A tutorial on the flexible optical networking paradigm: research challenges

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Citation Report

#	Article	IF	CITATIONS
1	Reconfigurable FEC codes for software-defined optical transceivers. , 2014, , .		1
2	Energy efficiency of electronic and optical QAM signal grooming. , 2015, , .		0
3	Techno-economic analysis of multiservice networks: Cost allocation to services: A study for flex-grid optical networks. , 2015, , .		4
4	Evaluating the Optimum Filter Resolution and Sub-Channel Spectrum Granularity for Flexible Super-Channels. , 2015, , .		9
5	Optical-Comb-Line Selection from a Low-Power/Low-OSNR Comb using a Low-Coherence Semiconductor Laser for Flexible Ultra-Dense Short Range Transceivers. , 2015, , .		5
6	Impairment-aware resource allocation over flexi-grid network with all-optical add/drop capability. , 2015, , .		4
7	The strict-sense nonblocking elastic optical switch. , 2015, , .		15
8	Performance evaluation of multi-stratum resources integration based on network function virtualization in software defined elastic data center optical interconnect. Optics Express, 2015, 23, 31192.	1.7	39
9	Routing and Spectrum Allocation in Elastic Optical Networks: A Tutorial. IEEE Communications Surveys and Tutorials, 2015, 17, 1776-1800.	24.8	501
10	Cost and power consumption model for flexible super-channel transmission with all-optical sub-channel add/drop capability. , 2015, , .		6
11	Towards fifth-generation (5G) optical transport networks. , 2015, , .		22
12	An analytical defragmentation bound on the performance of the elastic single link with dynamic traffic. , 2015, , .		2
13	Routing and spectrum assignment in metro optical ring networks with distance-adaptive transceivers. , 2015, , .		2
14	Cyber-Physical Interdependency in Dynamic Software-Defined Optical Transmission Networks. Journal of Optical Communications and Networking, 2015, 7, 1126.	3.3	6
15	Spectrally and spatially flexible optical network planning and operations. , 2015, 53, 69-78.		155
16	Migration from fixed grid to flexible grid in optical networks. , 2015, 53, 34-43.		48
17	Performance evaluation of data center service localization based on virtual resource migration in software defined elastic optical network. Optics Express, 2015, 23, 23059.	1.7	23
18	Performance evaluation of multi-stratum resources integrated resilience for software defined inter-data center interconnect. Optics Express, 2015, 23, 13384.	1.7	46

#	Article	IF	CITATIONS
19	Numerical investigation into the injection-locking phenomena of gain switched lasers for optical frequency comb generation. Applied Physics Letters, 2015, 106, .	1.5	25
20	Investigation of Spectrum Granularity for Performance Optimization of Flexible Nyquist-WDM-Based Optical Networks. Journal of Lightwave Technology, 2015, 33, 4767-4774.	2.7	21
21	Impact of filter sharpness on the performance of elastic optical networks. , 2015, , .		6
22	A comparison of dynamic traffic grooming algorithms for elastic optical networks. , 2015, , .		3
23	Mitigation of Environmental Temperature Variation Effects in OCDMA Networks Using PSO Power Control. Journal of Optical Communications and Networking, 2015, 7, 707.	3.3	8
24	Opportunities and challenges in the network planning of spatially and spectrally elastic optical networks. , 2015, , .		2
25	Evaluating the performance of ultra-fine spectrum granularity flexible optical networks. , 2015, , .		1
26	Energy Efficiency Analysis in Adaptive FEC-Based Lightpath Elastic Optical Networks. Journal of Circuits, Systems and Computers, 2015, 24, 1550133.	1.0	6
27	On the Complexity of Routing and Spectrum Assignment in Flexible-Grid Ring Networks [Invited]. Journal of Optical Communications and Networking, 2015, 7, A256.	3.3	29
