

Pengxing Guo

List of Publications by Year in descending order

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times ranked

964
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimizing Backup Optical-Network-Units Selection and Backup Fibers Deployment in Survivable Hybrid Wireless-Optical Broadband Access Networks. Journal of Lightwave Technology, 2012, 30, 1509-1523.	2.7	72
2	An Efficient SDN-Based DDoS Attack Detection and Rapid Response Platform in Vehicular Networks. IEEE Access, 2018, 6, 44570-44579.	2.6	71
3	Green Survivable Collaborative Edge Computing in Smart Cities. IEEE Transactions on Industrial Informatics, 2018, 14, 1594-1605.	7.2	67
4	SDN-Enabled Social-Aware Clustering in 5G-VANET Systems. IEEE Access, 2018, 6, 28213-28224.	2.6	67
5	A Novel Survivable Routing Algorithm With Partial Shared-Risk Link Groups (SRLG)-Disjoint Protection Based on Differentiated Reliability Constraints in WDM Optical Mesh Networks. Journal of Lightwave Technology, 2007, 25, 1410-1415.	2.7	56
6	Quick Answer for Big Data in Sharing Economy: Innovative Computer Architecture Design Facilitating Optimal Service-Demand Matching. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1494-1506.	3.4	46
7	Fault-Tolerant Routing Mechanism in 3D Optical Network-on-Chip Based on Node Reuse. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 547-564.	4.0	44
8	Robust and Integrated Grooming for Power- and Port-Cost-Efficient Design in IP Over WDM Networks. Journal of Lightwave Technology, 2011, 29, 3035-3047.	2.7	40
9	On Finding Feasible Solutions With Shared Backup Resources for Surviving Double-Link Failures in Path-Protected WDM Mesh Networks. Journal of Lightwave Technology, 2007, 25, 287-296.	2.7	37
10	Constellation mapping for physical-layer network coding with M-QAM modulation. , 2012, , .		28
11	Synchronous Physical-Layer Network Coding: A Feasibility Study. IEEE Transactions on Wireless Communications, 2013, 12, 4048-4057.	6.1	28
12	A novel IP-core mapping algorithm in reliable 3D optical network-on-chips. Optical Switching and Networking, 2018, 27, 50-57.	1.2	25
13	Local and global hamiltonian cycle protection algorithm based on abstracted virtual topology in fault-tolerant multi-domain optical networks. IEEE Transactions on Communications, 2010, 58, 851-859.	4.9	21
14	Multicast Grooming Algorithm in Waveband Switching Optical Networks. Journal of Lightwave Technology, 2010, 28, 2856-2864.	2.7	20
15	Virtual network planning for converged optical and data centers: ideas and challenges. IEEE Network, 2013, 27, 52-58.	4.9	19
16	A Novel Hybrid Routing Forwarding Algorithm in SDN Enabled Wireless Mesh Networks. , 2015, , .		16
17	Multicast multi-granular grooming based on integrated auxiliary grooming graph in optical networks. Photonic Network Communications, 2012, 24, 103-117.	1.4	15
18	A new virtual network embedding framework based on QoS satisfaction and network reconfiguration for fiber-wireless access network. , 2016, , .		15

