Pascal Del'Haye

List of Publications by Year
in descending order

129	6,111	172457	223800
papers	citations	29 h-index	46 g-index

130	130	130	3489
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dark-Bright Soliton Bound States in a Microresonator. Physical Review Letters, 2022, 128, 033901.	7.8	27
2	A Kerr polarization controller. Nature Communications, 2022, 13, 398.	12.8	23
3	Generalized theory of optical resonator and waveguide modes and their linear and Kerr nonlinear coupling. Physical Review A, 2022, 105, .	2.5	2
4	Brillouin optomechanics: from strong coupling to single-phonon-level operations. , 2022, , .		0
5	Brillouin optomechanics in whispering-gallery-mode microresonators: From strong coupling to single-phonon addition and subtraction. , 2021, , .		0
6	Self-Switching Kerr Oscillations of Counterpropagating Light in Microresonators. Physical Review Letters, 2021, 126, 043901.	7.8	32
7	Optical memories and switching dynamics of counterpropagating light states in microresonators. Optics Express, 2021, 29, 2193.	3.4	19
8	Optical Memory Based on Conterpropagating Light in Microresonators. , 2021, , .		0
9	More Than 34 dB Backscattering Suppression in Microresonators. , 2021, , .		0
10	Spontaneous polarization symmetry breaking of light in a microresonator. , 2021, , .		0
11	A Kerr Oscillator based on Counterpropagating Light in a Microresonator. , 2021, , .		0
12	Kerr Enhancement of Optomechanics in Microresonators. , 2021, , .		0
13	Nonlinear enhanced microresonator gyroscope. Optica, 2021, 8, 1219.	9.3	17
14	>30 dB Suppression of Intrinsic Backscattering in Whispering-Gallery-Mode Microresonators. , 2021, , .		0
15	Critical dynamics of an asymmetrically bidirectionally pumped optical microresonator. Physical Review A, 2021, 104, .	2.5	3
16	Spectral Extension of Microcombs with Two Seed Lasers. , 2021, , .		0
17	Kerr Logic Gates based on Counterpropagating Light in Microresonators. , 2021, , .		0
18	Kerr Switch and Memory Based on Counterpropagating Light in Microresonators. , 2021, , .		0

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19	Spectral extension and synchronization of microcombs in a single microresonator. Nature Communications, 2020, 11, 6384.	12.8	49
20	Kerr-Nonlinearity-Induced Mode-Splitting in Optical Microresonators. Physical Review Letters, 2020, 124, 223901.	7.8	17
21	Effects of self- and cross-phase modulation on the spontaneous symmetry breaking of light in ring resonators. Physical Review A, 2020, 101, .	2.5	39
22	Logic Gates Based on Interaction of Counterpropagating Light in Microresonators. Journal of Lightwave Technology, 2020, 38, 1414-1419.	4.6	25
23	Coherent suppression of backscattering in optical microresonators. Light: Science and Applications, 2020, 9, 204.	16.6	24
24	Microresonator Logic Gates with Counterpropagating Light. , 2020, , .		0
25	Ultrastable THz Wave Generation using a Soliton Microcomb. , 2020, , .		0
26	Suppressing Intrinsic Backscattering in Ultra-High-Q Optical Microresonators. , 2020, , .		0
27	Spectrally Extended and Synchronized Microcombs with an Auxiliary Pump Laser. , 2020, , .		0
28	Splitting Microresonator Modes with the Kerr-Nonlinearity. , 2020, , .		0
29	Critical Dynamics of a Nonlinear Enhanced Microresonator Gyroscope. , 2019, , .		0
30	All-Optical Switching in Microresonators using the Kerr Nonreciprocity. , 2019, , .		0
31	Direct Measurement of Cross-Phase Modulation in Microresonators. , 2019, , .		0
32	Spontaneous Symmetry Breaking, Oscillations, and Chaotic Regimes in Bidirectionally-Pumped Ring Resonators. , 2019, , .		0
33	Interplay of Polarization and Time-Reversal Symmetry Breaking in Synchronously Pumped Ring Resonators. Physical Review Letters, 2019, 122, 013905.	7.8	26
34	Spontaneous Symmetry Breaking Based Near-Field Sensing with a Microresonator. , 2019, , .		1
35	Thermo-optical pulsing in a microresonator filtered fiber-laser: a route towards all-optical control and synchronization. Optics Express, 2019, 27, 19242.	3.4	12
36	Terahertz wave generation using a soliton microcomb. Optics Express, 2019, 27, 35257.	3.4	67

