Timothy J Karle

List of Publications by Year
in descending order

74 papers	2,289 citations	257357 24 h-index	265120 42 g-index
75 all docs	75 docs citations	75 times ranked	2825 citing authors

#	Article	IF	Citations
1	Real-Space Observation of Ultraslow Light in Photonic Crystal Waveguides. Physical Review Letters, 2005, 94, 073903.	2.9	430
2	Electronic Properties and Metrology Applications of the Diamond<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mi>NV</mml:mi></mml:mrow><mml:mrow><mml:mo>â^’</mml:mo></m under Pressure. Physical Review Letters, 2014, 112, 047601.	2.9	302
3	Single-photon emitting diode in silicon carbide. Nature Communications, 2015, 6, 7783.	5.8	162
4	Single-Photon Emission and Quantum Characterization of Zinc Oxide Defects. Nano Letters, 2012, 12, 949-954.	4.5	118
5	Superprism phenomena in planar photonic crystals. IEEE Journal of Quantum Electronics, 2002, 38, 915-918.	1.0	109
6	Hybrid III-V semiconductor/silicon nanolaser. Optics Express, 2011, 19, 9221.	1.7	94
7	Direct Observation of Bloch Harmonics and Negative Phase Velocity in Photonic Crystal Waveguides. Physical Review Letters, 2005, 94, 123901.	2.9	89
8	Coupled photonic crystal heterostructure nanocavities. Optics Express, 2007, 15, 1228.	1.7	83
9	Observation of Pulse Compression in Photonic Crystal Coupled Cavity Waveguides. Journal of Lightwave Technology, 2004, 22, 514-519.	2.7	68
10	Depletion of nitrogen-vacancy color centers in diamond via hydrogen passivation. Applied Physics Letters, 2012, 100, .	1.5	53
11	Low-loss photonic crystal defect waveguides in InP. Applied Physics Letters, 2004, 84, 3588-3590.	1.5	50
12	Planar photonic crystal coupled cavity waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2002, 8, 909-918.	1.9	49
13	Efficient photonic crystal Y-junctions. Journal of Optics, 2003, 5, S76-S80.	1.5	47
14	Continuous-wave operation of photonic band-edge laser near 1.55 Âµm on silicon wafer. Optics Express, 2007, 15, 7551.	1.7	45
15	Lifetime Reduction and Enhanced Emission of Single Photon Color Centers in Nanodiamond via Surrounding Refractive Index Modification. Scientific Reports, 2015, 5, 11179.	1.6	45
16	Heterogeneous integration and precise alignment of InP-based photonic crystal lasers to complementary metal-oxide semiconductor fabricated silicon-on-insulator wire waveguides. Journal of Applied Physics, 2010, 107, .	1.1	42
17	Thermo-optical dynamics in an optically pumped Photonic Crystal nano-cavity. Optics Express, 2009, 17, 17118.	1.7	37
18	Integration of Single-Photon Emitters into 3C-SiC Microdisk Resonators. ACS Photonics, 2017, 4, 462-468.	3.2	37

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19	Development of a Templated Approach to Fabricate Diamond Patterns on Various Substrates. ACS Applied Materials & Interfaces, 2014, 6, 8894-8902.	4.0	31
20	Local probing of Bloch mode dispersion in a photonic crystal waveguide. Optics Express, 2005, 13, 4457.	1.7	29
21	III-V photonic crystal wire cavity laser on silicon wafer. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2146.	0.9	29
22	Optimizing H1 cavities for the generation of entangled photon pairs. New Journal of Physics, 2009, 11, 033022.	1.2	28
23	Time-domain mapping of nonlinear pulse propagation in photonic-crystal slow-light waveguides. Physical Review A, 2013, 87, .	1.0	28
24	Dynamics of band-edge photonic crystal lasers. Optics Express, 2009, 17, 3165.	1.7	26
25	Nearâ€Surface Spectrally Stable Nitrogen Vacancy Centres Engineered in Single Crystal Diamond. Advanced Materials, 2012, 24, 3333-3338.	11.1	25
26	Biocompatible and Biodegradable Magnesium Oxide Nanoparticles with In Vitro Photostable Near-Infrared Emission: Short-Term Fluorescent Markers. Nanomaterials, 2019, 9, 1360.	1.9	25
27	Experimental verification of numerically optimized photonic crystal injector, Y-splitter, and bend. IEEE Journal on Selected Areas in Communications, 2005, 23, 1390-1395.	9.7	24
28	Diamond encapsulated photovoltaics for transdermal power delivery. Biosensors and Bioelectronics, 2016, 77, 589-597.	5.3	22
29	Hybrid InP-based photonic crystal lasers on silicon on insulator wires. Applied Physics Letters, 2009, 95, 201119.	1.5	21
30	Broadband and robust optical waveguide devices using coherent tunnelling adiabatic passage. Optics Express, 2012, 20, 23108.	1.7	21
31	Radiation patterns from coupled photonic crystal nanocavities. Applied Physics Letters, 2011, 99, 111101.	1.5	20
32	Room-temperature single-photon emission from zinc oxide nanoparticle defects and their in vitro photostable intrinsic fluorescence. Nanophotonics, 2017, 6, 269-278.	2.9	18
33	Uniformity of the lasing wavelength of heterogeneously integrated InP microdisk lasers on SOI. Optics Express, 2013, 21, 10622.	1.7	17
34	Ultra-high-density 3D DNA arrays within nanoporous biocompatible membranes for single-molecule-level detection and purification of circulating nucleic acids. Nanoscale, 2015, 7, 5998-6006.	2.8	14
35	Very bright, near-infrared single photon emitters in diamond. APL Materials, 2013, 1, 032120.	2.2	10
36	Neurons Specifically Activated by Fear Learning in Lateral Amygdala Display Increased Synaptic Strength. ENeuro, 2018, 5, ENEURO.0114-18.2018.	0.9	10

