S J B Yoo

List of Publications by Year in Descending Order

65 papers	2,174 citations	23 h-index	46 g-index
93 ext. papers	2,577 ext. citations	4 avg, IF	4.42 L-index

#	Paper	IF	Citations
65	Scalable AWGR-based All-to-All Optical Interconnects with 2.5D/3D Integrated Optical Interposers **2018**,		5
64	Uniform emission, constant wavevector silicon grating surface emitter for beam steering with ultra-sharp instantaneous field-of-view. *Optics Express*, **2017**, 25, 19655-19661	3.3	24
63	Elastic Optical Networking by Dynamic Optical Arbitrary Waveform Generation and Measurement. *Journal of Optical Communications and Networking*, **2016**, 8, A171	4.1	9
62	Demonstration of Cooperative Resource Allocation in an OpenFlow-Controlled Multidomain and Multinational SD-EON Testbed. *Journal of Lightwave Technology*, **2015**, 33, 1508-1514	4	88
61	3D elastic optical networking in the temporal, spectral, and spatial domains **2015**, 53, 79-87		46
60	Polarization Diversified Integrated Circuits for Orbital Angular Momentum Multiplexing. *IEEE Photonics Technology Letters*, **2015**, 27, 1056-1059	2.2	12
59	Hybrid 3D Photonic Integrated Circuit for Optical Phased Array Beam Steering **2015**,		4
58	OpenFlow-Assisted Online Defragmentation in Single-/Multi-Domain Software-Defined Elastic Optical Networks [Invited]. *Journal of Optical Communications and Networking*, **2015**, 7, A7	4.1	48
57	Multi-domain cognitive optical software defined networks with market-driven brokers **2014**,		13
56	Demonstration of scalable, flat, and high-throughput data center architecture based on arrayed waveguide grating routers **2014**,		2
55	Experimental demonstration of dynamic flexible bandwidth optical data center network with all-to-all interconnectivity **2014**,		9
54	Free-space coherent optical communication with orbital angular, momentum multiplexing/demultiplexing using a hybrid 3D photonic integrated circuit. *Optics Express*, **2014**, 22, 145-56	3.3	112
53	A novel SDN enabled hybrid optical packet/circuit switched data centre network: The LIGHTNESS approach **2014**,		9
52	Demonstration of Orbital Angular Momentum State Conversion using Two Hybrid 3D Photonic Integrated Circuits **2014**,		6
51	Adaptive Spectrum Control and Management in Elastic Optical Networks. *IEEE Journal on Selected Areas in Communications*, **2013**, 31, 39-48	14.2	16
50	Elastic optical networking and low-latency high-radix optical switches for future cloud computing **2013**,		8
49	An All-Optical Token Technique Enabling a Fully-Distributed Control Plane in AWGR-Based Optical Interconnects. *Journal of Lightwave Technology*, **2013**, 31, 414-422	4	11

48	Outage constrained joint precoding for D2D underlay cellular networks **2013**,		1
47	Integrated Optical Orbital Angular Momentum Multiplexing Device using 3-D Waveguides and a Silica PLC **2013**,		3
46	Spectral and Spatial 2D Fragmentation-Aware Routing and Spectrum Assignment Algorithms in Elastic Optical Networks [Invited]. *Journal of Optical Communications and Networking*, **2013**, 5, A100	4.1	185
45	LIONS: An AWGR-Based Low-Latency Optical Switch for High-Performance Computing and Data Centers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 3600409-3600409	3.8	94
44	Experimental Demonstration of Adaptive Combinational QoT Degradation Restoration in Elastic Optical Networks. *Journal of Lightwave Technology*, **2013**, 31, 664-671	4	12
43	Scalable and Distributed Contention Resolution in AWGR-Based Data Center Switches Using RSOA-Based Optical Mutual Exclusion. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 3600111-3600111	3.8	16
42	Frequency-to-Time-Assisted Interferometry for Full-Field Optical Waveform Measurements With Picosecond Resolution and Microsecond Record Lengths. *IEEE Photonics Journal*, **2012**, 4, 748-758	1.8	7
41	Rapid High-Precision In Situ Wavelength Calibration for Tunable Lasers Using an Athermal AWG and a PD Array. *IEEE Photonics Technology Letters*, **2012**, 24, 70-72	2.2	5
40	Dynamic on-demand defragmentation in flexible bandwidth elastic optical networks. *Optics Express* , **2012**, 20, 1798-804	3.3	70
39	Full-field technique for measuring the spectral evolution of reconfigurable photonic filters. *Optics Letters*, **2012**, 37, 341-3	3	1
38	Demonstration of free space coherent optical communication using integrated silicon photonic orbital angular momentum devices. *Optics Express*, **2012**, 20, 9396-402	3.3	173
37	Fully Reconfigurable Silicon Photonic Lattice Filters With Four Cascaded Unit Cells. *IEEE Photonics Technology Letters*, **2011**, 23, 42-44	2.2	22
36	Experimental demonstration of flexible bandwidth networking with real-time impairment awareness. *Optics Express*, **2011**, 19, B736-45	3.3	23
35	Monolithic InP 100-Channel $times$ 10-GHz Device for Optical Arbitrary Waveform Generation. *IEEE Photonics Journal*, **2011**, 3, 975-985	1.8	29
34	Demonstration of a Flexible Bandwidth Optical Transmitter/Receiver System Scalable to Terahertz Bandwidths. *IEEE Photonics Journal*, **2011**, 3, 1013-1022	1.8	22
33	The First Testbed Demonstration of a Flexible Bandwidth Network with a Real-Time Adaptive Control Plane **2011**,		27
32	Real-time full-field arbitrary optical waveform measurement. *Nature Photonics*, **2010**, 4, 248-254	33.9	103
31	Fully reconfigurable silicon CMOS photonic lattice filters **2010**,		1

