Pascal Lorenz

List of Publications by Year
in descending order

174 papers	3,160 citations	218381 26 h-index	205818 48 g-index
179 all docs	179 docs citations	179 times ranked	2944 citing authors

#	Article	IF	Citations
1	IoT-Based Smart Irrigation Systems: An Overview on the Recent Trends on Sensors and IoT Systems for Irrigation in Precision Agriculture. Sensors, 2020, 20, 1042.	2.1	321
2	Wireless communication technologies for ITS applications [Topics in Automotive Networking. , 2010, 48, 156-162.		220
3	Toward ubiquitous mobility solutions for body sensor networks on healthcare. IEEE Communications Magazine, 2012, 50, 108-115.	4.9	192
4	Routing in Flying Ad Hoc Networks: Survey, Constraints, and Future Challenge Perspectives. IEEE Access, 2019, 7, 81057-81105.	2.6	168
5	An adaptive approach for information dissemination in Vehicular Ad hoc Networks. Journal of Network and Computer Applications, 2011, 34, 1971-1978.	5.8	159
6	Blockchain-Envisioned Secure Data Delivery and Collection Scheme for 5G-Based IoT-Enabled Internet of Drones Environment. IEEE Transactions on Vehicular Technology, 2020, 69, 9097-9111.	3.9	143
7	UAV-Assisted Supporting Services Connectivity in Urban VANETs. IEEE Transactions on Vehicular Technology, 2019, 68, 3944-3951.	3.9	110
8	The Internet of Things for Smart Cities: Technologies and Applications. IEEE Network, 2019, 33, 4-5.	4.9	92
9	On the Design of Conditional Privacy Preserving Batch Verification-Based Authentication Scheme for Internet of Vehicles Deployment. IEEE Transactions on Vehicular Technology, 2020, 69, 5535-5548.	3.9	89
10	Decentralized and Scalable Privacy-Preserving Authentication Scheme in VANETs. IEEE Transactions on Vehicular Technology, 2018, 67, 8647-8655.	3.9	73
11	Leveraging Communicating UAVs for Emergency Vehicle Guidance in Urban Areas. IEEE Transactions on Emerging Topics in Computing, 2021, 9, 1070-1082.	3.2	73
12	ECaD: Energyâ€efficient routing in flying ad hoc networks. International Journal of Communication Systems, 2019, 32, e4156.	1.6	64
13	Trust Management Scheme Based on Hybrid Cryptography for Secure Communications in VANETs. IEEE Transactions on Vehicular Technology, 2020, 69, 5232-5243.	3.9	55
14	Deployment Strategies of Soil Monitoring WSN for Precision Agriculture Irrigation Scheduling in Rural Areas. Sensors, 2021, 21, 1693.	2.1	55
15	Private blockchain-envisioned drones-assisted authentication scheme in IoT-enabled agricultural environment. Computer Standards and Interfaces, 2022, 80, 103567.	3.8	54
16	Security Against Rank Attack in RPL Protocol. IEEE Network, 2020, 34, 133-139.	4.9	39
17	Block-CLAP: Blockchain-Assisted Certificateless Key Agreement Protocol for Internet of Vehicles in Smart Transportation. IEEE Transactions on Vehicular Technology, 2021, 70, 8092-8107.	3.9	38
18	A Survey of Outlier Detection Techniques in IoT: Review and Classification. Journal of Sensor and Actuator Networks, 2022, 11, 4.	2.3	38