28	Energy-Efficient Manycast Routing and Spectrum Assignment in Elastic Optical Networks for Cloud Computing Environment. Journal of Lightwave Technology, 2015, 33, 4008-4018.	2.7	53
29	Modulation format identification aided hitless flexible coherent transceiver. Optics Express, 2016, 24, 15642.	1.7	19
30	OAM-labeled free-space optical flow routing. Optics Express, 2016, 24, 21642.	1.7	16
31	All-optical buffer based on temporal cavity solitons operating at 10  Gb/s. Optics Letters, 2016, 41, 452	6. 1.7	36
32	Software Defined Optical Networks (SDONs): A Comprehensive Survey. IEEE Communications Surveys and Tutorials, 2016, 18, 2738-2786.	24.8	266
33	Reward-based online routing and spectrum assignment in flex-grid optical networks. , 2016, , .		4
34	Experimental demonstration of multi-dimensional resources integration for service provisioning in cloud radio over fiber network. Scientific Reports, 2016, 6, 30678.	1.6	47
35	Robust plans for spectrum allocation in elastic flexgrid optical networks. , 2016, , .		1
36	Benefit Evaluation of All-Optical Subchannel Add–Drop in Flexible Optical Networks. IEEE Photonics Journal, 2016, 8, 1-9.	1.0	6

щ		IF	CITATIONS
#	Computing approximate blocking probability of inverse multiplexing and sub-band conversion in the	1.0	1
	flexible-grid optical networks. Optics Communications, 2016, 371, 243-247.		-
38	Comparison of Spectral and Spatial Super-Channel Allocation Schemes for SDM Networks. Journal of Lightwave Technology, 2016, 34, 2710-2716.	2.7	124
39	Strict-Sense Nonblocking W-S-W Node Architectures for Elastic Optical Networks. Journal of Lightwave Technology, 2016, 34, 3155-3162.	2.7	36
40	Strict-Sense Nonblocking Space-Wavelength-Space Switching Fabrics for Elastic Optical Network Nodes. Journal of Optical Communications and Networking, 2016, 8, 745.	3.3	29
41	Monolithically integrated low linewidth comb source using gain switched slotted Fabry-Perot lasers. Optics Express, 2016, 24, 7960.	1.7	24
42	ElasticO++: An Elastic Optical Network Simulation Framework for OMNeT++. Optical Switching and Networking, 2016, 22, 95-104.	1.2	12
43	Options for cost-effective capacity upgrades in backbone optical networks. , 2016, , .		4
44	A comparative discussion of some fairness-generating schemes in elastic networking. , 2016, , .		0
45	Multicast Routing and Distance-Adaptive Spectrum Allocation in Elastic Optical Networks With Shared Protection. Journal of Lightwave Technology, 2016, 34, 4076-4088.	2.7	57
46	Leveraging adaptive modulation with multi-hop routing in elastic optical networks. Computer Networks, 2016, 105, 124-137.	3.2	18
47	A Survey on FEC Codes for 100 G and Beyond Optical Networks. IEEE Communications Surveys and Tutorials, 2016, 18, 209-221.	24.8	103
48	Providing Quality of Service (QoS) for Data Traffic in Elastic Optical Networks (EONs). Arabian Journal for Science and Engineering, 2016, 41, 797-806.	1.1	18
49	Optical Performance Monitoring: A Review of Current and Future Technologies. Journal of Lightwave Technology, 2016, 34, 525-543.	2.7	241
50	Fast-Switchable OAM-Based High Capacity Density Optical Router. IEEE Photonics Journal, 2017, 9, 1-9.	1.0	7
51	Survey of Photonic Switching Architectures and Technologies in Support of Spatially and Spectrally Flexible Optical Networking [Invited]. Journal of Optical Communications and Networking, 2017, 9, 1.	3.3	183
52	Participation of Optical Backbone Network in Successful Advancement of Wireless Network. Wireless Personal Communications, 2017, 96, 3463-3481.	1.8	4
53	Adaptive and State-Dependent Online Resource Allocation in Dynamic Optical Networks. Journal of Optical Communications and Networking, 2017, 9, 864.	3.3	12
54	Comprehensive Survey on T-SDN: Software-Defined Networking for Transport Networks. IEEE Communications Surveys and Tutorials, 2017, 19, 2232-2283.	24.8	88