30	Optical Arbitrary Waveform Generation-Based Packet Generation and All-Optical Separation for Optical-Label Switching. *IEEE Photonics Technology Letters*, **2010**, 22, 715-717	2.2	12
29	400-Gb/s Modulation-Format-Independent Single-Channel Transmission With Chromatic Dispersion Precompensation Based on OAWG. *IEEE Photonics Technology Letters*, **2010**, 22, 905-907	2.2	5
28	Dynamic optical arbitrary waveform generation and measurement. *Optics Express*, **2010**, 18, 18655-70	3.3	37
27	Demonstration of high-fidelity dynamic optical arbitrary waveform generation. *Optics Express*, **2010**, 18, 22988-95	3.3	34
26	Silicon microring resonator-based reconfigurable optical lattice filter for on-chip optical signal processing **2009**,		2
25	Towards athermal optically-interconnected computing system using slotted silicon microring resonators and RF-photonic comb generation. *Applied Physics A: Materials Science and Processing*, **2009**, 95, 1101-1109	2.6	19
24	Design and evaluation of an arbitration-free passive optical crossbar for on-chip interconnection networks. *Applied Physics A: Materials Science and Processing*, **2009**, 95, 1111-1118	2.6	23
23	Near quantum-limited, single-shot coherent arbitrary optical waveform measurements. *Optics Express*, **2009**, 17, 12332-44	3.3	18
22	Athermalizing and Trimming of Slotted Silicon Microring Resonators With UV-Sensitive PMMA Upper-Cladding. *IEEE Photonics Technology Letters*, **2009**, 21, 1175-1177	2.2	73
21	Simultaneous multi-format RZ-OOK and RZ-DPSK optical packet switching based on tunable four-wave mixing **2009**,		1
20	Continuously Tunable, Wavelength-Selective Buffering in Optical Packet Switching Networks. *IEEE Photonics Technology Letters*, **2008**, 20, 1030-1032	2.2	27
19	Rapid updating of optical arbitrary waveforms via time-domain multiplexing. *Optics Letters*, **2008**, 33, 1068-70	3	18
18	Compact 10 GHz loopback arrayed-waveguide grating for high-fidelity optical arbitrary waveform generation. *Optics Letters*, **2008**, 33, 1714-6	3	35
17	Jitter and Amplitude Noise Accumulations in Cascaded All-Optical Regenerators. *Journal of Lightwave Technology*, **2008**, 26, 1640-1652	4	35
16	Active arrayed-waveguide grating with amplitude and phase control for arbitrary filter generation and high-order dispersion compensation **2008**,		4
15	Dynamic phase-error compensation for high-resolution InP arrayed-waveguide grating using electro-optic effect **2008**,		1
14	InP-Based Arrayed-Waveguide Grating with a Channel Spacing of 10 GHz **2008**,		2
13	Interactive Informatics on Internet Infrastructure **2007**,		1

List of Publications

12	Performance Comparison of Gated and Nongated All-Optical Thresholding Detection Schemes Using Mach-Zehnder Interferometers in SPECTS O-CDMA. *IEEE Photonics Technology Letters*, **2007**, 19, 1054-1056	2.2	2
11	3.5-THz Wide, 175 Mode Optical Comb Source **2007**,		9
10	Determination of 20 GHz InP AWG Phase Errors by Measurement of AWG Pulse Train. *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, **2007**,		1
9	Security Enhancement of SPECTS O-CDMA Through Concealment Against Upstream DPSK Eavesdropping. *Journal of Lightwave Technology*, **2007**, 25, 2799-2806	4	7
8	XFROG characterization of a 10 GHz colliding-pulse mode-locked laser **2006**,		1
7	Error-free 1,001-hop Cascaded Operation of an Optical-label Switching Router with Optical 3R Regeneration **2006**,		2
6	Experimental Investigation on Using Phase Mask in Spectral-Phase-Encoded O-CDMA for Security Enhancement **2006**,		1
5	All-Optical Label Swapping, Clock Recovery, and 3R Regeneration in 101-Hop Cascaded Optical-Label Switching Router Networks. *IEEE Photonics Technology Letters*, **2006**, 18, 2629-2631	2.2	8
4	All-optical packet-switched networks: a study of contention-resolution schemes in an irregular mesh network with variable-sized packets **2000**,		31
3	Wavelength conversion by difference frequency generation in AlGaAs waveguides with periodic domain inversion achieved by wafer bonding. *Applied Physics Letters*, **1996**, 68, 2609-2611	3.4	145
2	Second-order susceptibility in asymmetric quantum wells and its control by proton bombardment. *Applied Physics Letters*, **1991**, 58, 1724-1726	3.4	81
1	Observation of extremely large quadratic susceptibility at 9.6-10.8 microm in electric-field-biased AlGaAs quantum wells. *Physical Review Letters*, **1989**, 62, 1041-1044	7.4	318