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19	Bio Inspired Routing Algorithm and Efficient Communications within IoT. IEEE Network, 2017, 31, 74-79.	4.9	36
20	Connectivity, Energy and Mobility Driven Clustering Algorithm for Mobile Ad Hoc Networks. , 2007, , .		34
21	A proposal for bridging application layer protocols to HTTP on IoT solutions. Future Generation Computer Systems, 2019, 97, 145-152.	4.9	34
22	U2RV: UAVâ€assisted reactive routing protocol for VANETs. International Journal of Communication Systems, 2020, 33, e4104.	1.6	34
23	SEARCH: An SDN-Enabled Approach for Vehicle Path-Planning. IEEE Transactions on Vehicular Technology, 2020, 69, 14523-14536.	3.9	33
24	MsM: A microservice middleware for smart WSN-based IoT application. Journal of Network and Computer Applications, 2019, 144, 138-154.	5.8	32
25	Game theory based distributed clustering approach to maximize wireless sensors network lifetime. Journal of Network and Computer Applications, 2018, 123, 80-88.	5.8	30
26	An effective Bat algorithm for node localization in distributed wireless sensor network. Security and Privacy, 2018, 1, e7.	1.9	29
27	BRT: Bus-Based Routing Technique in Urban Vehicular Networks. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 4550-4562.	4.7	28
28	Intra-Mobility Support Solutions for Healthcare Wireless Sensor Networksâ€"Handover Issues. IEEE Sensors Journal, 2013, 13, 4339-4348.	2.4	27
29	MWCSGAâ€"Multi Weight Chicken Swarm Based Genetic Algorithm for Energy Efficient Clustered Wireless Sensor Network. Sensors, 2021, 21, 791.	2.1	27
30	A framework to identify knowledge actor roles in enterprise social networks. Journal of Knowledge Management, 2017, 21, 817-838.	3.2	21
31	DNA computing and table based data accessing in the cloud environment. Journal of Network and Computer Applications, 2020, 172, 102835.	5.8	21
32	In.IoTâ€"A New Middleware for Internet of Things. IEEE Internet of Things Journal, 2021, 8, 7902-7911.	5.5	21
33	A Hybrid Adaptive Coding and Decoding Scheme for Multi-hop Wireless Sensor Networks. Wireless Personal Communications, 2017, 94, 3017-3033.	1.8	20
34	EQ-AODV: Energy and QoS supported AODV for better performance in WMSNs. , 2016, , .		19
35	On the performance of adaptive coding schemes for energy efficient and reliable clustered wireless sensor networks. Ad Hoc Networks, 2017, 64, 99-111.	3.4	19
36	Channel Busyness Based Multipath Load Balancing Routing Protocol for Ad hoc Networks. IEEE Network, 2019, 33, 118-125.	4.9	19

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37	A novel cryptosystem based on DNA cryptography and randomly generated mealy machine. Computers and Security, 2021, 104, 102160.	4.0	19
38	New Path Centrality Based on Operator Calculus Approach for Wireless Sensor Network Deployment. IEEE Transactions on Emerging Topics in Computing, 2019, 7, 162-173.	3.2	18
39	Evolutionary multi-objective based approach for wireless sensor network deployment. , 2014, , .		17
40	DronAway: A Proposal on the Use of Remote Sensing Drones as Mobile Gateway for WSN in Precision Agriculture. Applied Sciences (Switzerland), 2020, 10, 6668.	1.3	16
41	A Novel Channel Switching Scenario in Multicast IPTV Networks. , 2009, , .		15
42	Weighted Probabilistic Next-Hop Forwarder Decision-Making in VANET Environments. , 2016, , .		15
43	Quality of service based routing algorithms for heterogeneous networks [Guest editorial]. , 2007, 45, 65-66.		14
44	Security and performance enhancement of AODV routing protocol. International Journal of Communication Systems, 2015, 28, 2003-2019.	1.6	14
45	Intra-mobility handover enhancement in healthcare wireless sensor networks. , 2012, , .		13
46	Performance comparison of modified AODV in reference point group mobility and random waypoint mobility models. , 2013, , .		13
47	A decentralized approach for information dissemination in Vehicular Ad hoc Networks. Journal of Network and Computer Applications, 2014, 46, 154-165.	5.8	13
48	Load Balancing Algorithm for Efficient and Reliable IoT Communications within E-Health Environment. , 2017, , .		13
49	Moth Flame Optimization Algorithm Range-Based for Node Localization Challenge in Decentralized Wireless Sensor Network. International Journal of Distributed Systems and Technologies, 2019, 10, 82-109.	0.6	13
50	A Cross Layer Solution for Better Interactions Between Routing and Transport Protocols in MANET. Journal of Computing and Information Technology, 2013, 21, 137.	0.2	13
51	Towards Secure Searchable Electronic Health Records Using Consortium Blockchain. Network, 2022, 2, 239-256.	1.5	13
52	A new approach for energy efficiency in MANET based on the OLSR protocol. International Journal of Wireless and Mobile Computing, 2012, 5, 292.	0.1	12
53	MAC layer handover mechanism for continuous communication support in healthcare mobile wireless sensor networks. Telecommunication Systems, 2015, 60, 119-132.	1.6	12
54	E-RPL: A Routing Protocol for IoT Networks. , 2018, , .		12