ARTICLE IF CITATIONS # Elastic Optical Networking for 5G Transport. Journal of Network and Systems Management, 2017, 25, 55 3.3 25 819-847. 128 Gb/s TWDM PON system using dispersion-supported transmission method. Optical Fiber 1.4 Technology, 2017, 38, 87-97. 57 Optical datacenter networks with elastic optical switches., 2017,,. 9 On provisioning strategies in translucent elastic optical networks with flexible regeneration and superchannel transmission., 2017,,. Bottom-up framework for cost allocation to services in telecommunication networks. NETNOMICS: 59 0.9 3 Economic Research and Electronic Networking, 2017, 18, 81-105. New Distance-Adaptive Modulation Scheme for Elastic Optical Networks. IEEE Communications 2.5 Letters, 2017, 21, 282-285. Performance evaluation of software-defined clustered-optical access networking for ubiquitous 61 1.4 6 data center optical interconnection. Photonic Network Communications, 2017, 34, 1-12. Wide-sense nonblocking elastic optical switch. Optical Switching and Networking, 2017, 25, 71-79. 1.2 16 Ultra-high-capacity optical packet switching networks with coherent polarization division 63 1 multiplexing modulation formats and related technologies., 2017,,. Robust spectrum allocation in elastic flexgrid optical networks: Complexity and formulations. 64 1.6 Networks, 2017, 70, 342-359. Programmable optical processor chips: toward photonic RF filters with DSP-level flexibility and 2.9 65 48 MHz-band selectivity. Nanophotonics, 2017, 7, 421-454. On the Performance Improvement and Cost Effectiveness Resulting from the Placement of Novel Architectures of Interconnected Transponders in Elastic Optical Networks., 2017,,. Proactive and Nondisruptive Channel Probing for Wavelength Switching in Optical Transmission. IEEE 67 1.0 0 Photonics Journal, 2017, 9, 1-7. Comparing Different Types of Flexibility when Solving the RSA Problem in EONs., 2017, ... Joint OSNR monitoring and modulation format identification in digital coherent receivers using deep 69 1.7 181 neural networks. Optics Express, 2017, 25, 17767. Dual-wavelength source based optical circuit switching and wavelength reconfiguration in multi-hop ROADM systems. Optics Express, 2017, 25, 27736. Ultra-High-Capacity Optical Packet Switching Networks with Coherent Polarization Division 71 0.9 9 Multiplexing QPSK/16QAM Modulation Formats. Photonics, 2017, 4, 27. Fragmentation-aware routing, wavelength and spectrum assignment (RWSA) scheme in flex-grid optical networks., 2017, , .

#	Article	IF	CITATIONS
73	Toward realizing choice-based co-optimizable networking paradigm. , 2017, , .		1
74	Techno-economic comparison of dynamic traffic grooming strategies for elastic optical networks. , 2017, , .		1
75	A Minimum Sub-Carrier Path RSA in Spectrum-Sliced Elastic Optical Path Networks. , 2017, , .		0
76	A Survey of Optical Carrier Generation Techniques for Terabit Capacity Elastic Optical Networks. IEEE Communications Surveys and Tutorials, 2018, 20, 211-263.	24.8	89
77	Fragmentation Problems and Management Approaches in Elastic Optical Networks: A Survey. IEEE Communications Surveys and Tutorials, 2018, 20, 183-210.	24.8	160
78	Micro-Grating Array-Enabled Power Efficiency Improvement for a DMD-Based Optical Switch. IEEE Photonics Technology Letters, 2018, 30, 145-148.	1.3	2
79	Evolutionary Multiobjective Strategy for Regenerator Placement in Elastic Optical Networks. IEEE Transactions on Communications, 2018, 66, 3583-3596.	4.9	15
80	Optimal Provisioning Strategies for Translucent Elastic Optical Networks. , 2018, , .		3
81	The Impending Optical Network Capacity Crunch. , 2018, , .		15
82	Infrastructure Costs in Dynamic Optical Networks. , 2018, , .		0
83	Translucent Provisioning in Elastic Optical Networks with Sliceable Bandwidth Variable Transponders. , 2018, , .		0
