Rakesh Kumar Jha

List of Publications by Year
in descending order

120 papers	4,443 citations	304368 22 h-index	106150 65 g-index
120 all docs	120 docs citations	120 times ranked	4682 citing authors

#	Article	IF	Citations
1	A Survey of 5G Network: Architecture and Emerging Technologies. IEEE Access, 2015, 3, 1206-1232.	2.6	1,973
2	Power Optimization in 5G Networks: A Step Towards GrEEn Communication. IEEE Access, 2016, 4, 1355-1374.	2.6	234
3	Device-to-Device Communication in Cellular Networks: A Survey. Journal of Network and Computer Applications, 2016, 71, 99-117.	5.8	221
4	A Survey on Beyond 5G Network With the Advent of 6G: Architecture and Emerging Technologies. IEEE Access, 2021, 9, 67512-67547.	2.6	221
5	A Survey on Energy Efficient Narrowband Internet of Things (NBIoT): Architecture, Application and Challenges. IEEE Access, 2019, 7, 16739-16776.	2.6	206
6	Green Communication in Next Generation Cellular Networks: A Survey. IEEE Access, 2017, 5, 11727-11758.	2.6	199
7	A survey on device-to-device (D2D) communication: Architecture and security issues. Journal of Network and Computer Applications, 2017, 78, 9-29.	5.8	174
8	A Survey on Software Defined Networking: Architecture for Next Generation Network. Journal of Network and Systems Management, 2017, 25, 321-374.	3.3	93
9	A survey on green communication and security challenges in 5G wireless communication networks. Journal of Network and Computer Applications, 2017, 96, 39-61.	5.8	76
10	A survey on ultra-dense network and emerging technologies: Security challenges and possible solutions. Journal of Network and Computer Applications, 2017, 95, 54-78.	5.8	47
11	Device to device communication: A survey. Journal of Network and Computer Applications, 2019, 129, 71-89.	5.8	44
12	Chromatic dispersion compensation techniques and characterization of fiber Bragg grating for dispersion compensation. Optical and Quantum Electronics, 2017, 49, 1.	1.5	43
13	Bandwidth Spoofing and Intrusion Detection System for Multistage 5G Wireless Communication Network. IEEE Transactions on Vehicular Technology, 2018, 67, 618-632.	3.9	43
14	A comprehensive survey on spectrum sharing: Architecture, energy efficiency and security issues. Journal of Network and Computer Applications, 2018, 103, 29-57.	5.8	43
15	Implementation of Intrusion Detection System using Adaptive Neuro-Fuzzy Inference System for 5G wireless communication network. AEU - International Journal of Electronics and Communications, 2017, 74, 94-106.	1.7	39
16	Performance comparison of various modulation schemes over free space optical (FSO) link employing Gammaâ€"Gamma fading model. Optical and Quantum Electronics, 2017, 49, 1.	1.5	37
17	NB-IoT Security: A Survey. Wireless Personal Communications, 2020, 113, 2661-2708.	1.8	35
18	Performance analysis of an 80 (8ÂÃ—10) Gbps RZ-DPSK based WDM-FSO system under combined effects of various weather conditions and atmospheric turbulence induced fading employing Gammaâ€"Gamma fading model. Optical and Quantum Electronics, 2018, 50, 1.	1.5	32

