## Francesco Musumeci

List of Publications by Year in descending order

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96 papers 1,952 citations

567281 15 h-index 35 g-index

96 all docs 96
docs citations

96 times ranked 1735 citing authors

#	Article	IF	CITATIONS
1	An Overview on Application of Machine Learning Techniques in Optical Networks. IEEE Communications Surveys and Tutorials, 2019, 21, 1383-1408.	39.4	374
2	The European Registry for Patients with Mechanical Circulatory Support (EUROMACS) of the European Association for Cardio-Thoracic Surgery (EACTS): second report. European Journal of Cardio-thoracic Surgery, 2018, 53, 309-316.	1.4	121
3	Optimal BBU Placement for 5G C-RAN Deployment Over WDM Aggregation Networks. Journal of Lightwave Technology, 2016, 34, 1963-1970.	4.6	119
4	A Tutorial on Machine Learning for Failure Management in Optical Networks. Journal of Lightwave Technology, 2019, 37, 4125-4139.	4.6	83
5	Virtual Network Function placement for resilient Service Chain provisioning. , 2016, , .		72
6	Machine-Learning-Based Soft-Failure Detection and Identification in Optical Networks. , 2018, , .		71
7	A Power Consumption Analysis for IP-Over-WDM Core Network Architectures. Journal of Optical Communications and Networking, 2012, 4, 108.	4.8	70
8	Network Traffic Prediction based on Diffusion Convolutional Recurrent Neural Networks., 2019,,.		56
9	Machine Learning-Based Routing and Wavelength Assignment in Software-Defined Optical Networks. IEEE Transactions on Network and Service Management, 2019, 16, 871-883.	4.9	49
10	Machine-learning-assisted DDoS attack detection with P4 language. , 2020, , .		41
11	Virtual-network-function placement for dynamic service chaining in metro-area networks. , 2018, , .		40
12	Traffic and power-aware protection scheme in Elastic Optical Networks., 2012,,.		36
13	Isolation-Aware 5G RAN Slice Mapping Over WDM Metro-Aggregation Networks. Journal of Lightwave Technology, 2020, 38, 1125-1137.	4.6	36
14	Protection in optical transport networks with fixed and flexible grid: Cost and energy efficiency evaluation. Optical Switching and Networking, 2014, 11, 55-71.	2.0	35
15	Protection strategies for virtual network functions placement and service chains provisioning. Networks, 2017, 70, 373-387.	2.7	33
16	Machine-Learning-Enabled DDoS Attacks Detection in P4 Programmable Networks. Journal of Network and Systems Management, 2022, 30, 1.	4.9	32
17	Multiplexing Gain and Processing Savings of 5G Radio-Access-Network Functional Splits. IEEE Transactions on Green Communications and Networking, 2018, 2, 982-991.	<b>5.</b> 5	30
18	TREND in energy-aware adaptive routing solutions. , 2013, 51, 94-104.		24

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19	Energy-efficiency of protected IP-over-WDM networks with sleep-mode devices. Journal of High Speed Networks, 2013, 19, 19-32.	0.8	22
20	Machine-Learning-Assisted Routing in SDN-Based Optical Networks. , 2018, , .		20
21	Energy-Efficient Video-On-Demand Content Caching and Distribution in Metro Area Networks. IEEE Transactions on Green Communications and Networking, 2019, 3, 159-169.	5.5	20
22	Elastic operations in federated datacenters for performance and cost optimization. Computer Communications, 2014, 50, 142-151.	5.1	19
23	The European Registry for Patients with Mechanical Circulatory Support of the European Association for Cardio-Thoracic Surgery: third report. European Journal of Cardio-thoracic Surgery, 2022, 62, .	1.4	18
24	A survey on network resiliency methodologies against weather-based disruptions. , 2016, , .		17
25	Tutorial on filterless optical networks [Invited]. Journal of Optical Communications and Networking, 2022, 14, 1.	4.8	17
26	On the Energy Efficiency of Optical Transport with Time Driven Switching. , 2011, , .		16
27	Energy efficient content distribution in an ISP network. , 2013, , .		16
28	Survivable virtual network mapping to provide content connectivity against double-link failures. , $2016,  ,  .$		15
29	Filterless and Semi-Filterless Solutions in a Metro-HAUL Network Architecture. , 2018, , .		15
30	On the energy efficiency of IP-over-WDM networks. , 2010, , .		14
31	Energy-efficient resilient optical networks: Challenges and trade-offs., 2015, 53, 144-150.		14
32	Is Machine Learning Suitable for Solving RWA Problems in Optical Networks?., 2018,,.		14
33	Latency-Aware CU Placement/Handover in Dynamic WDM Access-Aggregation Networks. Journal of Optical Communications and Networking, 2019, 11, B71.	4.8	14
34	QoT-Aware Optical Amplifier Placement in Filterless Metro Networks. IEEE Communications Letters, 2021, 25, 931-935.	4.1	14
35	On Deep Reinforcement Learning for Static Routing and Wavelength Assignment. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-12.	2.9	14
36	A power consumption sensitivity analysis of circuit-switched versus packet-switched backbone networks. Computer Networks, 2015, 78, 42-56.	5.1	13

