Jelena Vuckovic

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 292
 19,541
 69
 133

 papers
 citations
 h-index
 g-index

 494
 23,726
 7
 6.95

 ext. papers
 ext. citations
 avg, IF
 L-index

#	Paper	IF	Citations
292	Photonic quantum technologies. <i>Nature Photonics</i> , 2009 , 3, 687-695	33.9	1288
291	Indistinguishable photons from a single-photon device. <i>Nature</i> , 2002 , 419, 594-7	50.4	1136
290	Triggered single photons from a quantum dot. <i>Physical Review Letters</i> , 2001 , 86, 1502-5	7.4	756
289	Controlling the spontaneous emission rate of single quantum dots in a two-dimensional photonic crystal. <i>Physical Review Letters</i> , 2005 , 95, 013904	7.4	684
288	Monolayer semiconductor nanocavity lasers with ultralow thresholds. <i>Nature</i> , 2015 , 520, 69-72	50.4	545
287	Efficient source of single photons: a single quantum dot in a micropost microcavity. <i>Physical Review Letters</i> , 2002 , 89, 233602	7.4	497
286	Inverse design in nanophotonics. <i>Nature Photonics</i> , 2018 , 12, 659-670	33.9	485
285	Controlling cavity reflectivity with a single quantum dot. <i>Nature</i> , 2007 , 450, 857-61	50.4	459
284	Inverse design and demonstration of a compact and broadband on-chip wavelength demultiplexer. <i>Nature Photonics</i> , 2015 , 9, 374-377	33.9	441
283	Coherent generation of non-classical light on a chip via photon-induced tunnelling and blockade. <i>Nature Physics</i> , 2008 , 4, 859-863	16.2	403
282	Ultrafast photonic crystal nanocavity laser. <i>Nature Physics</i> , 2006 , 2, 484-488	16.2	402
281	Defect modes of a two-dimensional photonic crystal in an optically thin dielectric slab. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1999 , 16, 275	1.7	352
280	Controlled phase shifts with a single quantum dot. <i>Science</i> , 2008 , 320, 769-72	33.3	325
279	Ultralow-threshold electrically pumped quantum-dot photonic-crystal nanocavity laser. <i>Nature Photonics</i> , 2011 , 5, 297-300	33.9	303
278	Dipole induced transparency in drop-filter cavity-waveguide systems. <i>Physical Review Letters</i> , 2006 , 96, 153601	7.4	301
277	Waveguiding in planar photonic crystals. <i>Applied Physics Letters</i> , 2000 , 77, 1937-1939	3.4	280
276	Design and fabrication of silicon photonic crystal optical waveguides. <i>Journal of Lightwave Technology</i> , 2000 , 18, 1402-1411	4	272

(2007-2010)

275	Deterministic coupling of a single nitrogen vacancy center to a photonic crystal cavity. <i>Nano Letters</i> , 2010 , 10, 3922-6	11.5	267
274	Engineered quantum dot single-photon sources. <i>Reports on Progress in Physics</i> , 2012 , 75, 126503	14.4	255
273	Surface plasmon enhanced light-emitting diode. IEEE Journal of Quantum Electronics, 2000, 36, 1131-11	4 <u>4</u>	218
272	Secure communication: quantum cryptography with a photon turnstile. <i>Nature</i> , 2002 , 420, 762	50.4	213
271	Design of photonic crystal microcavities for cavity QED. <i>Physical Review E</i> , 2002 , 65, 016608	2.4	202
270	Optimization of the Q factor in photonic crystal microcavities. <i>IEEE Journal of Quantum Electronics</i> , 2002 , 38, 850-856	2	163
269	Electrical control of silicon photonic crystal cavity by graphene. <i>Nano Letters</i> , 2013 , 13, 515-8	11.5	162
268	Nanophotonic computational design. <i>Optics Express</i> , 2013 , 21, 13351-67	3.3	158
267	Resonant excitation of a quantum dot strongly coupled to a photonic crystal nanocavity. <i>Physical Review Letters</i> , 2010 , 104, 073904	7.4	143
266	General recipe for designing photonic crystal cavities. <i>Optics Express</i> , 2005 , 13, 5961-75	3.3	141
265	Room temperature 1.6 microm electroluminescence from Ge light emitting diode on Si substrate. <i>Optics Express</i> , 2009 , 17, 10019-24	3.3	136
264	Enhanced high-harmonic generation from an all-dielectric metasurface. <i>Nature Physics</i> , 2018 , 14, 1006-	10.602	132
263	Ultrafast photon-photon interaction in a strongly coupled quantum dot-cavity system. <i>Physical Review Letters</i> , 2012 , 108, 093604	7.4	131
262	Fabrication-constrained nanophotonic inverse design. Scientific Reports, 2017, 7, 1786	4.9	124
261	Control of two-dimensional excitonic light emission via photonic crystal. 2D Materials, 2014, 1, 011001	5.9	124
260	Efficient photonic crystal cavity-waveguide couplers. <i>Applied Physics Letters</i> , 2007 , 90, 073102	3.4	122
259	Loss-enabled sub-poissonian light generation in a bimodal nanocavity. <i>Physical Review Letters</i> , 2012 , 108, 183601	7.4	121
258	Generation and transfer of single photons on a photonic crystal chip. <i>Optics Express</i> , 2007 , 15, 5550-8	3.3	117

