

S J Ben Yoo

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5946419/s-j-ben-yoo-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

75
papers

2,224
citations

20
h-index

46
g-index

96
ext. papers

2,923
ext. citations

4
avg, IF

5.38
L-index

#	Paper	IF	Citations
75	Elastic optical networking: a new dawn for the optical layer?. <i>IEEE Communications Magazine</i> , 2012 , 50, s12-s20	9.1	898
74	Optical Packet and Burst Switching Technologies for the Future Photonic Internet. <i>Journal of Lightwave Technology</i> , 2006 , 24, 4468-4492	4	276
73	Tb/s Coherent Optical OFDM Systems Enabled by Optical Frequency Combs. <i>Journal of Lightwave Technology</i> , 2010 , 28, 2054-2061	4	71
72	Energy Efficiency in the Future Internet: The Role of Optical Packet Switching and Optical-Label Switching. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011 , 17, 406-418	3.8	69
71	DeepRMSA: A Deep Reinforcement Learning Framework for Routing, Modulation and Spectrum Assignment in Elastic Optical Networks. <i>Journal of Lightwave Technology</i> , 2019 , 37, 4155-4163	4	62
70	Sub-wavelength-pitch silicon-photonic optical phased array for large field-of-regard coherent optical beam steering. <i>Optics Express</i> , 2019 , 27, 1929-1940	3.3	55
69	A Scalable, Low-Latency, High-Throughput, Optical Interconnect Architecture Based on Arrayed Waveguide Grating Routers. <i>Journal of Lightwave Technology</i> , 2015 , 33, 911-920	4	48
68	Self-Taught Anomaly Detection With Hybrid Unsupervised/Supervised Machine Learning in Optical Networks. <i>Journal of Lightwave Technology</i> , 2019 , 37, 1742-1749	4	42
67	Knowledge-Based Autonomous Service Provisioning in Multi-Domain Elastic Optical Networks. <i>IEEE Communications Magazine</i> , 2018 , 56, 152-158	9.1	40
66	Heterogeneous 2D/3D photonic integrated microsystems. <i>Microsystems and Nanoengineering</i> , 2016 , 2, 16030	7.7	38
65	Scalable Optical Interconnect Architecture Using AWGR-Based TONAK LION Switch With Limited Number of Wavelengths. <i>Journal of Lightwave Technology</i> , 2013 , 31, 4087-4097	4	35
64	1705-km transmission over coupled-core fibre supporting 6 spatial modes 2014 ,		35
63	Flat-Topology High-Throughput Compute Node With AWGR-Based Optical-Interconnects. <i>Journal of Lightwave Technology</i> , 2016 , 34, 2959-2968	4	34
62	A 320-Gb/s Capacity (32-User \times 10 Gb/s) SPECTS O-CDMA Network Testbed With Enhanced Spectral Efficiency Through Forward Error Correction. <i>Journal of Lightwave Technology</i> , 2007 , 25, 79-86	4	32
61	Demonstration of Spectral Defragmentation in Flexible Bandwidth Optical Networking by FWM. <i>IEEE Photonics Technology Letters</i> , 2011 , 23, 1893-1895	2.2	30
60	All-Optical Physical Layer NACK in AWGR-Based Optical Interconnects. <i>IEEE Photonics Technology Letters</i> , 2012 , 24, 410-412	2.2	27
59	Nonlinear Optical Signal Processing in Optical Packet Switching Systems. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 978-987	3.8	23

