Marc Haelterman

List of Publications by Year
in descending order

61	2,801	279798	243625
papers	citations	23	44
		h-index	g-index

61	61	61	1428
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Photonic reservoir computer based on frequency multiplexing. Optics Letters, 2022, 47, 782.	3.3	11
2	Random Pattern and Frequency Generation Using a Photonic Reservoir Computer with Output Feedback. Neural Processing Letters, 2018, 47, 1041-1054.	3.2	3
3	Towards high-performance spatially parallel optical reservoir computing. , 2018, , .		6
4	Towards integrated parallel photonic reservoir computing based on frequency multiplexing. , 2018, , .		3
5	Towards autonomous photonic reservoir computer based on frequency parallelism of neurons. , 2017, , .		2
6	Online Training for High-Performance Analogue Readout Layers in Photonic Reservoir Computers. Cognitive Computation, 2017, 9, 297-306.	5.2	11
7	Brain-Inspired Photonic Signal Processor for Generating Periodic Patterns and Emulating Chaotic Systems. Physical Review Applied, 2017, 7, .	3.8	47
8	Online Training of an Opto-Electronic Reservoir Computer Applied to Real-Time Channel Equalization. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 2686-2698.	11.3	59
9	Photonic reservoir computer with output feedback for chaotic time series prediction. , 2017, , .		2
10	Autonomous bio-inspired photonic processor based on reservoir computing paradigm. , 2016, , .		2
11	Embodiment of Learning in Electro-Optical Signal Processors. Physical Review Letters, 2016, 117, 128301.	7.8	22
12	Towards Adjustable Signal Generation with Photonic Reservoir Computers. Lecture Notes in Computer Science, 2016, , 374-381.	1.3	3
13	Pattern and Frequency Generation Using an Opto-Electronic Reservoir Computer with Output Feedback. Lecture Notes in Computer Science, 2016, , 318-325.	1.3	3
14	Fully analogue photonic reservoir computer. Scientific Reports, 2016, 6, 22381.	3.3	133
15	Towards pattern generation and chaotic series prediction with photonic reservoir computers. Proceedings of SPIE, 2016, , .	0.8	16
16	Autonomous all-photonic processor based on reservoir computing paradigm. , 2016, , .		6
17	Impact of third-order dispersion on nonlinear bifurcations in optical resonators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1934-1937.	2.1	5
18	High-performance photonic reservoir computer based on a coherently driven passive cavity. Optica, 2015, 2, 438.	9.3	182

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19	Online Training of an Opto-Electronic Reservoir Computer. Lecture Notes in Computer Science, 2015, , 233-240.	1.3	8
20	Information processing using an autonomous all-photonic reservoir computer based on coherently driven passive cavities. , 2015, , .		3
21	All-optical reservoir computer based on saturation of absorption. Optics Express, 2014, 22, 10868.	3.4	132
22	Virtual Optical Reservoir Computing. , 2014, , .		4
23	Nonlinear Symmetry Breaking Induced by Third-Order Dispersion in Optical Fiber Cavities. Physical Review Letters, 2013, 110, 104103.	7.8	50
24	Dynamics of one-dimensional Kerr cavity solitons. Optics Express, 2013, 21, 9180.	3.4	189
25	All-optical reservoir computing. Optics Express, 2012, 20, 22783.	3.4	340
26	Cavity soliton oscillations in a one-dimensional fiber resonator. , 2012, , .		1
27	Switching and intrinsic position bistability of soliton beams in chiral nematic liquid crystals. Physical Review A, 2011, 83, .	2.5	14
28	Propagation of nematicons in unbiased configurations: spiraling solitons. Proceedings of SPIE, 2010, , .	0.8	0
29	Temporal cavity solitons in one-dimensional Kerr media as bits in an all-optical buffer. Nature Photonics, 2010, 4, 471-476.	31.4	609
30	Reservoir computing: a photonic neural network for information processing. Proceedings of SPIE, 2010, , .	0.8	10
31	Countering spatial soliton breakdown in nematic liquid crystals. Optics Letters, 2009, 34, 1900.	3.3	13
32	Experimental Generation of 1.6-THz repetition-rate pulse-trains in a Passive Optical Fiber Resonator. , 2009, , .		0
33	Experimental Observation of the 1D Kerr-type Cavity Soliton in a Passive Optical Fiber Resonator. , 2009, , .		0
34	Role of topological phase-defects in the parametric generation process. Optics Communications, 2008, 281, 3196-3200.	2.1	1
35	Nonlinear wave guiding in nematic liquid crystals. , 2007, , .		2
36	Fast self-pulsing through nonlinear incoherent feedback. Optics Letters, 2006, 31, 495.	3.3	4