84	Fairness and Efficiency in an Elastic Optical Network under Heavy Traffic. , 2018, , .		0
85	Analysis of Multichannel Signal Transmission using a flexible spectral allocation method in Elastic Optical Networks. , 2018, , .		1
86	Circuit Reallocation Strategy Aware of the Physical Layer Effects for Elastic Optical Networks. , 2018, , .		1
87	On the Cost Minimization in Space Division Multiplexing Based Elastic Optical Networks. Journal of Optical Communications, 2021, 42, 447-457.	4.0	3
88	Online Resource Allocation in Dynamic Optical Networks. , 2018, , .		2
89	Performance evaluation of 100 and 200-Gb/s WDM PM-QPSK transmission systems: tolerance analysis to the optical link impairments according to the optical carrier shape. Optical Review, 2018, 25, 663-677.	1.2	2
90	Routing, Modulation Level, Spectrum and Transceiver Assignment in Elastic Optical Networks. IEICE Transactions on Communications, 2018, E101.B, 1197-1209.	0.4	4

#	Article	IF	CITATIONS
91	Recent research progress on spectrum management approaches in software-defined elastic optical networks. Optical Switching and Networking, 2018, 30, 93-104.	1.2	25
92	Deep-Neural-Network-Based Wavelength Selection and Switching in ROADM Systems. Journal of Optical Communications and Networking, 2018, 10, D1.	3.3	35
93	Rearrangeable W-S-W Elastic Optical Networks Generated by Graph Approaches. Journal of Optical Communications and Networking, 2018, 10, 675.	3.3	13
94	Modulation format identification enabled by the digital frequency-offset loading technique for hitless coherent transceiver. Optics Express, 2018, 26, 7288.	1.7	36
95	Integrated flexible-grid WDM transmitter using an optical frequency comb in microring modulators. Optics Letters, 2018, 43, 1554.	1.7	26
96	Nonblocking Multirate 2-Stage Networks. IEEE Communications Letters, 2018, 22, 716-719.	2.5	2
97	EDFA Wavelength Dependent Gain Spectrum Measurement Using Weak Optical Probe Sampling. IEEE Photonics Technology Letters, 2018, 30, 177-180.	1.3	7
98	Strict-Sense Nonblocking Conditions for the log2âțN-1 Multirate Switching Fabric for the Discrete Bandwidth Model. Mathematical Problems in Engineering, 2019, 2019, 1-13.	0.6	0
99	Elastic optical bypasses for traffic bursts. Computer Communications, 2019, 146, 95-102.	3.1	3
100	Tunable Active De-Multiplexer for Optical Frequency Combs. , 2019, , .		0
101	Joint Modulation Format Identification and Frequency Offset Estimation Based on Superimposed LFM Signal and FrFT. IEEE Photonics Journal, 2019, 11, 1-12.	1.0	2
102	All-Optical VCSEL-to-VCSEL Injection Based on Cross Gain Modulation for Routing in Multinode Flexible Spectrum Optimization in Optical Fibre Transmission Links. International Journal of Optics, 2019, 2019, 1-11.	0.6	0
103	Capacity Partitioning in the Defragmented Elastic Single Link. , 2019, , .		1
104	Intelligent optical performance monitor using multi-task learning based artificial neural network. Optics Express, 2019, 27, 11281.	1.7	54
105	Inter-core crosstalk aware greedy algorithm for spectrum and core assignment in space division multiplexed elastic optical networks. Optical Switching and Networking, 2019, 33, 61-73.	1.2	11
106	Mode Suppression in Injection Locked Multi-Mode and Single-Mode Lasers for Optical Demultiplexing. Photonics, 2019, 6, 27.	0.9	9
107	The Effect of Relaxation Oscillations in Integrated Optical Comb Demultiplexers Based on Injection Locking. IEEE Journal of Quantum Electronics, 2019, 55, 1-6.	1.0	3
108	Loss weight adaptive multi-task learning based optical performance monitor for multiple parameters estimation. Optics Express, 2019, 27, 37041.	1.7	16

#	Article	IF	CITATIONS
109	Radio-over-Fiber signal demodulation in the presence of non-Gaussian distortions based on subregion constellation processing. Optical Fiber Technology, 2019, 53, 102062.	1.4	6
