Christian Grillet

List of Publications by Year
in descending order

97 papers	3,595 citations	147801 31 h-index	138484 58 g-index
97 all docs	97 docs citations	97 times ranked	2613 citing authors

#	Article	IF	Citations
1	Green light emission in silicon through slow-light enhanced third-harmonic generation in photonic-crystal waveguides. Nature Photonics, 2009, 3, 206-210.	31.4	503
2	Slow light enhancement of nonlinear effects in silicon engineered photonic crystal waveguides. Optics Express, 2009, 17, 2944.	3.4	221
3	Midinfrared supercontinuum generation from 2 to 6â€‰â€‰Î¼m in a silicon nanowire. Optica, 2015, 2, 797.	9.3	164
4	Optical signal processing on a silicon chip at 640Gb/s using slow-light. Optics Express, 2010, 18, 7770.	3.4	138
5	Low propagation loss silicon-on-sapphire waveguides for the mid-infrared. Optics Express, 2011, 19, 15212.	3.4	136
6	Four-wave mixing in slow light engineered silicon photonic crystal waveguides. Optics Express, 2010, 18, 22915.	3.4	134
7	Slow Light Enhanced Nonlinear Optics in Silicon Photonic Crystal Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 344-356.	2.9	132
8	Slow-light enhanced correlated photon pair generation in a silicon photonic crystal waveguide. Optics Letters, 2011, 36, 3413.	3.3	130
9	Mid-infrared octave spanning supercontinuum generation to 85â€‰â€‰Î¼m in silicon-germanium waveguides. Optica, 2018, 5, 360.	9.3	122
10	Dispersion engineering of slow light photonic crystal waveguides using microfluidic infiltration. Optics Express, 2009, 17, 1628.	3.4	121
11	Group velocity and propagation losses measurement in a single-line photonic-crystal waveguide on InP membranes. Applied Physics Letters, 2001, 79, 2312-2314.	3.3	115
12	Amorphous silicon nanowires combining high nonlinearity, FOM and optical stability. Optics Express, 2012, 20, 22609.	3.4	99
13	Photosensitive post tuning of chalcogenide photonic crystal waveguides. Optics Express, 2007, 15, 1277.	3.4	81
14	Integrated optical auto-correlator based on third-harmonic generation in a silicon photonic crystal waveguide. Nature Communications, 2014, 5, 3246.	12.8	79
15	Efficient coupling to chalcogenide glass photonic crystal waveguides via silica optical fiber nanowires. Optics Express, 2006, 14, 1070.	3.4	77
16	Optofluidics: a novel generation of reconfigurable and adaptive compact architectures. Microfluidics and Nanofluidics, 2008, 4, 81-95.	2.2	73
17	Microfluidic photonic crystal double heterostructures. Applied Physics Letters, 2007, 91, .	3.3	65
18	Reconfigurable microfluidic photonic crystal slab cavities. Optics Express, 2008, 16, 15887.	3.4	65

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19	Characterization and modeling of Fano resonances in chalcogenide photonic crystal membranes. Optics Express, 2006, 14, 369.	3.4	61
20	Compact tunable microfluidic interferometer. Optics Express, 2004, 12, 5440.	3.4	60
21	A proposal for enhancing four-wave mixing in slow light engineered photonic crystal waveguides and its application to optical regeneration. Optics Express, 2009, 17, 18340.	3.4	57
22	Nanowire coupling to photonic crystal nanocavities for single photon sources. Optics Express, 2007, 15, 1267.	3.4	56
23	Fiber taper coupling to chalcogenide microsphere modes. Applied Physics Letters, 2008, 92, 171109.	3.3	56
24	Investigation of phase matching for third-harmonic generation in silicon slow light photonic crystal waveguides using Fourier optics. Optics Express, 2010, 18, 6831.	3.4	54
25	Enhanced Fourâ€Wave Mixing in Silicon Nitride Waveguides Integrated with 2D Layered Graphene Oxide Films. Advanced Optical Materials, 2020, 8, 2001048.	7.3	52
26	Ultrafast saturable absorption dynamics in hybrid graphene/Si₃N₄ waveguides. APL Photonics, 2019, 4, 076102.	5.7	50
27	Chalcogenide glass photonic crystals. Photonics and Nanostructures - Fundamentals and Applications, 2008, 6, 3-11.	2.0	48
28	High-Q microfluidic cavities in silicon-based two-dimensional photonic crystal structures. Optics Letters, 2008, 33, 2206.	3.3	47
29	Reconfigurable photonic crystal waveguides created by selective liquid infiltration. Optics Express, 2012, 20, 11046.	3.4	46
30	Photowritten high-Q cavities in two-dimensional chalcogenide glass photonic crystals. Optics Letters, 2009, 34, 3671.	3.3	36
31	Reconfigurable photonic crystal circuits. Laser and Photonics Reviews, 2010, 4, 192-204.	8.7	35
32	Mid-infrared supercontinuum generation in silicon-germanium all-normal dispersion waveguides. Optics Letters, 2020, 45, 5008.	3.3	34
33	Characterizing photonic crystal waveguides with an expanded k-space evanescent coupling technique. Optics Express, 2008, 16, 13800.	3.4	31
34	Mid-infrared supercontinuum generation in a low-loss germanium-on-silicon waveguide. APL Photonics, 2021, 6, .	5.7	31
35	Dispersion trimming for mid-infrared supercontinuum generation in a hybrid chalcogenide/silicon-germanium waveguide. Journal of the Optical Society of America B: Optical Physics, 2019, 36, A98.	2.1	30
36	Directional channel-drop filter based on a slow Bloch mode photonic crystal waveguide section. Optics Express, 2005, 13, 3037.	3.4	29