257	Enhanced single-photon emission from a quantum dot in a micropost microcavity. <i>Applied Physics Letters</i> , 2003 , 82, 3596-3598	3.4	116
256	High quality two-dimensional photonic crystal slab cavities. <i>Applied Physics Letters</i> , 2001 , 79, 4289-4291	3.4	116
255	Strong enhancement of direct transition photoluminescence with highly tensile-strained Ge grown by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2011 , 98, 011111	3.4	114
254	Second harmonic generation in gallium phosphide photonic crystal nanocavities with ultralow continuous wave pump power. <i>Optics Express</i> , 2009 , 17, 22609-15	3.3	114
253	Photonic crystal microcavities for cavity quantum electrodynamics with a single quantum dot. <i>Applied Physics Letters</i> , 2003 , 82, 2374-2376	3.4	114
252	4H-silicon-carbide-on-insulator for integrated quantum and nonlinear photonics. <i>Nature Photonics</i> , 2020 , 14, 330-334	33.9	112
251	Photonic crystal nanocavity array laser. <i>Optics Express</i> , 2005 , 13, 8819-28	3.3	111
250	Entanglement formation and violation of Bellß inequality with a semiconductor single photon source. <i>Physical Review Letters</i> , 2004 , 92, 037903	7.4	108
249	Inverse Design and Demonstration of a Compact on-Chip Narrowband Three-Channel Wavelength Demultiplexer. <i>ACS Photonics</i> , 2018 , 5, 301-305	6.3	99
248	Finite-difference time-domain calculation of spontaneous emission lifetime in a microcavity. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 465	1.7	98
247	Single-photon generation with InAs quantum dots. New Journal of Physics, 2004, 6, 89-89	2.9	95
246	Submicrosecond correlations in photoluminescence from InAs quantum dots. <i>Physical Review B</i> , 2004 , 69,	3.3	93
245	Dipole induced transparency in waveguide coupled photonic crystal cavities. <i>Optics Express</i> , 2008 , 16, 12154-62	3.3	92
244	Ultrafast direct modulation of a single-mode photonic crystal nanocavity light-emitting diode. <i>Nature Communications</i> , 2011 , 2, 539	17.4	89
243	High-brightness single photon source from a quantum dot in a directional-emission nanocavity. <i>Optics Express</i> , 2009 , 17, 14618-26	3.3	89
242	Experimental demonstration of the slow group velocity of light in two-dimensional coupled photonic crystal microcavity arrays. <i>Applied Physics Letters</i> , 2005 , 86, 111102	3.4	88
241	Design of plasmon cavities for solid-state cavity quantum electrodynamics applications. <i>Applied Physics Letters</i> , 2007 , 90, 033113	3.4	86
240	Scalable Quantum Photonics with Single Color Centers in Silicon Carbide. <i>Nano Letters</i> , 2017 , 17, 1782-1	17865	85

(2018-2002)

