Stefan Preussler

List of Publications by Year
in descending order

69 papers	1,165 citations	430874 18 h-index	395702 33 g-index
69 all docs	69 docs citations	69 times ranked	699 citing authors

#	Article	IF	Citations
1	Link Budget Analysis for Terahertz Fixed Wireless Links. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 250-256.	3.1	215
2	Brillouin scattering gain bandwidth reduction down to 34MHz. Optics Express, 2011, 19, 8565.	3.4	101
3	Enhancement of spectral resolution and optical rejection ratio of Brillouin optical spectral analysis using polarization pulling. Optics Express, 2012, 20, 14734.	3.4	55
4	Bandwidth reduction in a multistage Brillouin system. Optics Letters, 2012, 37, 4122.	3.3	50
5	Quasi-Light-Storage based on time-frequency coherence. Optics Express, 2009, 17, 15790.	3.4	49
6	Frequency domain aperture for the gain bandwidth reduction of stimulated Brillouin scattering. Optics Letters, 2012, 37, 930.	3.3	43
7	Stimulated Brillouin scattering gain bandwidth reduction and applications in microwave photonics and optical signal processing. Optical Engineering, 2015, 55, 031110.	1.0	43
8	Generation of ultra-narrow, stable and tunable millimeter- and terahertz- waves with very low phase noise. Optics Express, 2013, 21, 23950.	3.4	42
9	Sharp tunable and additional noise-free optical filter based on Brillouin losses. Photonics Research, 2018, 6, 132.	7.0	37
10	Flexible Nyquist Pulse Sequence Generation With Variable Bandwidth and Repetition Rate. IEEE Photonics Journal, 2014, 6, 1-8.	2.0	32
11	Quasi-Light Storage: A Method for the Tunable Storage of Optical Packets With a Potential Delay-Bandwidth Product of Several Thousand Bits. Journal of Lightwave Technology, 2010, 28, 2586-2592.	4.6	30
12	Ultrahigh-Resolution Spectroscopy Based on the Bandwidth Reduction of Stimulated Brillouin Scattering. IEEE Photonics Technology Letters, 2011, 23, 1118-1120.	2.5	29
13	Integrated source-free all optical sampling with a sampling rate of up to three times the RF bandwidth of silicon photonic MZM. Optics Express, 2019, 27, 29972.	3.4	29
14	Attometer resolution spectral analysis based on polarization pulling assisted Brillouin scattering merged with heterodyne detection. Optics Express, 2015, 23, 26879.	3.4	27
15	Frequency-time coherence for all-optical sampling without optical pulse source. Scientific Reports, 2016, 6, 34500.	3.3	25
16	Zero-broadening measurement in Brillouin based slow-light delays. Optics Express, 2009, 17, 797.	3.4	21
17	Flat, rectangular frequency comb generation with tunable bandwidth and frequency spacing. Optics Letters, 2014, 39, 1637.	3.3	21
18	Agnostic sampling transceiver. Optics Express, 2021, 29, 14828.	3.4	19

#	ARTICLE	IF	CITATIONS
19	Quasi-light-storage enhancement by reducing the Brillouin gain bandwidth. Applied Optics, 2011, 50, 4252.	2.1	18
20	Nonlinearity- and dispersion- less integrated optical time magnifier based on a high-Q SiN microring resonator. Scientific Reports, 2019, 9, 14277.	3.3	17
21	Gain Spectrum Engineering in Distributed Brillouin Fiber Sensors. Journal of Lightwave Technology, 2019, 37, 5231-5237.	4.6	17
22	Orthogonal Full-Field Optical Sampling. IEEE Photonics Journal, 2019, 11, 1-9.	2.0	17
23	Investigation of Gain Dependent Relative Intensity Noise in Fiber Brillouin Amplification. Journal of Lightwave Technology, 2016, 34, 3930-3936.	4.6	16
24	Photonically synchronized large aperture radar for autonomous driving. Optics Express, 2019, 27, 1199.	3.4	16
25	Photonic Arbitrary Waveform Generation With Three Times the Sampling Rate of the Modulator Bandwidth. IEEE Photonics Technology Letters, 2020, 32, 1544-1547.	2.5	15
26	Measurement Accuracy Enhancement via Radio Frequency Filtering in Distributed Brillouin Sensing. Sensors, 2019, 19, 2878.	3.8	14
27	Tunable microwave-photonic filter using frequency-to-time mapping-based delay lines. Optics Express, 2013, 21, 21702.	3.4	13
28	The Influence of Dispersion on Stimulated-Brillouin-Scattering-Based Microwave Photonic Notch Filters. Journal of Lightwave Technology, 2018, 36, 5145-5151.	4.6	13
29	Photonic Microwave Frequency Measurement With High Accuracy and Sub-MHz Resolution. Journal of Lightwave Technology, 2022, 40, 2748-2753.	4.6	13
30	High-Bandwidth Arbitrary Signal Detection Using Low-Speed Electronics. IEEE Photonics Journal, 2022, 14, 1-7.	2.0	13
31	Pulse broadening cancellation in cascaded slow-light delays. Optics Express, 2009, 17, 7586.	3.4	12
32	All optical tunable storage of phase-shift-keyed data packets. Optics Express, 2012, 20, 18224.	3.4	11
33	Reconfigurable and real-time high-bandwidth Nyquist signal detection with low-bandwidth in silicon photonics. Optics Express, 2022, 30, 13776.	3.4	11
34	Combined Optical and Electrical Spectrum Shaping for High-Baud-Rate Nyquist-WDM Transceivers. IEEE Photonics Journal, 2016, 8, 1-11.	2.0	10
35	Roll-Off Factor Analysis of Optical Nyquist Pulses Generated by an On-Chip Mach-Zehnder Modulator. IEEE Photonics Technology Letters, 2021, 33, 1189-1192.	2.5	10
36	Nonlinear Brillouin based slow-light system for almost distortion-free pulse delay. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 544.	2.1	9