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55	Smart and selfâ€organised routing algorithm for efficient IoT communications in smart cities. IET Wireless Sensor Systems, 2018, 8, 305-312.	1.3	12
56	Autonomous Energy Management System Achieving Piezoelectric Energy Harvesting in Wireless Sensors. Mobile Networks and Applications, 2020, 25, 794-805.	2.2	12
57	User authentication scheme preserving anonymity for ubiquitous devices. Security and Communication Networks, 2015, 8, 3131-3141.	1.0	11
58	WeiSTARS: A weighted trust-aware relay selection scheme for VANET. , 2017, , .		11
59	ES-WSN: Energy Efficient by Switching between Roles of Nodes in WSNs. , 2015, , .		10
60	Intra-body Temperature Monitoring Using a Biofeedback Solution. , 2010, , .		9
61	Impact of sensor nodes scaling and velocity on handover mechanisms for healthcare wireless sensor networks with mobility support. Computers in Industry, 2015, 69, 92-104.	5.7	9
62	OLPâ€"A RESTful Open Low-Code Platform. Future Internet, 2021, 13, 249.	2.4	9
63	Increasing endâ€toâ€end fairness over IEEE 802.11eâ€based wireless mesh networks. International Journal of Communication Systems, 2013, 26, 1-12.	1.6	8
64	TCP Performance in Mobile Ad hoc Networks. Network Protocols and Algorithms, 2013, , 117.	1.0	8
65	Energy evaluation of AID protocol in Mobile Ad Hoc Networks. Journal of Network and Computer Applications, 2015, 58, 287-293.	5.8	8
66	Operator calculus approach for route optimizing and enhancing wireless sensor network. Journal of Network and Computer Applications, 2017, 97, 1-10.	5.8	8
67	Metaheuristic RSSI based for node localization in distributed wireless sensor network. , 2017, , .		8
68	Special issue on amateur drone and UAV communications and networks. Journal of Communications and Networks, 2018, 20, 429-433.	1.8	8
69	Performance Implications of Meshing Degree for Optical Burst Switched Networks Using One-Way Resource Reservation Protocols. Telecommunication Systems, 2005, 30, 35-47.	1.6	7
70	Secure AODV Routing Protocol Based on Trust Mechanism. Signals and Communication Technology, 2013, , 81-105.	0.4	7
71	A novel predictive link state indicator for ad-hoc networks. , 2014, , .		7
72	Adaptive scheduling mechanism for IPTV over WiMAX IEEE 802.16j networks. International Journal of Communication Systems, 2014, 27, 1009-1019.	1.6	7