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19	A novel method for parallel indexing of real time geospatial big data generated by IoT devices. Future Generation Computer Systems, 2019, 97, 433-452.	4.9	30
20	Performance Analysis of Proposed OpenFlow-Based Network Architecture Using Mininet. Wireless Personal Communications, 2016, 86, 943-958.	1.8	26
21	A Comparative Performance Analysis of Routing Protocols in MANET using NS3 Simulator. International Journal of Computer Network and Information Security, 2015, 7, 62-68.	1.8	25
22	Green NOMA With Multiple Interference Cancellation (MIC) Using Sector-Based Resource Allocation. IEEE Transactions on Network and Service Management, 2018, 15, 1006-1017.	3.2	23
23	Possible Security Attack Modeling in Ultradense Networks Using High-Speed Handover Management. IEEE Transactions on Vehicular Technology, 2018, 67, 2178-2192.	3.9	21
24	Sector-Based Radio Resource Allocation (SBRRA) Algorithm for Better Quality of Service and Experience in Device-to-Device (D2D) Communication. IEEE Transactions on Vehicular Technology, 2018, 67, 5750-5765.	3.9	20
25	Layer based security in Narrow Band Internet of Things (NB-IoT). Computer Networks, 2021, 185, 107592.	3.2	20
26	Security Comparison of Wired and Wireless Network with Firewall and Virtual Private Network (VPN). , 2010, , .		19
27	Power optimization using massive MIMO and small cells approach in different deployment scenarios. Wireless Networks, 2017, 23, 959-973.	2.0	19
28	Design and comparative performance analysis of different chirping profiles of tanh apodized fiber Bragg grating and comparison with the dispersion compensation fiber for long-haul transmission system. Journal of Modern Optics, 2017, 64, 555-566.	0.6	19
29	Prolonging User Battery Lifetime Using Green Communication in Spectrum Sharing Networks. IEEE Communications Letters, 2018, 22, 1490-1493.	2.5	17
30	Joint power allocation and relay selection strategy for 5G network: a step towards green communication. Telecommunication Systems, 2018, 68, 201-215.	1.6	14
31	Security threats of wireless networks: A survey. , 2015, , .		13
32	Attack modeling and intrusion detection system for 5G wireless communication network. International Journal of Communication Systems, 2017, 30, e3237.	1.6	13
33	Intelligent fault diagnosis of rolling bearing and gear system under fluctuating load conditions using image processing technique. Journal of Mechanical Science and Technology, 2020, 34, 4107-4115.	0.7	13
34	FILTERLESS 16-TUPLED OPTICAL MILLIMETER-WAVE GENERATION USING CASCADED PARALLEL MACH-ZEHNDER MODULATORS WITH EXTINCTION RATIO TOLERANCE. Progress in Electromagnetics Research Letters, 2020, 91, 129-135.	0.4	13
35	Location Based Performance of WiMAX Network for QoS with Optimal Base Stations (BS). Wireless Engineering and Technology, 2011, 02, 135-145.	0.6	13
36	Power and energy optimization with reduced complexity in different deployment scenarios of massive MIMO network. International Journal of Communication Systems, 2019, 32, e3907.	1.6	12

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37	Security Architecture of 5G Wireless Communication Network. International Journal of Sensors, Wireless Communications and Control, 2018, 8, 92-99.	0.5	11
38	Rank-Based Secrecy Rate Improvement Using NOMA for Ultra Dense Network. IEEE Transactions on Vehicular Technology, 2019, 68, 10687-10702.	3.9	11
39	Electromagnetic Radiation Reduction in 5G Networks and Beyond Using Thermal Radiation Mode. IEEE Transactions on Vehicular Technology, 2020, 69, 11841-11856.	3.9	11
40	A survey on security issues of 5G NR: Perspective of artificial dust and artificial rain. Journal of Network and Computer Applications, 2020, 160, 102597.	5.8	11
41	Adaptive Small Cell position algorithm (ASPA) for green farming using NB-IoT. Journal of Network and Computer Applications, 2021, 173, 102841.	5.8	11
42	Filterless optical millimeter-wave generation using cascaded-parallel Mach–Zehnder modulators with tunable frequency multiplication factor. Optical and Quantum Electronics, 2021, 53, 1.	1.5	11
43	Power optimization using optimal small cell arrangements in different deployment scenarios. International Journal of Communication Systems, 2017, 30, e3279.	1.6	10
44	Energy‐efficient device‐to‐device communication using adaptive resource‐block allocation. International Journal of Communication Systems, 2019, 32, e3922.	1.6	10
45	Novel Beamforming Approach for Secure Communication in UDN to Maximize Secrecy Rate and Fairness Security Assessment. IEEE Internet of Things Journal, 2019, 6, 5935-5947.	5.5	10
46	Green IoT: A Short Survey on Technical Evolution & Techniques. Wireless Personal Communications, 2022, 123, 525-553.	1.8	10
47	TWDM-PON-AN optical backhaul solution for hybrid opticalÂwireless networks. Journal of Modern Optics, 2016, 63, 1899-1916.	0.6	9
48	Power optimization with low complexity using scaled beamforming approach for a massive MIMO and small cell scenario. Wireless Networks, 2020, 26, 1165-1176.	2.0	9
49	Energy and spectral efficiency optimization using probabilistic based spectrum slicing (PBSS) in different zones of 5G wireless communication network. Telecommunication Systems, 2020, 73, 59-73.	1.6	9
50	A performance Comparison with cost for QoS Application in On-Demand Cloud Computing. , 2011, , .		8
51	Analysis of Si/SiGe Heterostructure Solar Cell. Journal of Energy, 2014, 2014, 1-7.	1.4	8
52	Performance Analysis of Disaster Management Using WSN Technology. Procedia Computer Science, 2015, 49, 162-169.	1.2	8
53	A comprehensive survey on Green ICT with 5G-NB-IoT: Towards sustainable planet. Computer Networks, 2021, 199, 108433.	3.2	8
54	VLC Enabled Hybrid Wireless Network for B5G/6G Communications. Wireless Personal Communications, 2022, 124, 1741-1771.	1.8	8