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37	Observation of Brillouin optomechanical strong coupling with an 11â€‰â€‰GHz mechanical mode. Optica, 2019, 6, 7.	9.3	38
38	Sub-milliwatt-level microresonator solitons with extended access range using an auxiliary laser. Optica, 2019, 6, 206.	9.3	120
39	Microwatt-Level Soliton Frequency Comb Generation in Microresonators Using an Auxiliary Laser. , 2019, , .		0
40	Logic Gates based on Interaction of Counterpropagating Light in Microresonators. , 2019, , .		1
41	Micro-combs: A novel generation of optical sources. Physics Reports, 2018, 729, 1-81.	25.6	448
42	Universal symmetry-breaking dynamics for the Kerr interaction of counterpropagating light in dielectric ring resonators. Physical Review A, 2018, 98, .	2.5	54
43	Uniform Thin Films on Optical Fibers by Plasma-Enhanced Chemical Vapor Deposition: Fabrication, Mie Scattering Characterization, and Application to Microresonators. Journal of Lightwave Technology, 2018, 36, 5580-5586.	4.6	2
44	Microresonator isolators and circulators based on the intrinsic nonreciprocity of the Kerr effect. Optica, 2018, 5, 279.	9.3	131
45	A Diode Made of Light â€“ Optical Isolators and Circulators Based on the Intrinsic Nonreciprocity of the Kerr Effect. , 2018, , .		0
46	Switching Dynamics of Counter-propagating Light States in Microresonators. , 2018, , .		0
47	Interaction of Counter-Propagating Light in Microresonators: Theoretical Model and Oscillatory Regimes. , 2018, , .		0
48	Temporal and Polarization Symmetry Breaking in Ring Resonators. , 2018, , .		0
49	Symmetry Breaking of Counter-Propagating Light in a Nonlinear Resonator. Scientific Reports, 2017, 7, 43142.	3.3	109
50	Kerr superoscillator model for microresonator frequency combs. Physical Review A, 2017, 95, .	2.5	2
51	Soliton crystals in Kerr resonators. Nature Photonics, 2017, 11, 671-676.	31.4	300
52	Self-synchronization phenomena in the Lugiato-Lefever equation. Physical Review A, 2017, 96, .	2.5	13
53	Kerr superoscillator model for microresonator frequency combs. , 2017, , .		0
54	Electronic synthesis of light. Optica, 2017, 4, 406.	9.3	115

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55	A Nonlinear Enhanced Microresonator Gyroscope. , 2017, , .		2
56	Dual Comb Generation in a Single Microresonator. , 2017, , .		4
57	Kerr Superoscillator Model for Microresonator Frequency Combs. , 2017, , .		0
58	Isolators and Circulators Based on Kerr Nonreciprocity in Microresonators. , 2017, , .		1
59	Spontaneous Symmetry Breaking of Counterpropagating Light in Microresonators. , 2017, , .		0
60	Self-synchronization and Phase Steps in Microresonator-based Optical Frequency Combs. , 2016, , .		0
61	Roadmap on ultrafast optics. Journal of Optics (United Kingdom), 2016, 18, 093006.	2.2	46
62	Phase-coherent microwave-to-optical link with a self-referenced microcomb. Nature Photonics, 2016, 10, 516-520.	31.4	133
63	Broadband dispersion-engineered microresonator on a chip. Nature Photonics, 2016, 10, 316-320.	31.4	79
64	Stabilizing multiple solitons in Kerr microresonator frequency combs. , 2016, , .		1
65	Soliton Crystals in Kerr Microresonator Frequency Combs. , 2016, , .		5
66	Generating 100+ GHz repetition rate soliton pulse trains with a Kerr microcavity. , 2016, , .		0
67	Dispersion engineered high-Q resonators on a chip. , 2016, , .		0
68	Self-referencing a 10 GHz Electro-optic Comb. , 2015, , .		1
69	Phase steps and resonator detuning measurements in microresonator frequency combs. Nature Communications, 2015, 6, 5668.	12.8	72
70	Self-referencing a CW laser with efficient nonlinear optics. , 2015, , .		2
71	Phase Measurements and Phase-Locking in Microresonator-Based Optical Frequency Combs. , 2014, , .		0
72	Measuring optical phases of Kerr frequency combs. , 2014, , .		0

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73	Microresonator frequency comb optical clock. Optica, 2014, 1, 10.	9.3	367
74	Self-Injection Locking and Phase-Locked States in Microresonator-Based Optical Frequency Combs. Physical Review Letters, 2014, 112, 043905.	7.8	107
75	Phase and coherence of optical microresonator frequency combs. Physical Review A, 2014, 89, .	2.5	17
76	All-optical stabilization of a microresonator frequency comb. , 2014, , .		0
77	Stable Mode Locking of Micro Resonator Frequency Combs. , 2014, , .		1
78	Coherent Frequency Multiplication from 10 GHz to 140 THz. , 2014, , .		0
79	Pulse-picked octave-spanning microresonator-based frequency comb for optical self-referencing. , 2013, , .		0
80	Laser-machined ultra-high-Q microrod resonators for nonlinear optics. Applied Physics Letters, 2013, 102, .	3.3	74
81	Mid-infrared optical frequency combs at 2.5â€‰Î¼m based on crystalline microresonators. Nature Communications, 2013, 4, 1345.	12.8	250
82	Parametric seeding of a microresonator optical frequency comb. Optics Express, 2013, 21, 17615.	3.4	77
83	Mechanical Control of a Microrod-Resonator Optical Frequency Comb. Physical Review X, 2013, 3, .	8.9	48
84	Microresonator frequency combs. , 2013, , .		0
85	Low phase-noise mid-infrared frequency combs based on microresonators. , 2013, , .		0
86	Hybrid Electro-Optic Microcombs and Frequency Domain Analysis of Modelocking in Microresonators. , 2013, , .		0
87	Pulse Picking of High Repetition Rate Frequency Combs for Generation of Octave-Spanning Spectra. , 2013, , .		0
88	Coherent control of microresonator comb generation via parametric-gain seeding. , 2013, , .		0
89	Towards a Self-Referenced and Frequency-Stabilized Microresonator Frequency Comb. , 2013, , .		0
90	Generation of Low Phase-noise Mid-Infrared Optical Frequency Combs from Crystalline Microresonators. , 2012, , .		0