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73	Cluster-Based Communication Protocol and Architecture for a Wastewater Purification System Intended for Irrigation. IEEE Access, 2021, 9, 142374-142389.	2.6	7
74	Multi-Constrained and Edge-Enabled Selection of UAV Participants in Federated Learning Process. Electronics (Switzerland), 2022, 11, 2119.	1.8	7
75	Performance analysis of evolutionary multi-objective based approach for deployment of wireless sensor network with the presence of fixed obstacles. , 2014, , .		6
76	Energy efficient in medical ad hoc sensors network by exploiting routing protocols. , 2014, , .		6
77	Energy-efficient power allocation algorithms for mobile wireless sensor networks. International Journal of Sensor Networks, 2014, 16, 199.	0.2	6
78	Network Life Time maximization of the AOMDV Protocol Using Nodes Energy Variation. Network Protocols and Algorithms, 2018, 10, 73.	1.0	6
79	Low Energy and Location Based Clustering Protocol for Wireless Sensor Network. , 2018, , .		6
80	Whale Optimization Approach for Optimization Problem In Distributed Wireless Sensor Network. , 2019, , .		6
81	Practical Design of a WSN to Monitor the Crop and its Irrigation System. Network Protocols and Algorithms, 2019, 10, 35.	1.0	6
82	WRE-OLSR, a new scheme for enhancing the lifetime within ad hoc and wireless sensor networks. International Journal of Communication Systems, 2019, 32, e3975.	1.6	6
83	Cross-layered energy optimization with MAC protocol based routing protocol in clustered wireless sensor network in internet of things applications. International Journal of Communication Systems, 2022, 35, .	1.6	6
84	Lightweight Blockchain-Based Scheme to Secure Wireless M2M Area Networks. Future Internet, 2022, 14, 158.	2.4	6
85	Performance Assessment of Optical Burst Switching Ring and Chordal Ring Networks. Telecommunication Systems, 2004, 27, 133-149.	1.6	5
86	Energy Saving and Connectivity Tradeoff by Adaptative Transmission Range in 802.11g MANETs. , 2006, , .		5
87	Wireless Broadband Access: WiMAX and Beyond [Guest Editorial]. , 2007, 45, 60-61.		5
88	An efficient heterogeneous key management approach for secure multicast communications in ad hoc networks. Telecommunication Systems, 2008, 37, 29-36.	1.6	5
89	Delay Aware Secure Hashing for Opportunistic Message Forwarding in Internet of Things. , 2017, , .		5
90	Black hole attack detection and ignoring in OLSR protocol. International Journal of Trust Management in Computing and Communications, 2017, 4, 75.	0.1	5

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91	A belief function-based forecasting link breakage indicator for VANETs. Wireless Networks, 2020, 26, 2433-2448.	2.0	5
92	Intelligent Technique Based on Enhanced Metaheuristic for Optimization Problem in Internet of Things and Wireless Sensor Network. International Journal of Grid and High Performance Computing, 2020, 12, 17-42.	0.7	5
93	A New and Efficient Scheme for Improving the Digitized Chaotic Systems From Dynamical Degradation. IEEE Access, 2021, 9, 88997-89008.	2.6	5
94	New Protocol and Architecture for a Wastewater Treatment System Intended for Irrigation. Applied Sciences (Switzerland), 2021, 11, 3648.	1.3	5
95	Identifying Misbehaving Greedy Nodes in IoT Networks. Sensors, 2021, 21, 5127.	2.1	5
96	A Framework to Analyze Enterprise Social Network Data. Advances in Business Information Systems and Analytics Book Series, 2016, , 84-107.	0.3	5
97	Communication protocols and algorithms for the smart grid [Guest Editorial]. , 2012, 50, 126-127.		4
98	Performance analysis of optimized trust AODV using ant algorithm. , 2014, , .		4
99	Design of Authentication Model Preserving Intimacy and Trust in Intelligent Environments. Network Protocols and Algorithms, 2015, 7, 64.	1.0	4
100	Data Fusion for a Forecasting Link State Indicator in VANETs. , 2016, , .		4
101	A study of users' acceptance and satisfaction of emergency call service. International Journal of Communication Systems, 2016, 29, 2279-2291.	1.6	4
102	Multi-Physics Modeling and Numerical Analysis of Tubular Linear Switched Reluctance Motors. Iranian Journal of Science and Technology - Transactions of Electrical Engineering, 2019, 43, 871-881.	1.5	4
103	Multi-Agent-Based Modeling for Underground Pipe Health and Water Quality Monitoring for Supplying Quality Water. International Journal of Intelligent Information Technologies, 2020, 16, 52-79.	0.5	4
104	Location, Context, and Social Objectives Using Knowledge-Based Rules and Conflict Resolution for Security in Internet of Things. IEEE Internet of Things Journal, 2021, 8, 407-417.	5.5	4
105	Incidence of the Improvement of the Interactions between MAC and Transport Protocols on MANET Performance. Advances in Wireless Technologies and Telecommunication Book Series, 2014, , 275-292.	0.3	4
106	An efficient QoS routing algorithm for solving MCP in ad hoc networks. Telecommunication Systems, 2006, 33, 255-267.	1.6	3
107	Primitive Operations for Prioritized Data Reduction in Wireless Sensor Network Nodes. , 2009, , .		3
108	A Group-Based Protocol for Improving Energy Distribution in Smart Grids. , 2011, , .		3