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55	Zonal-Based GrEEn Algorithm for Augmenting the Battery Life in Spectrum Shared Networks via D2D Communication. IEEE Transactions on Vehicular Technology, 2019, 68, 405-419.	3.9	7
56	Green NOMA assisted NB-IoT based urban farming in multistory buildings. Computer Networks, 2021, 199, 108410.	3.2	7
57	WiMAX System Simulation and Performance Analysis under the Influence of Jamming. Wireless Engineering and Technology, 2010, 01, 20-26.	0.6	7
58	Failure prognosis of rolling bearings using maximum variance wavelet subband selection and support vector regression. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, 1.	0.8	7
59	Performance Analysis under the Influence of Jamming for WiMAX System. , 2011, , .		6
60	On demand cloud computing performance analysis with low cost for QoS application. , 2011, , .		6
61	Security issues in ultra dense network for 5G scenario. , 2018, , .		6
62	Software Defined Optical Networks (SDON): proposed architecture and comparative analysis. Journal of the European Optical Society-Rapid Publications, 2019, 15, .	0.9	6
63	A Comprehensive Survey on Security Issues in 5G Wireless Communication Network using Beamforming Approach. Wireless Personal Communications, 2021, 119, 3447-3501.	1.8	6
64	Tactile Based Intelligence Touch Technology in IoT Configured WCN in B5G/6G-A Survey. IEEE Access, 2023, 11, 30639-30689.	2.6	6
65	TPA: Prediction of Spoofing Attack Using Thermal Pattern Analysis in Ultra Dense Network for High Speed Handover Scenario. IEEE Access, 2018, 6, 66268-66284.	2.6	5
66	Protocol design and resource allocation for power optimization using spectrum sharing for 5G networks. Telecommunication Systems, 2019, 72, 95-113.	1.6	5
67	Performance Analysis of Grouped Multilevel Space-Time Trellis Coding Technique Using Cognitive Radio in Different Deployment Models. Wireless Communications and Mobile Computing, 2019, 2019, 1-20.	0.8	5
68	SDOWN: A novel algorithm for better Quality of Service and Experience in Software Defined Optical Wireless Network. Optik, 2019, 176, 662-684.	1.4	5
69	Detection and Fortification Analysis of WiMAX Network: With Misbehavior Node Attack. International Journal of Communications, Network and System Sciences, 2012, 05, 353-367.	0.4	5
70	Modelling and Simulation of Hydro Power Plant using MATLAB & WatPro 3.0. International Journal of Intelligent Systems and Applications, 2015, 7, 1-8.	0.9	5
71	Notice of Violation of IEEE Publication Principles: A Performance Comparison of Routing Protocols for Security Issue in Wireless Mobile Ad Hoc Networks. , 2010, , .		4
72	Location Based Radio Resource Allocation (LBRRA) in WIMAX and WLAN network. , 2011, , .		4

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73	IPv6. , 2011, , .		4
74	Resource allocation for downlink OFDMA in WiMAX systems. , 2011, , .		4
75	Performance of location based WiMAX network for QoS with optimal base stations (BS). , 2011, , .		4
76	Computing over encrypted spatial data generated by IoT. Telecommunication Systems, 2019, 70, 193-229.	1.6	4
77	Power Optimization using Spectrum Sharing for 5G Wireless Networks. , 2019, , .		4
78	RBA: Region Based Algorithm for secure harvesting in Ultra Dense Network. Journal of Network and Computer Applications, 2019, 125, 179-189.	5.8	4
79	SDOWN: A Novel Algorithm and Comparative Performance Analysis of Underlying Infrastructure in Software Defined Heterogeneous Network. Fiber and Integrated Optics, 2019, 38, 43-75.	1.7	4
80	ANGUISH: Security attack in narrowband–Internet of Things (NB–IoT) using game theory and hardware analysis. Transactions on Emerging Telecommunications Technologies, 2021, 32, e3987.	2.6	4
81	AR-Based Half-Duplex Attack in Beyond 5G Networks. IEEE Systems Journal, 2021, 15, 1693-1704.	2.9	4
82	A Performance Comparison With Modulation Schemes In WiMAX Physical Layer Security Aspect. International Journal of Computer Applications, 2010, 6, 24-27.	0.2	4
83	Resource allocation algorithm for WiMAX systems. , 2011, , .		3
84	Location based WiMAX network optimization. , 2011, , .		3
85	MATLAB User Interface for Simulation of Silicon Germanium Solar Cell. Journal of Materials, 2015, 2015, 1-6.	0.1	3
86	Half-Duplex Radio: Toward Green 5G NR. IEEE Consumer Electronics Magazine, 2020, 9, 34-40.	2.3	3
87	Sustainable power production and purification of water. , 2014, , .		2
88	Technology Involved in Bridging Physical, Cyber, and Hyper World. Advances in Intelligent Systems and Computing, 2016, , 735-743.	0.5	2
89	Power Optimization using Spectrum Sharing for Next Generation Cellular Networks. , 2019, , .		2
90	Half-Duplex Attack: An Effectual Attack Modelling in D2D Communication. , 2020, , .		2