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37	Instability Dynamics of a Double-Pass Cavity with Nonlinear Feedback. , 2006, , .		0
38	Simulation of 2-D lateral light propagation in nematic-liquid-crystal cells with tilted molecules and nonlinear reorientational effect. Optical and Quantum Electronics, 2005, 37, 95-106.	3.3	20
39	Measurement of the self-induced waveguide of a solitonlike optical beam in a nematic liquid crystal. Journal of the Optical Society of America B: Optical Physics, 2005, 22, 1424.	2.1	95
40	Incoherent solitons generated in instantaneous response nonlinear Kerr media. , 2004, , WA3.		0
41	Condensation in Hamiltonian Parametric Wave Interaction. Physical Review Letters, 2004, 92, 103901.	7.8	29
42	Incoherent Solitons in Instantaneous Response Nonlinear Media. Physical Review Letters, 2004, 92, 143906.	7.8	45
43	Simulations and experiments on self-focusing conditions in nematic liquid-crystal planar cells. Optics Express, 2004, 12, 1011.	3.4	110
44	Condensation in parametric wave interaction. , 2004, , .		0
45	Hidden Coherence Along Space-Time Trajectories in Parametric Wave Mixing. Physical Review Letters, 2002, 88, 083901.	7.8	30
46	Coherence properties of the parametric three-wave interaction driven from an incoherent pump. Physical Review E, 2002, 66, 056605.	2.1	39
47	Continuous-wave ultrahigh-repetition-rate pulse-train generation through modulational instability in a passive fiber cavity. Optics Letters, 2001, 26, 39.	3.3	110
48	Parametric Three-Wave Soliton Generated from Incoherent Light. Physical Review Letters, 2001, 86, 2010-2013.	7.8	88
49	Influence of walk-off, dispersion, and diffraction on the coherence of parametric fluorescence. Physical Review E, 2001, 63, 056611.	2.1	23
50	Parametric Solitons in Passive Structures with Feedback. Springer Series in Optical Sciences, 2001, , 359-393.	0.7	4
51	Dispersion-Induced Dynamical Transition in Parametric Solitary Waves. Physical Review Letters, 2000, 84, 5760-5763.	7.8	14
52	Hybrid solitary waves in quadratic nonlinear media. Physical Review E, 1999, 59, 3749-3752.	2.1	8
53	Curvature dynamics and stability of topological solitons in the optical parametric oscillator. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 1936.	2.1	15
54	Competition between modulational instability and switching in optical bistability. Optics Letters, 1999, 24, 80.	3.3	36

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55	Solitons of singly resonant optical parametric oscillators. Optics Letters, 1999, 24, 400.	3.3	45
56	Transition towards dynamical parametric solitary waves. , 1999, , .		0
57	Excitation and bistability of self-trapped signal beams in optical parametric oscillators. Optics Letters, 1998, 23, 1514.	3.3	31
58	Spontaneous formation of symbiotic solitary waves in a backward quasi-phase-matched parametric oscillator. Optics Letters, 1998, 23, 1808.	3.3	32
59	Stable topological spatial solitons in optical parametric oscillators. Optics Letters, 1997, 22, 970.	3.3	112
60	Passive fiber ring flip-flop memory based on polarization dynamics. Optics Communications, 1997, 137, 427-436.	2.1	8
61	Optical bistability and temporal symmetry-breaking instability in nonlinear fiber resonators. Fiber and Integrated Optics, 1995, 14, 337-346.	2.5	11