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109	Introduction to special issue: ICISA 2010. Cluster Computing, 2012, 15, 1-1.	3.5	3
110	Performance estimation of AODV variant with trust mechanism. , 2014, , .		3
111	Impact of Realistic Simulation on the Evaluation of Mobile *Ad Hoc* Routing Protocols. IEEE Transactions on Emerging Topics in Computing, 2015, 3, 317-334.	3.2	3
112	An Android based new German eID solution for policy making processes. Security and Communication Networks, 2016, 9, 1271-1284.	1.0	3
113	Topology control by controlling mobility for coverage in wireless sensor networks. , 2016, , .		3
114	Efficient wireless mobile networks communications applied to e-health. , 2017, , .		3
115	Performance Evaluation of IoT Middleware through Multicriteria Decision-Making. , 2018, , .		3
116	AI for Network Traffic Control. IEEE Network, 2018, 32, 6-7.	4.9	3
117	A New AODV Based Forecasting Link Breakage Indicator for VANETs. , 2019, , .		3
118	Performance comparison of programming languages for Internet of Things middleware. Transactions on Emerging Telecommunications Technologies, 2020, 31, e3891.	2.6	3
119	RPL rank based†attack mitigation scheme in IoT environment. International Journal of Communication Systems, 2021, 34, e4917.	1.6	3
120	A SELF ORGANIZING ALGORITHM FOR AD HOC NETWORKS. , 2005, , .		3
121	Detecting Compromised IoT Devices Through XGBoost. IEEE Transactions on Intelligent Transportation Systems, 2023, 24, 15392-15399.	4.7	3
122	Autonomous, scalable, and resilient overlay infrastructure. Journal of Communications and Networks, 2006, 8, 378-390.	1.8	2
123	Energy-efficient network protocols and algorithms for wireless sensor networks. International Journal of Communication Systems, 2007, 20, 743-746.	1.6	2
124	An Efficient Multicast Tree Aggregation Mechanism for Ad Hoc Networks. , 2008, , .		2
125	Using Image Processing Algorithms for Energy Efficient Routing Algorithm in Sensor Networks. , 2009, , .		2
126	LAR Image Transmission over Fading Channels: A Hierarchical Protection Solution. , 2009, , .		2

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127	Determining Optimal Orbital Path of a Nanosatellite for Efficient Exploitation of the Solar Energy Captured. , 2009, , .		2
128	A Novel Scheme for a Fast Channel Change in Multicast IPTV System. , 2011, , .		2
129	Collaborating Using Intergroup Communications in Group-Based Wireless Sensor Networks: Another Way for Saving Energy. Lecture Notes in Computer Science, 2012, , 85-93.	1.0	2
130	Improving IPTV Forwarding Masechanism in IEEE 802.16j MMR Networks Based on Aggregation. ETRI Journal, 2013, 35, 234-244.	1.2	2
131	Integration of energy aware WSNs in cloud computing using NDN approach. , 2017, , .		2
132	Efficient medium access protocol for Internet of things applications. International Journal of Communication Systems, 2017, 30, e3227.	1.6	2
133	Distinction between data losses for better communications in iot. , 2017, , .		2
134	Self-organizing technique for improving coverage in connected mobile objects networks. Telecommunication Systems, 2018, 67, 179-193.	1.6	2
135	A Systematic Review of mHealth apps Evaluations for Cardiac Issues. Proceedings (mdpi), 2018, 2, .	0.2	2
136	A secure communication model using lightweight Diffie-Hellman method in vehicular ad hoc networks. International Journal of Security and Networks, 2019, 14, 61.	0.1	2
137	Anonymizing Communication in VANets by Applying I2P Mechanisms. , 2019, , .		2
138	A Novel Bat Algorithm for Line-of-Sight Localization in Internet of Things and Wireless Sensor Network. Advances in Computational Intelligence and Robotics Book Series, 2019, , 213-239.	0.4	2
139	Modelization of Temporal Mechanisms for Sensors Networks. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 111-122.	0.2	2
140	AODV-UI with Malicious Node Detection and Removal for Public MANET. Journal of Communications Software and Systems, 2017, 8, 110.	0.6	2
141	Node Localization in WSN and IoT Using Harris Hawks Optimization Algorithm. , 2021, , .		2
142	A Scalable Middleware for Creating and Managing Autonomous Overlays. , 2007, , .		1
143	A Service Based Clustering Approach for Pervasive Computing in Ad Hoc Networks. , 2008, , .		1
144	An Enhanced Framework for Web Recommenders. , 2009, , .		1