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91	An Effective Defence Mechanism for Detection of DDoS Attack on Application Layer Based on Hidden Markov Model. Advances in Intelligent and Soft Computing, 2012, , 943-950.	0.2	2
92	Behavioral Model for Live Detection of Apps Based Attack. IEEE Transactions on Computational Social Systems, 2023, 10, 934-946.	3.2	2
93	Geo-Encryption - A New Direction to Secure Traditional SSL VPN. , 2011, , .		1
94	Security analysis of WiMAX network: With Misbehavior Node attack. , 2011, , .		1
95	Performance Analysis of Black Hole Attack on WiMAX-WLAN Interface Network. , 2012, , .		1
96	Power optimization of wireless network. , 2013, , .		1
97	CFD and Thermal Analysis of Leaf Seals for Aero-Engine Application. , 2016, , .		1
98	A Survey on Wireless Security: IP Security Concern. Advances in Intelligent Systems and Computing, 2017, , 711-722.	0.5	1
99	Adaptive Resource Block Allocation for Green 5G Wireless Communication Networks. , 2018, , .		1
100	Comparison and Selection of Wavelets for Vibration Signals Denoising and Fault Detection of Rotating Machines using Neighborhood Correlation of SWT Coefficients. , 2018, , .		1
101	E2ARC: Energyâ€efficient adaptive resource block allocation with low complexity in deviceâ€toâ€device communication. Transactions on Emerging Telecommunications Technologies, 2018, 29, e3525.	2.6	1
102	EM Radiation Reduction in WCN: Towards Safe Generations. , 2020, , .		1
103	A Performance of Security Aspect in WiMAX Physical Layer with Different Modulation Schemes. Communications in Computer and Information Science, 2011, , 433-440.	0.4	1
104	Access Control Based on Location and Time. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 102-107.	0.2	1
105	Resource Allocation in Mobile WiMAX Network: An Optimal Approach. Proceedings of the Asia-Pacific Advanced Network, 2013, 34, 52.	0.3	1
106	Proposed Advanced Education System. International Journal of Computer Applications, 2014, 91, 1-4.	0.2	1
107	Location based radio resource allocation (LBRRA) for WiMAX networks. , 2011, , .		0
108	A performance comparison for QoS with different WiMAX environment for video application. , 2011, , .		0

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109	Mobile Governance based on WiMAX Connectivity for Rural Development in India. International Journal of Computer Network and Information Security, 2012, 4, 49-55.	1.8	0
110	Location based radio resource allocation (LBRRA) in WiMAX and WiMAX-WLAN interface network. , 2012, , .		0
111	Resource Allocation in Mobile WiMAX Network: An Optimal Approach. Proceedings of the Asia-Pacific Advanced Network, 2013, 34, 52.	0.3	0
112	Next generation cellular networks and green communication. , 2018, , .		0
113	RFID based food rationing system. HardwareX, 2018, 4, e00043.	1.1	0
114	RBA: Detection and Protection Analysis Using Region-Based Algorithm in Ultra-Dense Networks. IEEE Access, 2019, 7, 52997-53011.	2.6	0
115	Implementation of Fault Tolerant Features in the In-House Developed 1553B Controller Core. , 2019, , .		0
116	Dispersed beamforming approach for secure communication in UDN. Wireless Networks, 2020, 26, 3227-3244.	2.0	0
117	Security Issues in Narrowband-IoT: Towards Green Communication. , 2021, , .		0
118	Electronic Governance in Rural Areas: A Performance Case Study with WiMAX Technology. Lecture Notes in Computer Science, 2012, , 279-288.	1.0	0
119	An Optimum Approach for Radio Resource Allocation(RRA) in Mobile WiMAX Network. Lecture Notes in Computer Science, 2012, , 357-365.	1.0	0
120	Performance Analysis of Network Layer Security Attack in WiMAX System. Advances in Intelligent Systems and Computing, 2013, , 535-542.	0.5	0