Ryan P Scott

List of Publications by Year
in descending order

73 papers	**1,717** citations	279798 **23** h-index	302126 **39** g-index
73 all docs	**73** docs citations	**73** times ranked	**1527** citing authors

#	Article	IF	Citations
1	Demonstration of free space coherent optical communication using integrated silicon photonic orbital angular momentum devices. Optics Express, 2012, 20, 9396.	3.4	215
2	Real-time full-field arbitrary optical waveform measurement. Nature Photonics, 2010, 4, 248-254.	31.4	161
3	Free-space coherent optical communication with orbital angular, momentum multiplexing/demultiplexing using a hybrid 3D photonic integrated circuit. Optics Express, 2014, 22, 145.	3.4	145
4	Tb/s Coherent Optical OFDM Systems Enabled by Optical Frequency Combs. Journal of Lightwave Technology, 2010, 28, 2054-2061.	4.6	87
5	Bandwidth scalable, coherent transmitter based on the parallel synthesis of multiple spectral slices using optical arbitrary waveform generation. Optics Express, 2011, 19, 8242.	3.4	72
6	3D elastic optical networking in the temporal, spectral, and spatial domains. , 2015, 53, 79-87.		61
7	Heterogeneous 2D/3D photonic integrated microsystems. Microsystems and Nanoengineering, 2016, 2, 16030.	7.0	59
8	Rapid and complete hitless defragmentation method using a coherent RX LO with fast wavelength tracking in elastic optical networks. Optics Express, 2012, 20, 26958.	3.4	56
9	Modulation-format agile, reconfigurable â€˜Tb/s transmitter based on â€˜optical arbitrary waveform generation. Optics Express, 2009, 17, 15911.	3.4	54
10	Dynamic optical arbitrary waveformâ€˜generation and measurement. Optics Express, 2010, 18, 18655.	3.4	53
11	Demonstration of high-fidelity dynamic â€˜optical arbitrary waveform generation. Optics Express, 2010, 18, 22988.	3.4	48
12	Compact 10 GHz loopback arrayed-waveguide grating for high-fidelity optical arbitrary waveform generation. Optics Letters, 2008, 33, 1714.	3.3	45
13	A 320-Gb/s Capacity (32-User $\times$ 10 Gb/s) SPECTS O-CDMA Network Testbed With Enhanced Spectral Efficiency Through Forward Error Correction. Journal of Lightwave Technology, 2007, 25, 79-86.	4.6	44
14	Demonstration of a fast-reconfigurable silicon CMOS optical lattice filter. Optics Express, 2011, 19, 13245.	3.4	43
15	Monolithic InP 100-Channel $\times$ 10-GHz Device for Optical Arbitrary Waveform Generation. IEEE Photonics Journal, 2011, 3, 975-985.	2.0	40
16	Amplitude and phase noise sensitivity of modelocked Ti:sapphire lasers in terms of a complex noise transfer function. Optics Express, 2007, 15, 9090.	3.4	36
17	Demonstration of Spectral Defragmentation in Flexible Bandwidth Optical Networking by FWM. IEEE Photonics Technology Letters, 2011, 23, 1893-1895.	2.5	34
18	Quantum optical arbitrary waveform manipulation and measurement in real time. Optics Express, 2014, 22, 27942.	3.4	34

#	Article	IF	Citations
19	The First Testbed Demonstration of a Flexible Bandwidth Network with a Real-Time Adaptive Control Plane. , 2011, , .		32
20	Demonstration of a Flexible Bandwidth Optical Transmitter/Receiver System Scalable to Terahertz Bandwidths. IEEE Photonics Journal, 2011, 3, 1013-1022.	2.0	31
21	Amplitude and envelope phase noise of a modelocked laser predicted from its noise transfer function and the pump noise power spectrum. Optics Express, 2008, 16, 14186.	3.4	30
22	Experimental demonstration of flexible bandwidth networking with real-time impairment awareness. Optics Express, 2011, 19, B736.	3.4	30
23	Dynamic optical arbitrary waveform generation and detection in InP photonic integrated circuits for Tb/s optical communications. Optics Communications, 2011, 284, 3693-3705.	2.1	29
24	CMOS Compatible Reconfigurable Silicon Photonic Lattice Filters Using Cascaded Unit Cells for RF-Photonic Processing. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 359-368.	2.9	29
25	Near quantum-limited, single-shot coherent arbitrary optical waveform measurements. Optics Express, 2009, 17, 12332.	3.4	25
26	1-GHz Monolithically Integrated Hybrid Mode-Locked InP Laser. IEEE Photonics Technology Letters, 2010, 22, 1793-1795.	2.5	21
27	Terahertz Information and Signal Processing by RF-Photonics. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 167-176.	3.1	19
28	Optical Arbitrary Waveform Generation-Based Packet Generation and All-Optical Separation for Optical-Label Switching. IEEE Photonics Technology Letters, 2010, 22, 715-717.	2.5	18
29	Adaptive Spectrum Control and Management in Elastic Optical Networks. IEEE Journal on Selected Areas in Communications, 2013, 31, 39-48.	14.0	18
30	Polarization Diversified Integrated Circuits for Orbital Angular Momentum Multiplexing. IEEE Photonics Technology Letters, 2015, 27, 1056-1059.	2.5	14
31	Elastic Optical Networking by Dynamic Optical Arbitrary Waveform Generation and Measurement. Journal of Optical Communications and Networking, 2016, 8, A171.	4.8	14
32	Rapidly reconfigurable high-fidelity optical arbitrary waveform generation in heterogeneous photonic integrated circuits. Optics Express, 2017, 25, 8872.	3.4	14
33	Experimental Demonstration of Adaptive Combinational QoT Degradation Restoration in Elastic Optical Networks. Journal of Lightwave Technology, 2013, 31, 664-671.	4.6	12
34	80.8-km BOSSNET SPECTS O-CDMA Field Trial Using Subpicosecond Pulses and a Fully Integrated, Compact AWG-Based Encoder/Decoder. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1455-1462.	2.9	10
35	Bandwidth Scalable, Coherent Transmitter Based on Parallel Synthesis of Multiple Spectral Slices. , 2011, , .		9
36	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.	2.0	8