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37	Third-harmonic generation in slow-light chalcogenide glass photonic crystal waveguides. Optics Letters, 2011, 36, 2818.	3.3	28
38	Slow-light dispersion engineering of photonic crystal waveguides using selective microfluidic infiltration. Optics Letters, 2012, 37, 4215.	3.3	26
39	Propagation losses of the fundamental mode in a single line-defect photonic crystal waveguide on an InP membrane. Journal of Applied Physics, 2002, 92, 2227-2234.	2.5	25
40	Characteristics of Correlated Photon Pairs Generated in Ultracompact Silicon Slow-Light Photonic Crystal Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1676-1683.	2.9	23
41	Frontiers in microphotonics: tunability and all-optical control. Laser Physics Letters, 2007, 4, 177-186.	1.4	22
42	Photosensitive and thermal nonlinear effects in chalcogenide photonic crystal cavities. Optics Express, 2010, 18, 26695.	3.4	21
43	Liquid crystal dynamics in a photonic crystal cavity created by selective microfluidic infiltration. Optics Express, 2010, 18, 27280.	3.4	21
44	Positive and negative phototunability of chalcogenide (AMTIR-1) microdisk resonator. Optics Express, 2015, 23, 8681.	3.4	21
45	High Coherence at f and 2f of Mid-Infrared Supercontinuum Generation in Silicon Germanium Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.	2.9	18
46	Measurement of photosynthesis and photosynthetic efficiency in two diatoms. New Zealand Journal of Botany, 2014, 52, 6-27.	1.1	17
47	In situ optofluidic control of reconfigurable photonic crystal cavities. Applied Physics Letters, 2012, 100, 261107.	3.3	16
48	Optical coupling between a two-dimensional photonic crystal-based microcavity and single-line defect waveguide on InP membranes. IEEE Journal of Quantum Electronics, 2002, 38, 811-815.	1.9	15
49	Measuring the dispersive properties of liquids using a microinterferometer. Applied Optics, 2011, 50, 2408.	2.1	15
50	Light transmission of the marine diatom Coscinodiscus wailesii. , 2012, , .		11
51	Toward mid-infrared nonlinear optics applications of silicon carbide microdisks engineered by lateral under-etching [Invited]. Photonics Research, 2018, 6, B74.	7.0	9
52	Nonlinear integrated photonics. Photonics Research, 2018, 6, NIP1.	7.0	8
53	Mid-infrared supercontinuum generation in a varying dispersion waveguide for multi-species gas spectroscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2023, , 1-10.	2.9	7
54	Characterisation of chalcogenide 2D photonic crystal waveguides and nanocavities using silica fibre nanowires. Physica B: Condensed Matter, 2007, 394, 289-292.	2.7	6