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19	Adaptive Relaying Method Selection for Multi-Rate Wireless Networks with Network Coding. IEEE Communications Letters, 2012, 16, 2004-2007.	2.5	14
20	Heuristic Survivable Routing Algorithm for Multiple Failures in WDM Networks. , 2007, , .		13
21	Virtual 5G network embedding in a heterogeneous and multi-domain network infrastructure. China Communications, 2016, 13, 29-43.	2.0	13
22	Experimental demonstration of an intelligent control plane with proactive spectrum defragmentation in SD-EONs. Optics Express, 2017, 25, 24837.	1.7	12
23	Designs of 3D mesh and torus optical Network-on-Chips: Topology, optical router and routing module. China Communications, 2017, 14, 17-29.	2.0	11
24	Optimization and Deployment of Survivable Fiber-Wireless (FiWi) Access Networks with Integrated Small Cell and WiFi. , 2015, , .		9
25	Energy-Efficient Cooperative MAC Protocol Based on Power Control in MANETs. , 2015, , .		9
26	A novel waveband switching routing algorithm based on integrated auxiliary graph in WDM optical networks. , 2008, , .		8
27	Recovery escalation with load balancing and backup resources sharing in survivable WDM optical networks. Photonic Network Communications, 2009, 18, 393-399.	1.4	8
28	Mahalanobis distance-based traffic matrix estimation. European Transactions on Telecommunications, 2010, 21, 195-201.	1.2	8
29	Ring-based protection scheme for survivable Fiber-Wireless (FiWi) access network considering multiple failures. , 2012, , .		8
30	Energy-efficient topology reconfiguration in green Fiber-Wireless (FiWi) access network. , 2013, , .		8
31	Rate and power adaptation for physical-layer network coding with M-QAM modulation. , 2014, , .		8
32	Reliable routing in 3D optical Network-on-Chip based on fault node reuse. , 2015, , .		8
33	End-to-End Network Traffic Reconstruction Via Network Tomography Based on Compressive Sensing. Journal of Network and Systems Management, 2015, 23, 709-730.	3.3	8
34	A Provident Resource Defragmentation Framework for Mobile Cloud Computing. IEEE Transactions on Emerging Topics in Computing, 2018, 6, 32-44.	3.2	8
35	Joint Optimization of Latency Monitoring and Traffic Scheduling in Software Defined Heterogeneous Networks. Mobile Networks and Applications, 2020, 25, 102-113.	2.2	8
36	Differentiated Domain Protection Algorithm Based on Virtual Topology Graph in Multi-Domain Optical Networks. , 2009, , .		7

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37	Design and OPNET implementation of routing algorithm in 3D optical network on chip. , 2014, , .		7
38	A secure routing scheme based on social network analysis in wireless mesh networks. Science China Information Sciences, 2016, 59, 1.	2.7	7
39	Power-efficient schemes using directly modulated lasers for intensity modulation and direct detection OFDM-PONs. Photonic Network Communications, 2016, 31, 275-284.	1.4	7
40	An efficient data delivery and scheduling scheme for smart and sustainable cities. Journal of Cleaner Production, 2019, 215, 497-513.	4.6	7
41	New results for path-based shared protection and link-based Hamiltonian cycle protection in survivable WDM networks. Photonic Network Communications, 2008, 16, 245-252.	1.4	6
42	Performance evaluation for routing protocols in wireless mesh networks. , 2010, , .		6
43	Dynamic hybrid grooming based on power efficiency in green IP over WDM networks. Photonic Network Communications, 2012, 23, 230-245.	1.4	6
44	Green Provisioning of Many-to-Many Sessions Over WDM Optical Networks. Journal of Lightwave Technology, 2013, 31, 3289-3301.	2.7	6
45	Failure recovery solutions using cognitive mechanisms for Software Defined Optical Networks. , 2016, , .		6
46	Dynamic survivable routing heuristic for shared protected WDM optical networks. IEEE Communications Letters, 2006, 10, 676-678.	2.5	5
47	Multi-domain Waveband Routing Protection Algorithms in WDM Networks. , 2010, , .		5
48	Green grooming in spectrum-sliced elastic optical path networks. Photonic Network Communications, 2016, 32, 115-125.	1.4	5
49	Improving survivability for multi-link failures with reprovisioning in WDM mesh networks. Photonic Network Communications, 2007, 14, 265-271.	1.4	4
50	A New Link-Based Hamiltonian Cycle Protection in Survivable WDM Optical Networks. , 2008, , .		4
51	Protection Routing Algorithm Based on Survivable Integrated Auxiliary Graph in Waveband Switching Optical Networks. , 2008, , .		4
52	Efficient scheduling algorithms for mixed services in wireless OFDMA system. Telecommunication Systems, 2013, 52, 1945-1960.	1.6	4
53	3D Torus ONoC: Topology design, router modeling and adaptive routing algorithm. , 2014, , .		4
54	A new integrated energy-saving scheme in green Fiber-Wireless (FiWi) access network. Science China Information Sciences, 2014, 57, 1-15.	2.7	4