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37	Efficient Routing and Bandwidth Assignment for Inter-Data-Center Live Virtual-Machine Migrations. Journal of Optical Communications and Networking, 2017, 9, B12.	4.8	13
38	Resilient BBU placement in 5G C-RAN over optical aggregation networks. Photonic Network Communications, 2019, 37, 388-398.	2.7	13
39	Enhancing RAN Throughput by Optimized CoMP Controller Placement in Optical Metro Networks. IEEE Journal on Selected Areas in Communications, 2018, 36, 2561-2569.	14.0	12
40	DU/CU Placement for C-RAN over Optical Metro-Aggregation Networks. Lecture Notes in Computer Science, 2020, , 82-93.	1.3	12
41	Latency- and capacity-aware placement of chained Virtual Network Functions in FMC metro networks. Optical Switching and Networking, 2020, 35, 100536.	2.0	11
42	Survivable Virtual Network Mapping in Filterless Optical Networks., 2020,,.		11
43	Minimum-Cost Optical Amplifier Placement in Metro Networks. Journal of Lightwave Technology, 2020, 38, 3221-3228.	4.6	11
44	Dynamic Placement of BaseBand Processing in 5G WDM-based Aggregation Networks., 2017,,.		11
45	Domain adaptation and transfer learning for failure detection and failure-cause identification in optical networks across different lightpaths [Invited]. Journal of Optical Communications and Networking, 2022, 14, A91.	4.8	11
46	Quantifying Resource Savings from Low-Margin Design in Optical Networks with Probabilistic Constellation Shaping. , 2021, , .		11
47	Energy-efficient caching for Video-on-Demand in Fixed-Mobile Convergent networks. , 2015, , .		10
48	Power-aware design of protected IP-over-WDM Networks with sleep-mode devices. , 2012, , .		9
49	Latency-Aware Traffic Grooming for Dynamic Service Chaining in Metro Networks. , 2019, , .		9
50	On Dynamic Service Chaining in Filterless Optical Metro-Aggregation Networks. IEEE Access, 2020, 8, 222233-222241.	4.2	9
51	Supervised and Semi-Supervised Learning for Failure Identification in Microwave Networks. IEEE Transactions on Network and Service Management, 2021, 18, 1934-1945.	4.9	9
52	Dynamic 5G RAN slice adjustment and migration based on traffic prediction in WDM metro-aggregation networks. Journal of Optical Communications and Networking, 2020, 12, 403.	4.8	9
53	Survivable Virtual Network Mapping With Fiber Tree Establishment in Filterless Optical Networks. IEEE Transactions on Network and Service Management, 2022, 19, 37-48.	4.9	8
54	Transfer Learning across Different Lightpaths for Failure-Cause Identification in Optical Networks. , 2020, , .		8

