

Moritz Merklein

List of Publications by Year in descending order

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Hybrid Chalcogenide-Germanosilicate Waveguides for High Performance Stimulated Brillouin Scattering Applications. <i>Advanced Functional Materials</i> , 2022, 32, 2105230.	7.8	10
2	Multi-Band and Frequency-Agile Chip-Based RF Photonic Filter for Ultra-Deep Interference Rejection. <i>Journal of Lightwave Technology</i> , 2022, 40, 1672-1680.	2.7	6
3	Pilot-Tone-Assisted Stimulated-Brillouin-Scattering-Based Optical Carrier Recovery for Kramers-Kronig Reception. <i>Journal of Lightwave Technology</i> , 2022, 40, 4642-4648.	2.7	0
4	Wide-range optical carrier recovery via broadened Brillouin filters. <i>Optics Letters</i> , 2021, 46, 166.	1.7	8
5	Effective linewidth reduction in self-homodyne coherent reception by stimulated Brillouin scattering-based optical carrier recovery. <i>Optics Express</i> , 2021, 29, 25697.	1.7	2
6	Effective Linewidth Reduction in Self-Homodyne Coherent Reception Enabled by stimulated Brillouin scattering. , 2021, , .		0
7	Chip-based RF Photonic Notch Filter for Deep Rejection of Multi-Band Interfering Signals. , 2021, , .		0
8	Chip-based broadband microwave photonic mixer with image rejection. , 2021, , .		3
9	Broadband Brillouin Phase Shifter Utilizing RF Interference: Experimental Demonstration and Theoretical Analysis. <i>Journal of Lightwave Technology</i> , 2020, 38, 3624-3636.	2.7	12
10	Integrated microwave photonic true-time delay with interferometric delay enhancement based on Brillouin scattering and microring resonators. <i>Optics Express</i> , 2020, 28, 36020.	1.7	10
11	Si ₃ N ₄ -chip-based versatile photonic RF waveform generator with a wide tuning range of repetition rate. <i>Optics Letters</i> , 2020, 45, 1370.	1.7	9
12	Coherently refreshing hypersonic phonons for light storage. <i>Optica</i> , 2020, 7, 492.	4.8	32
13	On-chip broadband nonreciprocal light storage. <i>Nanophotonics</i> , 2020, 10, 75-82.	2.9	17
14	Chip-based broadband true-time delay using Brillouin scattering and phase amplification. , 2020, , .		0
15	Clamping of noise from a stimulated Brillouin scattering amplifier through optical injection locking. , 2020, , .		0
16	EDFA-band Coverage Broadband SBS Filter for Optical Carrier Recovery. , 2020, , .		2
17	On-Chip All-Optical Polarisation Pulling via Stimulated Brillouin Scattering. , 2020, , .		1
18	High-conversion-gain and deep-image-rejection Brillouin chip-based photonic RF mixer. <i>Optics Letters</i> , 2020, 45, 5571.	1.7	13