110	Spectral Idleness Minimization in the Elastic Single Link under Incremental Traffic. , 2019, , .		3
111	Hamiltonian Graph Analysis – Mixed Integer Linear Programming (HGA-MILP) Based Link Failure Detection System in Optical Data Center Networks. Journal of Optical Communications, 2023, 44, 351-358.	4.0	4
112	Traffic grooming technique for elastic optical networks: A survey. Optik, 2019, 176, 464-475.	1.4	21
113	Bounds for two static optimization problems on routing and spectrum allocation of anycasting. Optical Switching and Networking, 2019, 31, 144-161.	1.2	11
114	All-Optical Signal Processing Techniques for Flexible Networks. Journal of Lightwave Technology, 2019, 37, 21-35.	2.7	71
115	Optimization of wide-sense nonblocking elastic optical switches. Optical Switching and Networking, 2019, 33, 85-94.	1.2	10
116	Optimization of strict-sense nonblocking wavelength-space-wavelength elastic optical switching fabrics. Optical Switching and Networking, 2019, 33, 76-84.	1.2	12
117	Rearrangeable \$\$2 imes 2\$\$ elastic optical switch with two connection rates and spectrum conversion capability. Photonic Network Communications, 2020, 39, 78-90.	1.4	3
118	Performance Analysis of Elastic Optical Network using different Modulation Formats. , 2020, , .		2
119	Performance Gains Imparted by Traffic-Awareness in an Elastic Single Link. , 2020, , .		1
120	200 Gb/s Short Reach Transmitters Based on Optical Frequency Combs. , 2020, , .		0
121	Virtual Network Mapping in Elastic Optical Networks with Advance Reservation. , 2020, , .		5
122	Low Complexity OSNR Monitoring and Modulation Format Identification Based on Binarized Neural Networks. Journal of Lightwave Technology, 2020, 38, 1314-1322.	2.7	23
123	Link State Aware Dynamic Routing and Spectrum Allocation Strategy in Elastic Optical Networks. IEEE Access, 2020, 8, 45071-45083.	2.6	25
124	Virtual network mapping in elastic optical networks with sliceable transponders. Photonic Network Communications, 2020, 40, 281-292.	1.4	3
125	Rearrangeable and Repackable S-W-S Elastic Optical Networks for Connections with Limited Bandwidths. Applied Sciences (Switzerland), 2020, 10, 1251.	1.3	4
126	A modulation format identification method based signal amplitude sorting and ratio calculation. Optics Communications, 2020, 470, 125819.	1.0	7

#	Article	IF	CITATIONS
127	A Pareto frontier for node survivable computer network design problem. Telecommunication Systems, 2021, 76, 371-389.	1.6	1
128	Characterization of a multifunctional active demultiplexer for optical frequency combs. Optics and Laser Technology, 2021, 134, 106637.	2.2	11
129	Optical Amplifier Response Estimation Considering Non-Flat Input Signals Characterization Based on Artificial Neural Networks. Journal of Lightwave Technology, 2021, 39, 208-215.	2.7	7
130	A metaheuristic approach for source traffic grooming in elastic optical networks. Transactions on Emerging Telecommunications Technologies, 2021, 32, .	2.6	3
131	Routing, Modulation and Spectrum Assignment Algorithm Using Multi-Path Routing and Best-Fit. IEEE Access, 2021, 9, 111633-111650.	2.6	15
132	A Multi-Service Model of Resources With the Neighboring Choice of Allocation Units. IEEE Access, 2021, 9, 107260-107266.	2.6	3
133	Cross-layer static resource provisioning for dynamic traffic in flexible grid optical networks. Journal of Optical Communications and Networking, 2021, 13, 1.	3.3	7
134	Dynamic Multi-Modulation Allocation Scheme for Elastic Optical Networks. , 2021, , .		5
135	Joint OSNR monitoring and modulation format identification on signal amplitude histograms using convolutional neural network. Optical Fiber Technology, 2021, 61, 102455.	1.4	13
136	Demonstration of Orbital-Angular-Momentum-Based Optical Switching Using Dual-Area Mirrors. Optics and Photonics Journal, 2021, 11, 351-359.	0.3	1