239	Experimental and theoretical confirmation of Bloch-mode light propagation in planar photonic crystal waveguides. <i>Applied Physics Letters</i> , 2002 , 80, 1689-1691	3.4	85
238	Coherent Generation of Nonclassical Light on Chip via Detuned Photon Blockade. <i>Physical Review Letters</i> , 2015 , 114, 233601	7.4	83
237	Local quantum dot tuning on photonic crystal chips. Applied Physics Letters, 2007, 90, 213110	3.4	83
236	Strain-induced pseudoheterostructure nanowires confining carriers at room temperature with nanoscale-tunable band profiles. <i>Nano Letters</i> , 2013 , 13, 3118-23	11.5	81
235	Two-dimensional coupled photonic crystal resonator arrays. <i>Applied Physics Letters</i> , 2004 , 84, 161-163	3.4	81
234	Single-cell photonic nanocavity probes. <i>Nano Letters</i> , 2013 , 13, 4999-5005	11.5	80
233	Nanobeam photonic crystal cavity quantum dot laser. <i>Optics Express</i> , 2010 , 18, 8781-9	3.3	80
232	Strongly Cavity-Enhanced Spontaneous Emission from Silicon-Vacancy Centers in Diamond. <i>Nano Letters</i> , 2018 , 18, 1360-1365	11.5	79
231	Inverse design and implementation of a wavelength demultiplexing grating coupler. <i>Scientific Reports</i> , 2014 , 4, 7210	4.9	76
230	Ultrafast nonlinear optical tuning of photonic crystal cavities. <i>Applied Physics Letters</i> , 2007 , 90, 091118	3.4	76
229	Integrated quantum optical networks based on quantum dots and photonic crystals. <i>New Journal of Physics</i> , 2011 , 13, 055025	2.9	75
228	Inverse-designed non-reciprocal pulse router for chip-based LiDAR. <i>Nature Photonics</i> , 2020 , 14, 369-374	33.9	73
227	Phonon mediated off-resonant quantum dot@avity coupling under resonant excitation of the quantum dot. <i>Physical Review B</i> , 2011 , 84,	3.3	73
226	Finite-difference time-domain calculation of the spontaneous emission coupling factor in optical microcavities. <i>IEEE Journal of Quantum Electronics</i> , 1999 , 35, 1168-1175	2	71
225	Local tuning of photonic crystal cavities using chalcogenide glasses. <i>Applied Physics Letters</i> , 2008 , 92, 043123	3.4	70
224	Cavity quantum electrodynamics with a single quantum dot coupled to a photonic molecule. <i>Physical Review B</i> , 2012 , 86,	3.3	69
223	Revealing multiple classes of stable quantum emitters in hexagonal boron nitride with correlated optical and electron microscopy. <i>Nature Materials</i> , 2020 , 19, 534-539	27	68
222	Fully-automated optimization of grating couplers. <i>Optics Express</i> , 2018 , 26, 4023-4034	3.3	68