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55	Waveguide-based optofluidics. Proceedings of SPIE, 2010, , .	0.8	3
56	Chalcogenide glass photonic crystals: progress and prospects. Proceedings of SPIE, 2010, , .	0.8	3
57	Low loss single line photonic crystal waveguide on InP membrane. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 472-474.	2.7	2
58	Laboratory post-engineering of microstructured optical fibers. Progress in Optics, 2005, 48, 1-34.	0.6	2
59	Micron-scale tunability in photonic devices using microfluidics. , 2006, 6329, 24.		2
60	Silicon Carbide Microdisk on Silicon Pillar Probed by Evanescent Coupling. , 2016, , .		2
61	Nanowire coupling to photonic crystal nanocavities for single photon sources. , 2007, , .		1
62	Improved CAR and noise analysis for photon-pair generation in an ultra-compact silicon slow-light photonic crystal waveguide. , 2011, , .		1
63	Slow-light Enhanced Nonlinear Optics in Silicon Photonic Crystal Waveguides. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 273-278.	0.4	1
64	Tailoring the Dispersion of a Hybrid Chalcogenide/Silicon-Germanium Waveguide for Mid-Infrared Supercontinuum Generation. , 2019, , .		1
65	Nonlinear photonic crystals in chalcogenide for all-optical processing. , 2006, , .		0
66	Coupling via Tapered Nanowire Micro-Loops to Photonic Crystal Nanocavities for Single-Photon Source Applications. , 2006, , .		0
67	Coupling to Ultra-small Nanocavities for Single-Photon Source Applications via Tapered Nanowire Micro-loops. , 2006, , .		0
68	Characterization and modeling of Fano resonances in chalcogenide glass photonic crystal membranes. , 2006, , .		0
69	Nanowire Coupling to Photonic Crystal nanocavities for Single Photon Sources. , 2007, , .		0
70	Tuning of Photonic Crystal Nanocavity Resonances. , 2007, , .		0
71	Photosensitive post-tuning of chalcogenide photonic crystal waveguides. , 2007, , .		0
72	Microfluidic photonic crystal nanocavities. , 2007, , .		0

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73	Microfluidic cavities in silicon-based photonic crystal slab waveguides. , 2008, , .		0
74	Photo-induced cavities in chalcogenide photonic crystals. , 2008, , .		0
75	Reconfigurable silicon-based photonic crystal components using microfluidics. , 2008, , .		0
76	An Expanded k-Space Evanescent Coupling Technique for Characterizing Photonic Crystal Waveguides. , 2009, , .		0
77	Photoinduced high-Q cavities in chalcogenide photonic crystals. , 2009, , .		0
78	High-Q photonic crystal chalcogenide cavities by photosensitive post processing. , 2009, , .		0
79	Reconfigurable optofluidic silicon-based photonic crystal components. Proceedings of SPIE, 2009, , .	0.8	0
80	Third-harmonic generation in engineered slow light photonic crystal waveguides in chalcogenide glasses. , 2011, , .		0
81	All-optical signal processing using slow light enhanced nonlinearities in silicon waveguides. , 2011, , .		0
82	Integrated optical auto-correlator based on THG in a silicon photonic crystal waveguide. , 2012, , .		0
83	Mid-infrared Octave-spanning Supercontinuum Generation in an All-normal Dispersion SiGe Waveguide. , 2021, , .		0
84	Mid-Infrared Supercontinuum Generation in a Pure Germanium-on-Silicon Ridge Waveguide. , 2021, , .		0
85	Mid-Infrared Supercontinuum Generation in Germanium Waveguides. , 2021, , .		0
86	2D Nonlinear Photonic Crystals Nanocavities in Chalcogenide for All-optical Processing. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2007, 3, 308-310.	0.4	0
87	Reconfigurable microfluidic photonic crystal cavities. , 2008, , .		0
88	The Evolution of Photoinduced Photonic Crystal Cavities During Writing. , 2010, , .		0
89	Correlated Photon-Pair Generation in an Ultra-Compact Silicon Photonic Crystal Waveguide. , 2011, , .		0
90	Four-wave mixing in short silicon slow-light engineered photonic crystal waveguides. , 2011, , .		0

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91	Ultra-compact integrated optical auto-correlator based on third-harmonic generation in Si photonic crystal waveguides. , 2012, , .		0
92	Coherent Mid-Infrared Supercontinuum Sources in SiliconGermanium Waveguides. , 2020, , .		0
93	Coherent mid-infrared supercontinuum generation for pulse compression in a silicon-based chip. , 2020, , .		0
94	Experimental Mid-Infrared Supercontinuum Generation in a Germanium on Silicon Waveguide. , 2020, , .		0
95	Mid-Infrared Supercontinuum Generation in Germanium-on-Silicon Waveguides. , 2020, , .		0
96	Enhanced FWM in SiN nanowires integrated with 2D graphene oxide films. , 2020, , .		0
97	Low-noise mid-infrared supercontinuum generation in a silicon-based chip. , 2020, , .		0