137	Resource Orchestration Strategies With Retrials for Latency-Sensitive Network Slicing Over Distributed Telco Clouds. IEEE Access, 2021, 9, 132801-132817.	2.6	4
138	Systematic Performance Comparison of (Duobinary)-PAM-2,4 Signaling under Light and Strong Opto-Electronic Bandwidth Conditions. Photonics, 2021, 8, 81.	0.9	1
139	Deep learning inspired routing in ICN using Monte Carlo Tree Search algorithm. Journal of Parallel and Distributed Computing, 2021, 150, 104-111.	2.7	10
140	Flexible and fast multiâ€level modulation format identification using optical orthogonal frequency division multiplexing redundancy subcarriers. Microwave and Optical Technology Letters, 2021, 63, 2436-2441.	0.9	0
141	Spectrum Defragmentation with Improved Lightpath Migration Scheme in Flex-grid Networks. , 2021, , .		3
142	Energy Efficiency in Sliceable-Transponder Enabled Elastic Optical Networks. IEEE Transactions on Green Communications and Networking, 2021, 5, 789-802.	3.5	3
143	Design considerations for transceiver-limited elastic optical networks. Photonic Network Communications, 2021, 42, 81-92.	1.4	2
144	Non-Data-Aided Symbol Rate Estimation for a Low Roll-Off Factor Nyquist WDM Signal. IEEE Photonics Journal, 2021, 13, 1-10.	1.0	1

#	Article	IF	CITATIONS
145	Determination of Traffic Characteristics of Elastic Optical Networks Nodes with Reservation Mechanisms. Electronics (Switzerland), 2021, 10, 1853.	1.8	8
146	Blind Identification of the Shaping Rate for Probabilistic Shaping QAM Signal. IEEE Photonics Technology Letters, 2021, 33, 998-1001.	1.3	3
147	Resource-aware provisioning strategies in translucent elastic optical networks. Computer Communications, 2021, 180, 134-145.	3.1	0
148	A deep neural network with a fuzzy multi-objective optimization model for fault analysis in an elastic optical network. Optical Switching and Networking, 2022, 43, 100644.	1.2	1
149	Elastic Optical Networks Survivability Based on Spectrum Utilization and ILP Model with Increasing Traffic. Advances in Intelligent Systems and Computing, 2021, , 507-518.	0.5	0
150	Fiber Nonlinearity and Optical System Performance. Springer Handbooks, 2020, , 287-351.	0.3	12
151	Embedding Virtual Networks in Flexible Optical Networks with Sliceable Transponders. Lecture Notes in Computer Science, 2020, , 26-38.	1.0	1
152	A Heuristic Algorithm for Designing OTN Over Flexible- Grid DWDM Networks. Journal of Communications, 2017, , 500-509.	1.3	3
153	QoT-aware performance evaluation of spectrally–spatially flexible optical networks over FM-MCFs. Journal of Optical Communications and Networking, 2020, 12, 288.	3.3	12
154	Modulation format identification assisted by sparse-fast-Fourier-transform for hitless flexible coherent transceivers. Optics Express, 2019, 27, 7072.	1.7	17
155	Field Trial of a Novel SDN Enabled Network Restoration Utilizing In-Depth Optical Performance Monitoring Assisted Network Re-Planning. , 2017, , .		8
156	Elastic Optical Networks. Studies in Systems, Decision and Control, 2016, , 101-193.	0.8	1
158	A Defragmentation-Ready Simulation Framework For Elastic Optical Networks. Journal of Communication and Information Systems, 2017, 32, 41-53.	0.2	2
159	Self-starting optical–electrical–optical homodyne clock recovery for phase-modulated signals. Optics Letters, 2017, 42, 3486.	1.7	0
160	OSNR Monitoring and Modulation Format Recognition Based on Neural Networks and Normalized Autocorrelation Function. , 2018, , .		0
161	Rearrangeability of 2×2 W-S-W Elastic Switching Fabrics with Two Connection Rate. Journal of Telecommunications and Information Technology, 2018, 1, 11-17.	0.3	1
162	Defragmentation in W-S-W Elastic Optical Networks. Journal of Telecommunications and Information Technology, 2018, 1, 18-23.	0.3	0
