communications Over Internet of Things. IEEE Internet of Things Journal, 2019, 6, 5446-5460.	8.7	32
69	Application of Cybertwin for Offloading in Mobile Multiaccess Edge Computing for 6G Networks. IEEE Internet of Things Journal, 2021, 8, 16231-16242.	8.7	31
70	Blockchain-Assisted Distributed and Lightweight Authentication Service for Industrial Unmanned Aerial Vehicles. IEEE Internet of Things Journal, 2022, 9, 16928-16940.	8.7	31
71	2-to-<inline-formula> <tex-math notation="LaTeX">M </tex-math> </inline-formula> Coordinated Multipoint-Based Uplink Transmission in Ultra-Dense Cellular Networks. IEEE Transactions on Wireless Communications, 2018, 17, 8342-8356.	9.2	29
72	On Covert Communication with Interference Uncertainty. , 2018, , .		28

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73	Topology Poisoning Attack in SDN-Enabled Vehicular Edge Network. IEEE Internet of Things Journal, 2020, 7, 9563-9574.	8.7	28
74	Efficient and Consistent Key Extraction Based on Received Signal Strength for Vehicular Ad Hoc Networks. IEEE Access, 2017, 5, 5281-5291.	4.2	26
75	AI-Enabled Massive Devices Multiple Access for Smart City. IEEE Internet of Things Journal, 2019, 6, 7623-7634.	8.7	26
76	Reconfigurable Intelligent Surface Enhanced Secure Aerial-Ground Communication. IEEE Transactions on Communications, 2021, 69, 6185-6197.	7.8	26
77	Deep Learning-Based Privacy Preservation and Data Analytics for IoT Enabled Healthcare. IEEE Transactions on Industrial Informatics, 2022, 18, 4798-4807.	11.3	26
78	Optimal Placement of Virtual Machines in Mobile Edge Computing. , 2017, , .		25
79	Big Data Acquisition Under Failures in FiWi Enhanced Smart Grid. IEEE Transactions on Emerging Topics in Computing, 2019, 7, 420-432.	4.6	25
80	Adaptive Task Offloading in Vehicular Edge Computing Networks: a Reinforcement Learning Based Scheme. Mobile Networks and Applications, 2020, 25, 1736-1745.	3.3	25
81	Movement Aware CoMP Handover in Heterogeneous Ultra-Dense Networks. IEEE Transactions on Communications, 2021, 69, 340-352.	7.8	25
82	VehicleEIDS: A Novel External Intrusion Detection System Based on Vehicle Voltage Signals. IEEE Internet of Things Journal, 2022, 9, 2124-2133.	8.7	25
83	Resisting Undesired Signal Through IRS-Based Backscatter Communication System. IEEE Communications Letters, 2021, 25, 2743-2747.	4.1	23
84	Deep Learning Enhanced Driving Behavior Evaluation Based on Vehicle-Edge-Cloud Architecture. IEEE Transactions on Vehicular Technology, 2021, 70, 6172-6177.	6.3	22
85	On Minimizing Energy Consumption in FiWi Enhanced LTE-A HetNets. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 579-591.	4.6	21
86	Physical Layer Security in Largeâ€“Scale Probabilistic Caching: Analysis and Optimization. IEEE Communications Letters, 2019, 23, 1484-1487.	4.1	21
87	Spatially Cooperative Caching and Optimization for Heterogeneous Network. IEEE Transactions on Vehicular Technology, 2019, 68, 11260-11270.	6.3	21
88	ST-DeLTA: A Novel Spatial-Temporal Value Network Aided Deep Learning Based Intelligent Network Traffic Control System. IEEE Transactions on Sustainable Computing, 2020, 5, 568-580.	3.1	20
89	Energy-Efficient Task Offloading and Transmit Power Allocation for Ultra-Dense Edge Computing. , 2018, , .		19
90	Multi-Agent Deep Reinforcement Learning for Massive Access in 5G and Beyond Ultra-Dense NOMA System. IEEE Transactions on Wireless Communications, 2022, 21, 3057-3070.	9.2	19