58	Continuously Tunable Optical Buffering at 40 Gb/s for Optical Packet Switching Networks. <i>Journal of Lightwave Technology</i> , 2008 , 26, 3776-3783	4	23
57	High-Performance Optical 3R Regeneration for Scalable Fiber Transmission System Applications. <i>Journal of Lightwave Technology</i> , 2007 , 25, 504-511	4	22
56	. <i>IEEE Photonics Journal</i> , 2017 , 9, 1-5	1.8	21
55	Experimental Demonstration of Flexible Bandwidth Optical Data Center Core Network With All-to-All Interconnectivity. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1578-1585	4	20
54	CMOS Compatible Reconfigurable Silicon Photonic Lattice Filters Using Cascaded Unit Cells for RF-Photonic Processing. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014 , 20, 359-368	3.8	17
53	High-Density Wafer-Scale 3-D Silicon-Photonic Integrated Circuits. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018 , 24, 1-10	3.8	16
52	On Incentive-Driven VNF Service Chaining in Inter-Datacenter Elastic Optical Networks: A Hierarchical Game-Theoretic Mechanism. <i>IEEE Transactions on Network and Service Management</i> , 2019 , 16, 1-12	4.8	15
51	Hierarchical Learning for Cognitive End-to-End Service Provisioning in Multi-Domain Autonomous Optical Networks. <i>Journal of Lightwave Technology</i> , 2019 , 37, 218-225	4	15
50	Foundry-Enabled Scalable All-to-All Optical Interconnects Using Silicon Nitride Arrayed Waveguide Router Interposers and Silicon Photonic Transceivers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019 , 25, 1-9	3.8	14
49	Quality-of-Service Based Protection in MPLS Control WDM Mesh Networks. <i>Photonic Network Communications</i> , 2002 , 4, 297-320	1.7	14
48	The First Testbed Demonstration of Cognitive End-to-End Optical Service Provisioning with Hierarchical Learning across Multiple Autonomous Systems 2018 ,		14
47	Demonstration of Spectral Phase O-CDMA Encoding and Decoding in Monolithically Integrated Arrayed-Waveguide-Grating-Based Encoder. <i>IEEE Photonics Technology Letters</i> , 2006 , 18, 2602-2604	2.2	12
46	Bit-Parallel All-to-All and Flexible AWGR-based Optical Interconnects 2017 ,		12
45	Design and Evaluation of AWGR-Based Photonic NoC Architectures for 2.5D Integrated High Performance Computing Systems 2017 ,		11
44	Silicon Photonic Flex-LIONS for Bandwidth-Reconfigurable Optical Interconnects. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020 , 26, 1-10	3.8	10
43	Demonstration of distributed collaborative learning with end-to-end QoT estimation in multi-domain elastic optical networks. <i>Optics Express</i> , 2019 , 27, 35700-35709	3.3	10
42	Multi-FSR Silicon Photonic Flex-LIONS Module for Bandwidth-Reconfigurable All-to-All Optical Interconnects. <i>Journal of Lightwave Technology</i> , 2020 , 38, 3200-3208	4	9
41	MUVIS: Multi-source video streaming service over WLANs. <i>Journal of Communications and Networks</i> , 2005 , 7, 144-156	4.1	8

40	Enabling scalable chiplet-based uniform memory architectures with silicon photonics 2019 ,		7
39	Theory and Design Optimization of Energy-Efficient Hydrophobic Wafer-bonded III/V/Si Hybrid Semiconductor Optical Amplifiers. <i>Journal of Lightwave Technology</i> , 2013 , 31, 4057-4066	4	7
38	GMPLS Control Plane With Distributed Multipath RMSA for Elastic Optical Networks. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1522-1530	4	7
37	3D elastic optical networks in temporal, spectral, and spatial domains with fragmentation-aware RSSMA algorithms 2014 ,		7
36	Multi-Agent Deep Reinforcement Learning in Cognitive Inter-Domain Networking with Multi-Broker Orchestration 2019 ,		7
35	Scalable 3D Silicon Photonic Electronic Integrated Circuits and Their Applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020 , 26, 1-10	3.8	6
34	80.8-km BOSSNET SPECTS O-CDMA Field Trial Using Subpicosecond Pulses and a Fully Integrated, Compact AWG-Based Encoder/Decoder. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2007 , 13, 1455-1462	3.8	6
33	Flex-LIONS: A Scalable Silicon Photonic Bandwidth-Reconfigurable Optical Switch Fabric 2019 ,		6
32	Software defined elastic optical networking in temporal, spectral, and spatial domains. <i>Photonic Network Communications</i> , 2014 , 28, 19-33	1.7	5
31	10-Gb/s BM-CDR Circuit With Synchronous Data Output for Optical Networks. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 508-511	2.2	5
30	Microwave velocity and impedance tuning of traveling-wave modulator using ion implantation for monolithic integrated photonic systems. <i>Microwave and Optical Technology Letters</i> , 2008 , 50, 2151-2155 ^{1,2}		5
29	First Field Trial of OLS Network Testbed with All-Optical Contention Resolution of Asynchronous, Variable-Length Optical Packets 2007 ,		5
28	Prospects and Challenges of Photonic Switching in Data Centers and Computing Systems. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	5
27	Solid-State MWIR Beam Steering Using Optical Phased Array on Germanium-Silicon Photonic Platform. <i>IEEE Photonics Journal</i> , 2019 , 11, 1-9	1.8	5
26	Materials for emergent silicon-integrated optical computing. <i>Journal of Applied Physics</i> , 2021 , 130, 070907 ⁵		5
25	Four-State Data Encoding for Enhanced Security Against Upstream Eavesdropping in SPECTS O-CDMA. <i>Journal of Lightwave Technology</i> , 2011 , 29, 62-68	4	4
24	Experimental Demonstration of Flex-LIONS for Reconfigurable All-to-All Optical Interconnects 2018 ,		4
23	Enabling Scalable Disintegrated Computing Systems With AWGR-Based 25D Interconnection Networks. <i>Journal of Optical Communications and Networking</i> , 2019 , 11, 333	4.1	3