221	Quantum dot single-photon sources with ultra-low multi-photon probability. <i>Npj Quantum Information</i> , 2018 , 4,	8.6	67
220	Objective-first design of high-efficiency, small-footprint couplers between arbitrary nanophotonic waveguide modes. <i>Optics Express</i> , 2012 , 20, 7221-36	3.3	66
219	Probing the ladder of dressed states and nonclassical light generation in quantum-dotBavity QED. <i>Physical Review A</i> , 2012 , 85,	2.6	66
218	Quantum Properties of Dichroic Silicon Vacancies in Silicon Carbide. <i>Physical Review Applied</i> , 2018 , 9,	4.3	65
217	Spatiotemporal light control with frequency-gradient metasurfaces. <i>Science</i> , 2019 , 365, 374-377	33.3	65
216	On-chip integrated laser-driven particle accelerator. <i>Science</i> , 2020 , 367, 79-83	33.3	64
215	Fast electrical control of a quantum dot strongly coupled to a photonic-crystal cavity. <i>Physical Review Letters</i> , 2010 , 104, 047402	7.4	63
214	Gallium phosphide photonic crystal nanocavities in the visible. <i>Applied Physics Letters</i> , 2008 , 93, 063103	3.4	62
213	Inverse-designed diamond photonics. <i>Nature Communications</i> , 2019 , 10, 3309	17.4	60
212	Coupling of PbS quantum dots to photonic crystal cavities at room temperature. <i>Applied Physics Letters</i> , 2005 , 87, 241102	3.4	60
211	Optimization of three-dimensional micropost microcavities for cavity quantum electrodynamics. <i>Physical Review A</i> , 2002 , 66,	2.6	58
210	On-Chip Generation, Routing, and Detection of Resonance Fluorescence. <i>Nano Letters</i> , 2015 , 15, 5208-1	3 11.5	57
209	Focus on Single Photons on Demand. New Journal of Physics, 2004, 6,	2.9	57
208	Design and analysis of photonic crystal coupled cavity arrays for quantum simulation. <i>Physical Review B</i> , 2012 , 86,	3.3	56
207	Enhanced light emission in photonic crystal nanocavities with Erbium-doped silicon nanocrystals. <i>Applied Physics Letters</i> , 2008 , 92, 161107	3.4	56
206	Nonclassical higher-order photon correlations with a quantum dot strongly coupled to a photonic-crystal nanocavity. <i>Physical Review A</i> , 2014 , 90,	2.6	55
205	Multiply resonant photonic crystal nanocavities for nonlinear frequency conversion. <i>Optics Express</i> , 2011 , 19, 22198-207	3.3	54
204	Dispersive properties and large Kerr nonlinearities using dipole-induced transparency in a single-sided cavity. <i>Physical Review A</i> , 2006 , 73,	2.6	54

(2010-2010)

203	Analysis of the Purcell effect in photonic and plasmonic crystals with losses. <i>Optics Express</i> , 2010 , 18, 16546-60	3.3	52
202	Methods for controlling positions of guided modes of photonic-crystal waveguides. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2001 , 18, 1362	1.7	52
201	Photonic crystal cavities in cubic (3C) polytype silicon carbide films. <i>Optics Express</i> , 2013 , 21, 32623-9	3.3	50
200	Ultrafast photonic crystal lasers. <i>Laser and Photonics Reviews</i> , 2008 , 2, 264-274	8.3	49
199	Coupled mode theory for photonic crystal cavity-waveguide interaction. <i>Optics Express</i> , 2005 , 13, 5064-	73 .3	49
198	Direct Bandgap Light Emission from Strained Germanium Nanowires Coupled with High-Q Nanophotonic Cavities. <i>Nano Letters</i> , 2016 , 16, 2168-73	11.5	47
197	Photonic crystal cavities in silicon dioxide. <i>Applied Physics Letters</i> , 2010 , 96, 031107	3.4	47
196	Quantum Simulators: Architectures and Opportunities. PRX Quantum, 2021, 2,	6.1	47
195	Vertical-Substrate MPCVD Epitaxial Nanodiamond Growth. <i>Nano Letters</i> , 2017 , 17, 1489-1495	11.5	46
194	Generation of nonclassical states of light via photon blockade in optical nanocavities. <i>Physical Review A</i> , 2010 , 81,	2.6	46
193	Development of Quantum Interconnects (QuICs) for Next-Generation Information Technologies. <i>PRX Quantum</i> , 2021 , 2,	6.1	46
192	Three-dimensionally confined modes in micropost microcavities: quality factors and Purcell factors. <i>IEEE Journal of Quantum Electronics</i> , 2002 , 38, 170-177	2	44
191	Photonic crystals for confining, guiding, and emitting light. <i>IEEE Nanotechnology Magazine</i> , 2002 , 1, 4-1	12.6	44
190	Nanophotonic inverse design with SPINS: Software architecture and practical considerations. <i>Applied Physics Reviews</i> , 2020 , 7, 011407	17.3	43
189	Low-threshold surface-passivated photonic crystal nanocavity laser. <i>Applied Physics Letters</i> , 2007 , 91, 071124	3.4	42
188	Local temperature control of photonic crystal devices via micron-scale electrical heaters. <i>Applied Physics Letters</i> , 2009 , 95, 043102	3.4	40
187	Analytical level set fabrication constraints for inverse design. Scientific Reports, 2019, 9, 8999	4.9	39
186	Linewidth narrowing and Purcell enhancement in photonic crystal cavities on an Er-doped silicon nitride platform. <i>Optics Express</i> , 2010 , 18, 2601-12	3.3	39