#	Article	IF	Citations
37	Optical Signal Generation and Distribution for Large Aperture Radar in Autonomous Driving. , 2019, , .		8
38	Modular Wideband High Angular Resolution 79 GHz Radar System. , 2019, , .		6
39	Integrated High-Resolution Optical Spectrum Analyzer With Broad Operational Bandwidth. IEEE Photonics Technology Letters, 2020, 32, 1061-1064.	2.5	5
40	Optical convolution with a rectangular frequency comb for almost ideal sampling. , 2019, , .		5
41	Compact and Energy-Efficient Forward-Biased PN Silicon Mach-Zehnder Modulator. IEEE Photonics Journal, 2022, 14, 1-7.	2.0	5
42	Maximum transmittable data rates for Millimeter-wave fixed wireless links. , 2012, , .		3
43	High Modulation Efficiency Segmented Mach-Zehnder Modulator Monolithically Integrated with Linear Driver in 0.25 µm BiCMOS Technology. , 2021, , .		3
44	Modulation Format Aggregation of Nyquist channels by Spectral Superposition with Electro-Optic Modulators. , 2022, , .		3
45	Increasing the Resolution of Optical Spectrometers for the Measurement of Advanced Optical Communication Signals. , 2012, , .		2
46	Ultra-narrow line-width, stable and widely tuneable laser source for coherent optical communication systems. , 2014, , .		2
47	Almost distortion free storage of 1Gbps/8bit optical packets for up to 100 bit lengths. , 2010, , .		1
48	Managing the resolution bandwidth in Brillouin based spectroscopy. , 2011, , .		1
49	Tunable generation of ultra-narrow linewidth millimeter and THz-waves and their modulation at 40 Gbd. , 2013, , .		1
50	Quasi-light Storage for Optical Data Packets. Journal of Visualized Experiments, 2014, , e50468.	0.3	1
51	All-optical sampling without optical source. Proceedings of SPIE, 2017, , .	0.8	1
52	High-speed Silicon Mach-Zehnder Modulator with Corrugated Waveguides for Data Center Interconnects. , 2021, , .		1
53	Frequency-Time Coherence for All-Optical Sampling. , 2016, , .		1
54	Nyquist Data Transmission with Threefold Bandwidth of the Utilized Modulator. , 2020, , .		1

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55	Optical PRBS Generation with Threefold Bandwidth of the Employed Electronics and Photonics. , 2021, , .		1
56	Emulation of integrated high-bandwidth photonic AWG using low-speed electronics. , 2022, , .		1
57	Gain enhancement in multiple-pump-line Brillouin-based slow light systems by using fiber segments and filter stages. Applied Optics, 2009, 48, 5583.	2.1	0
58	Methods for the enhancement of the storage time in Quasi-Light-Storage. , 2011, , .		0
59	Optical spectrum analysis with kHz resolution based on polarization pulling and local oscillator assisted Brillouin scattering. , 2015, , .		0
60	Generation of highly stable millimeter waves with low phase noise and narrow linewidth. , 2015, , .		0
61	Ultra-high resolution spectroscopy of optical frequency combs. Proceedings of SPIE, 2016, , .	0.8	0
62	Investigation of the Dispersion Effect on Stimulated Brillouin Scattering based Microwave Photonic Notch Filters. , 2018, , .		0
63	Photonic Components for Signal Generation and Distribution for Large Aperture Radar in Autonomous Driving. Frequenz, 2019, 73, 399-408.	0.9	0
64	Integrated all optical sampling of microwave signals in silicon photonics. , 2019, , .		0
65	Generation and Stabilization of THz-waves with Extraordinary Low Line Width and Phase Noise. , 2015, , .		0
66	Dispersion engineering with stimulated Brillouin scattering and applications. , 2018, , .		0
67	Photonically synchronized radar for advanced driver assistance systems. , 2019, , .		0
68	Modulator-based sinc-sequence sampled time and frequency multiplexed QAM signal transmission. , 2021, , .		0
69	Analysis of the effect of jitter and non-idealities on photonic digital-to-analog converters based on Nyquist pulses. , 2022, , .		0