22	2018,		3
21	Single-Tone Optical Frequency Shifting and Nonmagnetic Optical Isolation by Electro-Optical Emulation of a Rotating Half-Wave Plate in a Traveling-Wave Lithium Niobate Waveguide. <i>IEEE Photonics Journal</i> , 2017 , 9, 1-13	1.8	2
20	Scalable and energy-efficient AWGR-based computing node: Performance under PARSEC benchmark workload 2016,		2
19	Scalability of microring-based crossbar for all-to-all optical interconnects 2017,		2
18	Benchmark analysis of AWGR-based optical tiled architectures for multi-socket HPC boards 2015,		2
17	Multi-Rate Spectral Phase-Encoded Time-Spreading Optical CDMA System Using OVSF Code Sequences 2007,		2
16	Integrated SiPh Flex-LIONS Module for All-to-All Optical Interconnects with Bandwidth Steering 2020,		2
15	Machine-learning-aided cognitive reconfiguration for flexible-bandwidth HPC and data center networks [Invited]. <i>Journal of Optical Communications and Networking</i> , 2021 , 13, C10	4.1	2
14	On Cooperative Fault Management in Multi-Domain Optical Networks Using Hybrid Learning. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2022 , 28, 1-9	3.8	2
13	Nanophotonic computing: scalable and energy-efficient computing with attojoule nanophotonics 2017,		1
12	Multi-mode arrayed waveguide grating demultiplexer with single-mode performance and few-mode-fiber interfaces 2015,		1
11	Characterization of dual-electrode Mach-Zehnder modulator based optical frequency comb generator in two regimes 2008,		1
10	High-Resolution, Loop-Back AWG for Compact, High-Fidelity Optical Arbitrary Waveform Generation 2008,		1
9	Demonstration of Optical TTL Based Selective-3R in OLS Network Testbed with Label Rewriting and Fiber Transmission 2007,		1
8	Flex-LIONS: A Silicon Photonic Bandwidth-Reconfigurable Optical Switch Fabric. <i>IEICE Transactions on Communications</i> , 2020 , E103.B, 1190-1198	0.5	1
7	Quantum Wrapper Networking 2021,		1
6	Photonics in Data Centers 2018, 3-21		1
5	Silicon Photonic Flex-LIONS for Reconfigurable Multi-GPU Systems. <i>Journal of Lightwave Technology</i> , 2021 , 39, 1212-1220	4	1

4	Low-Loss Wafer-Scale Silicon Photonic Interposer Utilizing Inverse-Taper Coupler 2018 ,		1
3	Cooperative Learning for Disaggregated Delay Modeling in Multidomain Networks. <i>IEEE Transactions on Network and Service Management</i> , 2021 , 18, 3633-3646	4.8	1
2	Introduction to the Issue on Optical Codes in Optical Communications and Networks. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2007 , 13, 1349-1350	3.8	
1	HTA: A Scalable High-Throughput Accelerator for Irregular HPC Workloads. <i>Lecture Notes in Computer Science</i> , 2021 , 176-194	0.9	