#	ARTICLE	IF	CITATIONS
37	Hybrid 3D Photonic Integrated Circuit for Optical Phased Array Beam Steering. , 2015, , .		8
38	400-Gb/s Modulation-Format-Independent Single-Channel Transmission With Chromatic Dispersion Precompensation Based on OAWG. IEEE Photonics Technology Letters, 2010, 22, 905-907.	2.5	6
39	Four-State Data Encoding for Enhanced Security Against Upstream Eavesdropping in SPECTS O-CDMA. Journal of Lightwave Technology, 2011, 29, 62-68.	4.6	6
40	Optical Spectrally Sliced Transmitter for High Fidelity and Bandwidth Scalable Waveform Generation. Journal of Lightwave Technology, 2016, 34, 737-744.	4.6	6
41	Integrated Optical Orbital Angular Momentum Multiplexing Device using 3-D Waveguides and a Silica PLC. , 2013, , .		5
42	Software defined elastic optical networking in temporal, spectral, and spatial domains. Photonic Network Communications, 2014, 28, 19-33.	2.7	5
43	Two-User 150-km Field Fiber Security Enhanced SPECTS O-CDMA Transmission. IEEE Photonics Technology Letters, 2007, 19, 852-854.	2.5	3
44	Continuous, Real-Time, Full-Field Waveform Measurements via Spectral Slicing and Parallel Digital Coherent Detection. , 2010, , .		3
45	Single Channel, 200 Gb/s, Chromatic Dispersion Precompensated 100 km Transmission Using an Optical Arbitrary Waveform Generation Based Optical Transmitter. , 2010, , .		3
46	Multi-mode arrayed waveguide grating demultiplexer with single-mode performance and few-mode-fiber interfaces. , 2015, , .		3
47	Flexible-Bandwidth, Impairment-Aware Transmitter Based on Parallel Synthesis of Optical Frequency Combs. , 2011, , .		3
48	Characterization of dual-electrode Mach-Zehnder modulator based optical frequency comb generator in two regimes. , 2008, , .		2
49	Security Enhanced SPECTS O-CDMA with Four-State Encoded Data Modulation. , 2010, , .		2
50	Bandwidth Scalable and High Fidelity Spectrally-Sliced Transmitter. , 2015, , .		2
51	Characterization of the complex noise transfer function of a modelocked Ti: Sapphire laser. , 2007, , .		1
52	360 Gb/s data modulation with dispersion precompensation using optical arbitrary waveform generation. , 2008, , .		1
53	High-Resolution, Loop-Back AWG for Compact, High-Fidelity Optical Arbitrary Waveform Generation. , 2008, , .		1
54	Modulation-format transparent optical arbitrary waveform generation based optical-label switching transmitter with all-optical label extraction using FBG. , 2009, , .		1

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55	Fully reconfigurable silicon CMOS photonic lattice filters. , 2010, , .		1
56	Generation and detection of arbitrary modulation format, coherent optical waveforms scalable to a terahertz. , 2011, , .		1
57	Full-field technique for measuring the spectral evolution of reconfigurable photonic filters. Optics Letters, 2012, 37, 341.	3.3	1
58	Polarization diversified integrated circuits for orbital angular momentum multiplexing. , 2015, , .		1
59	Experimental Demonstration of 3D Elastic Optical Networking in Space, Time and Frequency. , 2015, , .		1
60	Optical Arbitrary Waveform Generation Based Optical-Label Switching Transmitter with All-Optical Label Extraction. , 2010, , .		1
61	Predicting amplitude and phase noise of modelocked lasers from the pump noise power spectrum. , 2008, , .		0
62	3 b/s/Hz 1.2 Tb/s Packet Generation using Optical Arbitrary Waveform Generation Based Optical Transmitter. , 2009, , .		0
63	Frequency-to-Time Assisted Interferometry for Polarization-Diversified, Single-Shot, Full-Field Waveform Measurement. , 2010, , .		0
64	Multi-band coherent optical OFDM receiver enabled by optical frequency combs. , 2010, , .		0
65	Demonstration of high-fidelity dynamic optical arbitrary waveform generation. , 2010, , .		0
66	Bandwidth Scalable, Coherent Transmitter Based on Parallel Spectral Slice Waveform Generation. , 2011, , .		0
67	Coherent reception of 80 GBd QPSK using integrated spectral slice optical arbitrary waveform measurement. , 2012, , .		0
68	Dynamic optical arbitrary waveform generation and measurement to increase the flexibility, fidelity and bandwidth of optical networks. , 2012, , .		0
69	Spectrally-sliced Transmitter for Long-haul Fiber Transmission. , 2016, , .		0
70	Measurements of Temporal Correlation Between Pump Noise and Modelocked Laser Noise. , 2009, , .		0
71	Terabit/Second Modulation Format Independent Optical Transmitter and Receiver Using Optical Arbitrary Waveform Generation and Measurement. , 2010, , .		0
72	Demonstration of Dynamic Optical Arbitrary Waveform Generation with 5-ns Record Lengths and 33-ps Features. , 2011, , .		0

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73	Dynamic optical arbitrary waveform generation and measurement for telecommunications. , 2012, , .		0