163	Performance of an injection-locked active demultiplexer for FSR-tunable optical frequency combs. , 2019, , .		3

#	Article	IF	CITATIONS
164	Performance Evaluation of the WSW1 Switching Fabric Architecture with Limited Resources. Advances in Intelligent Systems and Computing, 2020, , 189-196.	0.5	0
165	New upper bound for a rearrangeable nonâ€blocking WSW architecture. IET Communications, 2019, 13, 3425-3433.	1.5	5
166	Evolution of optical networks: from legacy networks to next-generation networks. Journal of Optical Communications, 2024, 44, s955-s970.	4.0	5
167	Performance evaluation of a comb-based transmission system employing multi-functional active demultiplexers. , 2020, , .		2
168	Energy Efficiency in Optical Networks. Springer Handbooks, 2020, , 631-664.	0.3	1
169	Joint linear and nonlinear noise monitoring techniques based on spectrum analysis. Optics Express, 2020, 28, 36953.	1.7	3
170	High Accuracy and Low Complexity Frequency Offset Estimation Method Based on All Phase FFT for M-QAM Coherent Optical Systems. IEEE Photonics Journal, 2022, 14, 1-6.	1.0	4
171	Optical Channel Selection Avoiding DIPP in DSB-RFoF Fronthaul Interface. Entropy, 2021, 23, 1554.	1.1	2
172	Nonblocking conditions for a multicast WSW architecture based on subtree scheme for elastic optical networks. Optical Switching and Networking, 2022, 44, 100660.	1.2	3
173	Optimization of Regenerator Placement in Optical Networks Using Deep Tensor Neural Network. , 2020, , .		2
174	Implementation Possibilities of Elastic Optical Networks Technology in Burundi Backbone Network. , 2021, , .		0
175	A number-theoretic framework for the mitigation of fragmentation loss in elastic optical links. Photonic Network Communications, 2022, 43, 85-99.	1.4	3
176	Spectrum resource optimization in elastic optical networks using dynamic RMSA. Optical and Quantum Electronics, 2022, 54, 1.	1.5	2
177	Simultaneous baud rate/modulation format identification and multi-parameter optical performance monitoring using multi-task learning with enhanced picture of Radon transform. Optical Fiber Technology, 2022, 70, 102873.	1.4	6
179	A new mathematical model considering the multi-protocol label switching and the routing and spectrum allocation problems jointly in elastic optical networks. Photonic Network Communications, 2022, 44, 10-20.	1.4	1
181	Multi-step Migration of Optical Connections in Flex-grid Networks to Minimize Disruption Time. , 2022,		0
182	Analytical Model of a Single Link of Elastic Optical Networks. IEEE Access, 2022, 10, 90200-90212.	2.6	2
183	Analysis of Call Admission Control Mechanisms in Nodes of Elastic Optical Networks. , 2022, , .		0

#	Article	IF	CITATIONS
184	Multi-step migration of optical connections to minimize disruption time in flex-grid networks. Journal of Optical Communications and Networking, 2022, 14, 866.	3.3	0
185	A vectored fragmentation metric for elastic optical networks. Photonic Network Communications, 0, , ,	1.4	0
186	Fifty Years of Fixed Optical Networks Evolution: A Survey of Architectural and Technological Developments in a Layered Approach. Telecom, 2022, 3, 619-674.	1.6	7
187	Coordinating Multiple Light-Trails in Multicast Elastic Optical Networks With Adaptive Modulation. IEEE Photonics Journal, 2023, 15, 1-15.	1.0	4
188	A Dynamic Spectrum Allocation Scheme to limit the FWM Effects in Elastic Optical Networks. , 2022, , .		2
189	Static Virtual Network Mapping With Advance Reservation In Elastic Optical Networks. , 2023, , .		1
190	Rearrangeability and repackability of a multicast wavelength-space-wavelength elastic optical network. Optical Switching and Networking, 2023, 50, 100741.	1.2	1
191	Vortex-Beam Information Exchange. , 2023, , 383-416.		0
195	Modulation Classification with Convolutional Neural Network Based Deep Learning in Elastic Optical Network. , 2023, , .		0