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55	Almost as good as single-hop full-duplex: bidirectional end-to-end known interference cancellation. , 2015, , .		4
56	Virtual concatenation-based elastic network embedding for inter-cloud-data-center networks. , 2015, , .		4
57	Virtual Network Embedding Supporting User Mobility in 5G Metro/Access Networks. , 2019, , .		4
58	A New Differentiated Hamiltonian Cycle Protection Algorithm in Survivable WDM Mesh Networks. , 2009, , .		3
59	A New Node Role-Based Reputation Model in Hierarchical Ad Hoc Networks. , 2009, , .		3
60	Survivable routing algorithm with mixed shared protection in fault-tolerant GMPLS multi-layered optical networks. European Transactions on Telecommunications, 2010, 21, 312-323.	1.2	3
61	A k-coverage algorithm in three dimensional wireless sensor networks. , 2010, , .		3
62	Multicast Waveband Routing and Grooming algorithm in optical WDM networks. , 2010, , .		3
63	Cross-Layer QoS-aware routing protocol for multi-radio multi-channel wireless mesh networks. , 2012, , .		3
64	A reconstructing approach to end-to-end network traffic based on multifractal wavelet model. International Journal of Communication Systems, 2014, 27, 3565-3580.	1.6	3
65	A Dynamic Cooperative Monitor Node Selection Algorithm in Wireless Mesh Networks. , 2015, , .		3
66	Joint wireless and Optical Resources Allocation based on connection availability in FiWi access network. , 2015, , .		3
67	On Throughput Optimization in Software-Defined Multi-Dimensional Space Division Multiplexing Optical Networks. Journal of Lightwave Technology, 2021, 39, 2635-2651.	2.7	3
68	Survivable Routing with Risk-Level Disjoint in WDM Optical Networks. , 2007, , .		2
69	An improved shared-path protection algorithm for double-link failures in meshed WDM optical networks. Journal of Communications and Networks, 2008, 10, 331-337.	1.8	2
70	Enhanced Hamiltonian Cycle Protection Algorithm in Survivable Networks. , 2008, , .		2
71	Segment Protection Algorithm with Load Balancing for Multicasting WDM Mesh Networks. International Conference on Advanced Communication Technology, 2008, , .	0.0	2
72	A new routing algorithm in waveband switching multi-domain optical networks. , 2010, , .		2

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73	A dynamic (t, n) threshold signature scheme with provable security. , 2010, , .		2
74	Enhanced Multicast Hamiltonian Cycle Protection in WDM optical networks. , 2010, , .		2
75	A Compressive Sensing-Based Reconstruction Approach to End-to-End Network Traffic. , 2012, , .		2
76	OBOF: A protection scheme for survivable Fiber-Wireless broadband access network. , 2012, , .		2
77	Multi-domain grooming algorithm based on hierarchical integrated multi-granularity auxiliary graph in optical mesh networks. Photonic Network Communications, 2012, 23, 205-216.	1.4	2
78	Modeling the Propagation of Mobile Phone Virus under Complex Network. Scientific World Journal, The, 2014, 2014, 1-14.	0.8	2
79	Failure dependency-based protection scheme for multi-segment fiber-wireless (FiWi) access network. , 2014, , .		2
80	Maximum covering planning of survivable Fiber-Wireless access network considering network connectivity. Optik, 2014, 125, 6946-6952.	1.4	2
81	Novel routing algorithms in space information networks based on timeliness-aware data mining and time-space graph. , 2015, , .		2
82	Design of Dynamic Traffic Grooming Algorithm in Software-Defined Wireless Mesh Networks. , 2015, , .		2
83	Modulation adaptive grooming in green elastic optical networks. , 2015, , .		2
84	Optimizing maintenance efficiency in OFDMA-PONs supporting wireline-wireless convergence. , 2015, , .		2
85	A comparative study on four modified artificial bee swarm algorithms. , 2016, , .		2
86	Attack Mitigation of Hardware Trojans for Thermal Sensing via Micro-ring Resonator in Optical NoCs. ACM Journal on Emerging Technologies in Computing Systems, 2021, 17, 1-23.	1.8	2
87	Improved Survivable Routing Algorithm in WDM Mesh Networks. , 2007, , .		1
88	A Novel Heuristic Method Based on Shared-Risk Link Groups (SRLG) Constraints in WDM Optical Networks. International Conference on Advanced Communication Technology, 2007, , .	0.0	1
89	A New Sub-path Protection Algorithm Based on Auxiliary Virtual Topology in WDM Optical Networks. , 2008, , .		1
90	A New Recovery Escalation Algorithm with Load Balancing and Backup Resources Sharing in Path Protected WDM Optical Networks. , 2008, , .		1