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37	Nanodiamond induced high-Q resonances in defect-free photonic crystal slabs. Optics Express, 2011, 19, 22219.	1.7	7
38	Lossless backward second-harmonic generation of extremely narrow subdiffractive beams in two-dimensional photonic crystals. Physical Review A, 2010, 82, .	1.0	5
39	Propagation of optical pulses in photonic crystal waveguides. IEE Proceedings: Optoelectronics, 2004, 151, 109.	0.8	4
40	Modelling of a 2D photonic crystal waveguide pulse reshaper integrated with a SOA. , 0, , .		2
41	Hybrid nanodiamond and titanium dioxide nanobeam cavity design. Optical Materials Express, 2017, 7, 785.	1.6	2
42	High resolution, dispersion measurement of photonic waveguides. , 2006, , .		1
43	III–V photonic crystal lasers heterogeneously bonded to Silicon-On-Insulator waveguides. , 2009, , .		1
44	Thermal improvement of InP wire photonic crystal laser on silicon by addition of Diamond Nanoparticles in polymer bonding layer. , 2010, , .		1
45	Room temperature single photon emission from zinc oxide nanoparticles formed by ion implantation in silica. , 2013, , .		1
46	Temporal ringdown of silicon-on-insulator racetrack resonators. Optics Letters, 2013, 38, 2304.	1.7	1
47	High-Q Defect-Free 2D Photonic Crystal Cavity from Random Localised Disorder. Crystals, 2014, 4, 342-350.	1.0	1
48	Direct observation of Temporal Solitons and Pulse acceleration in III-V semiconductor Photonic crystal waveguides. , 2011, , .		1
49	Propagation of picosecond pulses through photonic crystal waveguides at C-band region. , 0, , .		0
50	<title>Dispersion engineering in photonic crystal waveguides</title>. , 2002, , .		0
51	Modelling of a 2R regenerator based on a photonic crystal waveguide pulse reshaper integrated with a SOA. , 2005, , .		0
52	Local investigation of photonic crystal devices in space and time. , 0, , .		0
53	Electromagnetic Modelling of a Monolithic Pulse Reshaper based on a Photonic Crystal Waveguide Integrated with a SOA. , 2006, , .		0
54	Pulsed and Continuous-Wave Operation of Photonic Band-Edge Lasers near 1.55 μm on Silicon Wafer. , 2007, , .		0

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55	InP 2D photonic crystal on SOI hybrid devices. , 2008, , .		0
56	Towards a new platform for integrated optics: III–V photonic crystals bonded to silicon on insulator wire waveguides. , 2009, , .		0
57	ULtrafast dynamics of band-edge two- dimensional III–V semiconductor photonic crystal lasers. , 2009, , .		0
58	InP-based 2D photonic crystal lasers heterogeneously integrated and coupled to SOI wires. , 2009, , .		0
59	Threshold and dynamic characteristics of photonic crystal nanolasers with controlled spontaneous emission. , 2009, , .		0
60	Hybrid active photonic crystal structures: III-V based slow light waveguides or nanocavities coupled to SOI wires. , 2010, , .		0
61	Towards hybrid diamond optical devices. , 2011, , .		0
62	Evanescent wave coupling in hybrid III–V/SOI nanolaser. , 2011, , .		0
63	Control of evanescent wave coupling in hybrid III–V/SOI nanolaser. , 2011, , .		0
64	Vertically confined phase matched second harmonic generation in sub-diffractive planar two-dimensional photonic crystals. , 2011, , .		0
65	Hybrid III–V/silicon on insulator nonlinear nanophotonics. , 2011, , .		0
66	Photonic crystal lasers on silicon. , 2012, , .		0
67	Recent progress in diamond photonics. , 2012, , .		0
68	Fluorescent nanoparticles for biosensing applications. , 2013, , .		0
69	Glass-brain mapping provides an adjunct tool for structural analysis in mouse models of neurodevelopmental disease. NeuroImage Reports, 2021, 1, 100023.	0.5	0
70	Photonic crystal channel waveguides in InP. , 2004, , .		0
71	InP 2D Photonic Crystal Lasers integrated onto SOI waveguides. , 2009, , .		0
72	Ultrafast Dynamics of Band-Edge Photonic Crystals Lasers. , 2009, , .		0

#	Article	IF	Citations
73	Optimally coupled hybrid III-V Photonic Crystal Wire Cavity CW Lasers on passive SOI waveguides. , 2011, , .		0
74	Diamond in Glass, a New Platform for Quantum Photonics. , 2012, , .		0