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145	A Clustering-Based Scalable Key Management Protocol for Ad Hoc Networks. , 2009, , .		1
146	An Adaptive Framework for Diagnosis Validation. , 2009, , .		1
147	Prioritizing Data Processing in Wireless Sensor Networks. , 2010, , .		1
148	Using Matrix Convolutions and Clustering for Energy Efficient Routing Algorithm in Sensor Networks. , 2010, , .		1
149	Mixed positioning system guaranteeing the continuity of indoor/outdoor tracking. , 2014, , .		1
150	Search based software engineering on evolutionary multi-objective approach. , 2016, , .		1
151	Cognitive Radio Enabled Cache Map-and-Route Using Context Mapping and Decision Making Approach in Software Defined Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 5849-5858.	3.9	1
152	Proactive Replication Scheme for Resilient Content Delivery in Software Defined Networks. , 2019, , .		1
153	MONET Special Issue on Towards Future Ad Hoc Networks: Technologies and Applications (I). Mobile Networks and Applications, 2020, 25, 756-759.	2.2	1
154	Divide and Conquer-based Attack against RPL Routing Protocol. , 2020, , .		1
155	An Enhanced Bat Algorithm for Parallel Localization Based on a Mobile Beacon Sensor in Wireless Sensor Networks. Lecture Notes in Networks and Systems, 2020, , 43-61.	0.5	1
156	A hybrid Harrison Hawk optimization based on differential evolution for the node localization problem in IoT networks. International Journal of Communication Systems, 0, , .	1.6	1
157	GUEST EDITORIAL - WIRELESS BROADBAND ACCESS: WIMAX AND BEYOND. , 2007, 45, 122-123.		0
158	Heterogeneous key management protocol for secure group communications in MANETS. , 2007, , .		0
159	Fairness in Double Star Ad Hoc Networks. , 2009, , .		0
160	Dynamic Feedback for Service Reputation Updates. , 2010, , .		0
161	Location-Aided Routing Using Image Representation for Wireless Sensor Networks. , 2011, , .		0
162	Comparison and performance analysis of AntNet and distance vector routing protocol in telecommunication networks Case study : XYZ company. , 2013, , .		0

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163	An optimization calculation method: the positioning of passenger's mobility based on augmented reality. , 2014, , .		0
164	Foreword by Guest Editors for the Special Issue on the 2012 ICUFN Conference. Wireless Personal Communications, 2014, 74, 1017-1019.	1.8	0
165	A combined path selection and admission control scheme for IPTV in IEEE 802.16j MMR networks. , 2015, , .		0
166	Application of a New Energy-Efficient Protocol for MAC Layer for E-Health. , 2016, , .		0
167	S-ROGUE: Routing protocol for unmanned systems on the surface. , 2017, , .		0
168	Guest Editorial Special Issue on Visual Signal Applications Over Networks. IEEE Systems Journal, 2018, 12, 10-11.	2.9	0
169	Guest Editorial: Next Generation Wireless Computing Systems. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 551-552.	3.2	0
170	Evidence theory–based framework for improving automation in home automation system. International Journal of Communication Systems, 2018, 31, e3791.	1.6	0
171	Resource Allocation and Event Synchronisation Approach Based on Max-Plus Algebra for Cloud Computing. , 2019, , .		0
172	QoS and QoE in the Next Generation Networks and Wireless Networks. Communications in Computer and Information Science, 2014, , 3-16.	0.4	0
173	International Workshop on Future Internet and Smart Networks. Studies in Computational Intelligence, 2016, , 461-461.	0.7	0
174	Security Challenges for Light Emitting Systems. Future Internet, 2021, 13, 276.	2.4	0