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91	Inter-Server Collaborative Federated Learning for Ultra-Dense Edge Computing. IEEE Transactions on Wireless Communications, 2022, 21, 5191-5203.	9.2	18
92	Achieve Load Balancing in Multi-UAV Edge Computing IoT Networks: A Dynamic Entry and Exit Mechanism. IEEE Internet of Things Journal, 2022, 9, 18725-18736.	8.7	18
93	Adaptively secure multi-authority attribute-based encryption with verifiable outsourced decryption. Science China Information Sciences, 2016, 59, 1.	4.3	17
94	Achieving Robust and Efficient Consensus for Large-Scale Drone Swarm. IEEE Transactions on Vehicular Technology, 2020, 69, 15867-15879.	6.3	17
95	ClockIDS: A Real-Time Vehicle Intrusion Detection System Based on Clock Skew. IEEE Internet of Things Journal, 2022, 9, 15593-15606.	8.7	16
96	Multi-Task Cross-Server Double Auction for Resource Allocation in Mobile Edge Computing. , 2019, , .		14
97	Overprivileged Permission Detection for Android Applications. , 2019, , .		14
98	A Novel Perspective on Multiple Access in 5G Network: Framework and Solutions. IEEE Wireless Communications, 2019, 26, 154-160.	9.0	13
99	Envisioning Intelligent Reflecting Surface Empowered Space-Air-Ground Integrated Network. IEEE Network, 2021, 35, 225-232.	6.9	13
100	Optimizing Uplink Resource Allocation for D2D Overlaying Cellular Networks with Power Control. , 2016, , .		12
101	Collaborative Computation Offloading for Mobile-Edge Computing over Fiber-Wireless Networks. , 2017, , .		12
102	A Reinforcement Learning Based Task Offloading Scheme for Vehicular Edge Computing Network. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 438-449.	0.3	12
103	Automatic Content Inspection and Forensics for Children Android Apps. IEEE Internet of Things Journal, 2020, 7, 7123-7134.	8.7	12
104	Deep Learning Techniques for Advancing 6G Communications in the Physical Layer. IEEE Wireless Communications, 2021, 28, 141-147.	9.0	12
105	Robust Multiuser Beamforming for IRS-Enhanced Near-Space Downlink Communications Coexisting With Satellite System. IEEE Internet of Things Journal, 2022, 9, 14900-14912.	8.7	12
106	Virtual machine placement for backhaul traffic minimization in fog radio access networks. , 2017, , .		11
107	Collaborative Computation Offloading at UAV-Enhanced Edge. , 2019, , .		11
108	Gait Learning Based Authentication for Intelligent Things. IEEE Transactions on Vehicular Technology, 2020, 69, 4450-4459.	6.3	11

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109	Location Hijacking Attack in Software-Defined Spaceâ€“Airâ€“Ground-Integrated Vehicular Network. IEEE Internet of Things Journal, 2022, 9, 5971-5981.	8.7	11
110	Multitask Learning Assisted Driver Identity Authentication and Driving Behavior Evaluation. IEEE Transactions on Industrial Informatics, 2021, 17, 7093-7102.	11.3	11
111	SmartEar: Rhythm-Based Tap Authentication Using Earphone in Information-Centric Wireless Sensor Network. IEEE Internet of Things Journal, 2022, 9, 885-896.	8.7	11
112	Divide-and-conquer based cooperative jamming: Addressing multiple eavesdroppers in close proximity. , 2016, , .		10
113	Inter-Segment Gateway Selection for Transmission Energy Optimization in Space-Air-Ground Converged Network. , 2018, , .		10
114	Secure and Reliable Slicing in 5G and Beyond Vehicular Networks. IEEE Wireless Communications, 2022, 29, 126-133.	9.0	10
115	Average rate analysis for a D2D overlaying two-tier downlink cellular network. , 2015, , .		9
116	Fault Detection for Medical Body Sensor Networks Under Bayesian Network Model. , 2015, , .		8
117	Fault diagnosis of body sensor networks using hidden Markov model. Peer-to-Peer Networking and Applications, 2017, 10, 1285-1298.	3.9	8
118	Energy-Aware Task Offloading for Ultra-Dense Edge Computing. , 2018, , .		8
119	A Double Auction-Based Approach for Multi-User Resource Allocation in Mobile Edge Computing. , 2018, , .		8
120	Gateway Placement for Reliability Optimization in 5G-Satellite Hybrid Networks. , 2018, , .		8
121	A Probabilistic Approach to Deploying Disaster Response Network. IEEE Transactions on Vehicular Technology, 2018, 67, 12086-12094.	6.3	7
122	An Experimental Study Towards Driver Identification for Intelligent and Connected Vehicles. , 2019, , .		7
123	Joint Computation Offloading and Resource Configuration in Ultra-Dense Edge Computing Networks: A Deep Reinforcement Learning Solution. , 2019, , .		7
124	Countering Large-Scale Drone Swarm Attack by Efficient Splitting. IEEE Transactions on Vehicular Technology, 2022, 71, 9967-9979.	6.3	7
125	An Experimental Study Towards the In-Vehicle Network of Intelligent and Connected Vehicles. , 2018, , .		6
126	Online Microservice Orchestration for IoT via Multiobjective Deep Reinforcement Learning. IEEE Internet of Things Journal, 2022, 9, 17513-17525.	8.7	6