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55	Power consumption evaluation of circuit-switched versus packet-switched optical backbone networks. , $2013,  \ldots$		7
56	TREND big picture on energy-efficient backbone networks. , 2013, , .		7
57	Traffic-Adaptive Re-Configuration of Programmable Filterless Optical Networks. , 2020, , .		7
58	Online Virtual Machine Evacuation for Disaster Resilience in Inter-Data Center Networks. IEEE Transactions on Network and Service Management, 2021, 18, 1990-2001.	4.9	7
59	Strategies for Dedicated Path Protection in Filterless Optical Networks. , 2021, , .		7
60	If Not Here, There. Explaining Machine Learning Models for Fault Localization in Optical Networks. , 2022, , .		7
61	Dynamic grooming and spectrum allocation in optical metro ring networks with flexible grid., 2013,,.		6
62	Benefits of elastic spectrum allocation in optical networks with dynamic traffic. , 2014, , .		6
63	C-RAN baseband pooling: Cost model and multiplexing gain analysis. , 2017, , .		6
64	Techno-Economic Evaluation of CDN Deployments in Metropolitan Area Networks. , 2017, , .		6
65	Optical Metro Network Design with Low Cost of Equipment. , 2021, , .		6
66	Cascading-failure-resilient interconnection for interdependent power grid - Optical network. Optical Switching and Networking, 2021, 42, 100632.	2.0	6
67	Progressive Slice Recovery With Guaranteed Slice Connectivity After Massive Failures. IEEE/ACM Transactions on Networking, 2022, 30, 826-839.	3.8	6
68	Survivable BBU Placement for C-RAN over Optical Aggregation Networks. , 2018, , .		5
69	Efficient Online Virtual Machines Migration for Alert-Based Disaster Resilience., 2019,,.		5
70	Dynamic DU/CU Placement for 3-layer C-RANs in Optical Metro-Access Networks. , 2020, , .		5
71	Virtual Network Mapping vs Embedding with Link Protection in Filterless Optical Networks. , 2020, , .		5
72	Energy-efficiency of all-optical transport through time-driven switching. IET Optoelectronics, 2012, 6, 173.	3.3	4

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73	Energy efficiency in reliable optical core networks. , 2015, , .		4
74	Benefits of Elastic Spectrum Allocation in Optical Networks with Dynamic Traffic. IEEE Latin America Transactions, 2015, 13, 3642-3648.	1.6	4
75	Power reduction strategies with differentiated quality of protection in IP-over-WDM networks. Annales Des Telecommunications/Annals of Telecommunications, 2018, 73, 81-94.	2.5	4
76	Wavelength-Aware Translucent Network Design. , 2011, , .		4
77	On the energy consumption of IP-over-WDM architectures. , 2012, , .		3
78	A Techno-Economic Evaluation of VNF Placement Strategies in Optical Metro Networks. , 2019, , .		3
79	Reliable Control and Data Planes forÂSoftwarized Networks. Computer Communications and Networks, 2020, , 243-270.	0.8	3
80	On the Energy Efficiency of IP-over-WDM Networks. IEEE Latin America Transactions, 2011, 9, 477-483.	1.6	2
81	The role of network topology on the energy efficiency of IP-over-WDM architectures. , 2012, , .		2
82	Blocking analysis for green WDM networks with transponder power management., 2013,,.		2
83	Enhancing RAN throughput by optimizec controller placement in optical metro networks. , 2017, , .		2
84	Optimal Cache Deployment for Video-an-Demand Delivery in Optical Metro-Area Networks. , 2018, , .		2
85	On the Placement of BBU Hotels in an Optical Access/Aggregation Network for 5G Transport. , 2015, , .		2
86	Handling Priorities in Optical Buffers. IEEE Transactions on Communications, 2012, 60, 2784-2788.	7.8	1
87	A Blocking Analysis for Green WDM Networks With Transponder Power Management. Journal of Lightwave Technology, 2014, 32, 4261-4271.	4.6	1
88	Dynamic Routing and Bandwidth Assignment for live Virtual Machines migrations. , 2016, , .		1
89	Caching Placement Strategies for Dynamic Content Delivery in Metro Area Networks. , 2018, , .		1
90	Reprovisioning for latency-aware dynamic service chaining in metro networks. Journal of Optical Communications and Networking, 2020, 12, 355.	4.8	1

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91	Survivable Virtual Network Mapping against Double-Link Failures Based on Virtual Network Capacity Sharing. , 2021, , .		1
92	Strategies for effective converged control of LTE and Wi-Fi networks. , 2016, , .		0
93	Introduction to PNET special issue on "Resilience in future 5G photonic networks― Photonic Network Communications, 2019, 37, 263-264.	2.7	O
94	Optimal Cache Deployment for Video-On-Demand in Optical Metro Edge Nodes under Limited Storage Capacity. Applied Sciences (Switzerland), 2020, 10, 1984.	2.5	0
95	Resilient NFV Technology and Solutions. Computer Communications and Networks, 2020, , 675-697.	0.8	O
96	Service Chaining in Filterless Optical Metro-Aggregation Networks (Invited Paper)., 2021,,.		0