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91	Adaptive beamforming using sequential beamspace approach. , 2012, , .		1
92	Mechanical stabilization of a microrod-resonator optical frequency comb. , 2012, , .		3
93	Mechanical stabilization of frequency combs from laser machined microrod-resonators. , 2012, , .		0
94	Hybrid Electro-Optically Modulated Microcombs. Physical Review Letters, 2012, 109, 263901.	7.8	107
95	An All-Optical Resonator Stabilization Scheme with Laser Machined SiO2 Microresonators. , 2012, , .		0
96	Octave Spanning Tunable Frequency Comb from a Microresonator. Physical Review Letters, 2011, 107, 063901.	7.8	289
97	Mid-infrared frequency combs based on microresonators. , 2011, , .		0
98	Frequency comb generation in crystalline MgF<inf>2</inf> whispering-gallery mode resonators. , 2011, , .		1
99	Mid-Infrared Frequency Combs Based on Microresonators. , 2011, , .		5
100	Mid-Infrared Frequency Combs Based on Microresonators. , 2011, , .		0
101	Frequency Comb Generation in Crystalline MgF2 Whispering-Gallery Mode Resonators. , 2011, , .		1
102	Intermediate Infrared Raman Lasing and Four-Wave Mixing in Crystalline Whispering Gallery Mode Resonators. , 2010, , .		0
103	Octave-spanning Tunable frequency combs on a chip. , 2010, , .		0
104	Octave-Spanning Tunable Frequency Combs on a Chip. , 2010, , .		2
105	Observation of optomechanical coupling in crystalline whispering gallery mode resonators. , 2009, , .		0
106	Broadband precision spectroscopy using a scanning diode laser and a frequency comb. , 2009, , .		0
107	Frequency comb assisted diode laser spectroscopy for measurement of microcavity dispersion. Nature Photonics, 2009, 3, 529-533.	31.4	231
108	Optical Frequency Comb Generation in Monolithic Microresonators. Optical Science and Engineering, 2009, , 483-506.	0.1	5

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109	A chip-scale microwave repetition rate frequency comb. , 2009, , .		0
110	Precision Spectroscopy with a Scanning Diode Laser and Measurement of Microcavity Dispersion. , 2009, , .		0
111	Full Stabilization of a Microresonator-Based Optical Frequency Comb. Physical Review Letters, 2008, 101, 053903.	7.8	204
112	Optical Frequency Comb Generation in HNLF Cavities. , 2008, , .		0
113	Chip scale frequency combs and their stabilization. , 2008, , .		0
114	Direct Stabilization of a Microresonator Frequency Comb at Microwave Frequencies. , 2008, , .		0
115	Full stabilization of a frequency comb generated in a monolithic microcavity. , 2008, , .		2
116	Kerr nonlinearity induced optical frequency comb generation in microcavities. , 2007, , .		0
117	Kerr Nonlinearity induced Optical Frequency Comb Generation in Microcavities. , 2007, , .		0
118	Cooling of a micro-mechanical oscillator using radiation-pressure induced dynamical backaction. , 2007, , .		1
119	Kerr Nonlinearity induced Optical Frequency Comb Generation in Microcavities. , 2007, , .		0
120	Radiation Pressure Cooling of a Micromechanical Oscillator Using Dynamical Backaction. , 2007, , .		0
121	Radiation pressure driven vibrational modes in ultra-high-Q silica microspheres. , 2007, , .		0
122	Radiation-pressure-driven vibrational modes in ultrahigh-Q silica microspheres. Optics Letters, 2007, 32, 2200.	3.3	63
123	Optical frequency comb generation from a monolithic microresonator. Nature, 2007, 450, 1214-1217.	27.8	1,686
124	Cooling of a Micro-Mechanical Oscillator Using Radiation Pressure Induced Dynamical Back-Action. , 2007, , .		1
125	Cooling of a Micro-Mechanical Oscillator Using Radiation-Pressure Induced Dynamical Backaction. , 2007, , .		0
126	Optical frequency comb generation from a monolithic micro-resonator via the Kerr nonlinearity. , 2007, , .		1

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127	Radiation-Pressure Cooling of a Micro-Mechanical Oscillator Using Dynamical Backaction. , 2007, , .		0
128	Generation of an optical frequency comb from a monolithic micro-resonator via the Kerr nonlinearity. , 2007, , .		0
129	Radiation Pressure Cooling of a Micromechanical Oscillator Using Dynamical Backaction. Physical Review Letters, 2006, 97, 243905.	7.8	503