#	ARTICLE	IF	CITATIONS
19	Refreshed Opto-Acoustic Memory. , 2019, , .		0
20	Cross talk-free coherent multi-wavelength Brillouin interaction. APL Photonics, 2019, 4, .	3.0	15
21	On-chip correlation-based Brillouin sensing: design, experiment, and simulation. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 146.	0.9	23
22	Highly sensitive, broadband microwave frequency identification using a chip-based Brillouin optoelectronic oscillator. Optics Express, 2019, 27, 12855.	1.7	22
23	Positive link gain microwave photonic bandpass filter using Si ₃ N ₄ -ring-enabled sideband filtering and carrier suppression. Optics Express, 2019, 27, 31727.	1.7	31
24	Brillouin-based phase shifter in a silicon waveguide. Optica, 2019, 6, 907.	4.8	28
25	Photonic-chip based RF signal detection system with improved bandwidth and sensitivity. , 2019, , .		0
26	Non-reciprocal delay based on photon-phonon interactions on a chip. , 2019, , .		0
27	High-resolution RF spectrum analyzer on a chip. , 2019, , .		2
28	Broadband Brillouin-based phase shifter with phase amplification in a silicon waveguide. , 2019, , .		0
29	Highly localized distributed Brillouin scattering response in a photonic integrated circuit. APL Photonics, 2018, 3, .	3.0	22
30	Broad-band phase-shifter based on stimulated Brillouin scattering and RF interference. , 2018, , .		0
31	High Resolution Brillouin Sensing of Micro-Scale Structures. Applied Sciences (Switzerland), 2018, 8, 2572.	1.3	6
32	Coherent photonic-phononic interactions in integrated circuits. , 2018, , .		0
33	Develop RF-Photonic Technology for Wideband Spectrum Analyses. , 2018, , .		0
34	On-chip multi-stage optical delay based on cascaded Brillouin light storage. Optics Letters, 2018, 43, 4321.	1.7	5
35	Brillouin spectroscopy of a hybrid silicon-chalcogenide waveguide with geometrical variations. Optics Letters, 2018, 43, 3493.	1.7	13
36	On-chip coherent photonic-phononic memory. , 2018, , .		0

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37	Distributed SBS Sensing in a Silicon-Chalcogenide Platform. , 2018, , .		0
38	Short-scale photon-phonon interactions. , 2018, , .		0
39	Frequency preserving coherent opto-acoustic storage. , 2018, , .		0
40	A chip-integrated coherent photonic-phononic memory. Nature Communications, 2017, 8, 574.	5.8	110
41	A chip-integrated Brillouin-based optical memory. , 2017, , .		0
42	Simultaneous opto-acoustic light storage at multiple frequency channels. , 2017, , .		0
43	Simultaneous opto-acoustic light storage at multiple frequency channels. , 2017, , .		1
44	Brillouin-based Light Storage of 200ps-long Pulses for 70 Pulse Widths. , 2017, , .		3
45	Coherent photon-phonon conversion in integrated circuits. , 2017, , .		0
46	Distributed Brillouin Scattering Measurement with Sub-mm Spatial Resolution. , 2017, , .		1
47	Widely tunable, low phase noise microwave source based on a photonic chip. Optics Letters, 2016, 41, 4633.	1.7	84
48	Opto-electronic oscillator employing photonic-chip based stimulated Brillouin scattering. , 2016, , .		0
49	Stimulated Brillouin Scattering in Photonic Integrated Circuits: Novel Applications and Devices. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 336-346.	1.9	36
50	Access to acoustic decay time in photonic circuits via Brillouin-based phononic memory. , 2016, , .		0
51	Photonic-chip based widely tunable microwave source using a Brillouin opto-electronic oscillator. , 2016, , .		0
52	A coherent on-chip optical memory: storing amplitude and phase as acoustic phonons. , 2016, , .		3
53	Enhancing and inhibiting stimulated Brillouin scattering in photonic integrated circuits. Nature Communications, 2015, 6, 6396.	5.8	73
54	Inhibiting stimulated Brillouin scattering in a highly nonlinear waveguide. , 2015, , .		0

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55	Storing Light as Sound in a Photonic Integrated Circuit. , 2015, , .		2
56	Phase-locked, chip-based, cascaded stimulated Brillouin scattering. Optica, 2014, 1, 311.	4.8	35
57	Slow-light enhanced Brillouin frequency comb generation on a chip. , 2014, , .		0
58	Phase-locked Cascaded Stimulated Brillouin Scattering and Pulse Train Generation on a Photonic Chip. , 2014, , .		0
59	Phase Transitions in Co-Doped NiMnGa Magnetic Shape Memory Alloys Probed by Coherent Phonons. , 2014, , .		0
60	Ultrafast spectroscopy of super high frequency mechanical modes of doubly clamped beams. Applied Physics Letters, 2013, 103, .	1.5	8