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127	Optimizing Channel Allocation for D2D Overlaying Multi-Channel Downlink Cellular Networks. , 2016, , .		5
128	Efficient keyword search over encrypted data in multi-cloud setting. Security and Communication Networks, 2016, 9, 3808-3820.	1.5	5
129	On cooperative jamming in wireless networks with eavesdroppers at arbitrary locations. , 2016, , .		4
130	On Physical Layer Security in Finite-Area Wireless Networks: An Analysis Framework. , 2017, , .		4
131	On Extracting the Spatial-Temporal Features of Network Traffic Patterns: A Tensor Based Deep Learning Model. , 2018, , .		4
132	Optimal Replica Distribution in Edge-Node-Assisted Cloud-P2P Platforms for Real-Time Streaming. IEEE Transactions on Vehicular Technology, 2018, 67, 8637-8646.	6.3	4
133	An Experimental Study Towards Attacker Identification in Automotive Networks. , 2019, , .		4
134	Smart Resource Configuration and Task Offloading with Ultra-Dense Edge Computing. , 2019, , .		4
135	Optimal User Pairing and Power Allocation in 5G Satellite Random Access Networks. IEEE Transactions on Wireless Communications, 2022, 21, 4085-4097.	9.2	4
136	Joint Computation Offloading and Trajectory Design for Aerial Computing. IEEE Wireless Communications, 2021, 28, 88-94.	9.0	4
137	A Stochastic Geometry Analysis of CoMP-Based Uplink in Ultra-Dense Cellular Networks. , 2018, , .		3
138	Road Navigation System Attacks: A Case on GPS Navigation Map. , 2019, , .		3
139	Automatic Detection for Privacy Violations in Android Applications. IEEE Internet of Things Journal, 2022, 9, 6159-6172.	8.7	3
140	Fault Diagnosing ECG in Body Sensor Networks Based on Hidden Markov Model. , 2014, , .		2
141	A Data Reconstruction Model Addressing Loss and Faults in Medical Body Sensor Networks. , 2016, , .		2
142	Guest Editorial Special Issue on Large-Scale Internet of Things. IEEE Internet of Things Journal, 2016, 3, 439-440.	8.7	2
143	Guest Editorial â€œThingsâ€•as Intelligent Sensors and Actuators in the Usersâ€™ Context: Processing and Communications Issues. IEEE Internet of Things Journal, 2017, 4, 297-298.	8.7	2
144	Analyzing Hit Probability of Spatial Correlated Caching for Heterogeneous Mobile Edge Computing. , 2018, , .		2

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145	An Optimized Spatially Cooperative Caching Strategy for Heterogeneous Caching Network. , 2019, , .		2
146	CSEar: Metalearning for Head Gesture Recognition Using Earphones in Internet of Healthcare Things. IEEE Internet of Things Journal, 2022, 9, 23176-23187.	8.7	2
147	Data leakage between C/S communication: A case study on Android music app. , 2017, , .		1
148	Deep Reinforcement Learning Based Task Offloading in SDN-Enabled Industrial Internet of Things. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 425-437.	0.3	1
149	Optimal False Data Injection Attacks on MTC. IEEE Transactions on Vehicular Technology, 2022, 71, 3372-3376.	6.3	1
150	Stochastic Cooperative Communications Using a Geometrical Probability Approach for Wireless Networks. Mobile Networks and Applications, 2019, 24, 1437-1451.	3.3	0
151	A Points-to-Sensitive Model Checker for C Programs in IoT Firmware. IEEE Internet of Things Journal, 2022, 9, 18998-19011.	8.7	0