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91	A New Waveband Switching Routing Algorithm in WDM Optical Networks. International Conference on Advanced Communication Technology, 2008, , .	0.0	1
92	Shared Sub-Path Protection Algorithm with Recovery Time Constraint in WDM Networks. , 2008, , .		1
93	A New Multi-layered Protection Algorithm in GMPLS Optical Networks. , 2009, , .		1
94	Network coding protection based on p-cycles for mesh networks. , 2010, , .		1
95	A novel QoS-oriented packet scheduling algorithm for mixed services in the downlink of OFMDA system. , 2010, , .		1
96	Key technology and solution to improve throughput in wireless mesh networks. , 2010, , .		1
97	A Partial Bandwidth Reservation Scheme for QoS Support in Ad Hoc Networks. , 2010, , .		1
98	Multicast grooming algorithm in green IP over WDM networks. , 2010, , .		1
99	Energy Saving Mechanism based on Sleep mode and Dynamic double-threshold link selection in EPON. , 2012, , .		1
100	Multicast grooming protection algorithm in green optical WDM networks. , 2013, , .		1
101	Deadline-aware adaptive packet scheduling and transmission in cooperative wireless networks. , 2014, , .		1
102	Hybrid cloud rendering-oriented virtual network embedding in Optical and Data Center Networks. , 2014, , .		1
103	Performance Improvement of Energy-Aware MANET Routing Algorithm Using Load-Balancing. , 2014, , .		1
104	Double auction and negotiation for dynamic resource allocation with elastic demands. , 2015, , .		1
105	Resource allocation for heterogeneous multi-core fiber supporting big data transmission. , 2017, , .		1
106	An Intelligent Computing Method for Contact Plan Design in the Multi-Layer Spatial Node-Based Internet of Things. Sensors, 2018, 18, 2852.	2.1	1
107	A simple insight about availability guarantee with time variation in survivable WDM mesh networks. , 2007, , .		0
108	A New Enhanced Differentiated Services Protection Algorithm in WDM Optical Networks. , 2008, , .		0

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109	ABC Supporting QoS Unicast Routing Scheme with Particle Swarm Optimization. , 2009, , .		0
110	An Efficient Scheme of Group Signature Based on DSA. , 2009, , .		0
111	Game theory based inter-domain protection in multi-domain optical networks. , 2010, , .		0
112	QoS-Aware Multipath Routing Protocol based on local information for Ad Hoc networks. , 2010, , .		0
113	Design on routing protocol in hybrid wireless self-organizing networks. , 2010, , .		0
114	Dynamic Waveband Grooming in Multi-Domain Mesh Optical Networks. , 2010, , .		0
115	Dynamic shared backup wavelength protection in waveband switching networks. , 2010, , .		0
116	Dynamic grooming algorithm in multi-domain mesh optical networks. , 2010, , .		0
117	Cognitive and credible network architecture. , 2010, , .		0
118	Traffic grooming algorithms for power efficiency in IP over WDM networks. , 2010, , .		0
119	Dynamic dedicated protection algorithm in waveband switching optical networks. , 2010, , .		0
120	Multi-granular grooming algorithm in multicast optical networks. , 2010, , .		0
121	Heuristic protection algorithm in multicast multi-domain optical networks. , 2011, , .		0
122	A high-throughput routing protocol based on network coding for Wireless Mesh Networks. , 2012, , .		0
123	Channel estimation based on outage probability in analog network coding. , 2012, , .		0
124	On routing and aggregation of many-to-many sessions over green WDM optical networks. , 2013, , .		0
125	Joint optimization of bit and power loading for power efficient OFDM-PON. , 2014, , .		0
126	OFDM-PON supporting heterogeneous access techniques: Survey and challenges. , 2014, , .		0

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127	Placement strategy for survivable hybrid WOBAN against multi-fibre failure. , 2014, , .		0
128	Spectrum and energy-efficient routing algorithm in survivable and elastic optical network. , 2014, , .		0
129	Flexible data center backup in WDM networks based on virtual machine migration and elastic bandwidth allocation. , 2014, , .		0
130	Connection availability based protection algorithm in wireless-optical broadband access network. Science China Information Sciences, 2014, 57, 1-9.	2.7	0
131	Hierarchical Routing for Integrated Space/Air Information Networks. , 2014, , .		0
132	A Multicast-Traffic-Oriented Energy-Saving Algorithm with a Hybrid Sleep Mode for EPONs. Journal of Electrical and Computer Engineering, 2016, 2016, 1-10.	0.6	0
133	Analysis of Reputation Stability Based on Symbiosis in Hierarchical Ad Hoc Networks. , 2009, , 1005-1009.		0