185	Silicon-based photonic crystal nanocavity light emitters. <i>Applied Physics Letters</i> , 2006 , 89, 221101	3.4	39
184	Nonlinear temporal dynamics of a strongly coupled quantum-dotBavity system. <i>Physical Review A</i> , 2012 , 85,	2.6	38
183	Inverse Design and Demonstration of Broadband Grating Couplers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019 , 25, 1-7	3.8	38
182	Inverse design of a three-dimensional nanophotonic resonator. <i>Optics Express</i> , 2011 , 19, 10563-70	3.3	37
181	Linewidth broadening of a quantum dot coupled to an off-resonant cavity. <i>Physical Review B</i> , 2010 , 82,	3.3	37
180	Genetic optimization of photonic bandgap structures. <i>Optics Express</i> , 2007 , 15, 8218-30	3.3	37
179	Second harmonic generation in GaP photonic crystal waveguides. <i>Applied Physics Letters</i> , 2011 , 98, 263	1334	36
178	Hybrid Group IV Nanophotonic Structures Incorporating Diamond Silicon-Vacancy Color Centers. <i>Nano Letters</i> , 2016 , 16, 212-7	11.5	35
177	Polarization control and sensing with two-dimensional coupled photonic crystal microcavity arrays. <i>Optics Letters</i> , 2005 , 30, 982-4	3	35
176	Generating arbitrary topological windings of a non-Hermitian band. <i>Science</i> , 2021 , 371, 1240-1245	33.3	35
175	Signatures of two-photon pulses from a quantum two-level system. <i>Nature Physics</i> , 2017 , 13, 649-654	16.2	34
174	Inverse design of nanophotonic structures using complementary convex optimization. <i>Optics Express</i> , 2010 , 18, 3793-804	3.3	34
173	Optical parametric oscillation in silicon carbide nanophotonics. <i>Optica</i> , 2020 , 7, 1139	8.6	34
172	Complete Coherent Control of a Quantum Dot Strongly Coupled to a Nanocavity. <i>Scientific Reports</i> , 2016 , 6, 25172	4.9	34
171	Second-Harmonic Generation in GaAs Photonic Crystal Cavities in (111)B and (001) Crystal Orientations. <i>ACS Photonics</i> , 2014 , 1, 516-523	6.3	33
170	Photon blockade in two-emitter-cavity systems. <i>Physical Review A</i> , 2017 , 96,	2.6	33
169	Photon blockade with a four-level quantum emitter coupled to a photonic-crystal nanocavity. <i>New Journal of Physics</i> , 2013 , 15, 025014	2.9	33
168	Direct band Ge photoluminescence near 1.6 th coupled to Ge-on-Si microdisk resonators. <i>Applied Physics Letters</i> , 2010 , 97, 241102	3.4	33

167	Dynamical modeling of pulsed two-photon interference. New Journal of Physics, 2016, 18, 113053	2.9	33
166	Nanodiamond Integration with Photonic Devices. Laser and Photonics Reviews, 2019, 13, 1800316	8.3	32
165	Visible Photoluminescence from Cubic (3C) Silicon Carbide Microdisks Coupled to High Quality Whispering Gallery Modes. <i>ACS Photonics</i> , 2015 , 2, 14-19	6.3	31
164	Optical fiber tips functionalized with semiconductor photonic crystal cavities. <i>Applied Physics Letters</i> , 2011 , 99, 191102	3.4	31
163	Photonic Technologies for Quantum Information Processing. <i>Quantum Information Processing</i> , 2004 , 3, 215-231	1.6	31
162	Electrically pumped photonic crystal nanocavity light sources using a laterally doped p-i-n junction. <i>Applied Physics Letters</i> , 2010 , 96, 181103	3.4	30
161	Vibronic States and Their Effect on the Temperature and Strain Dependence of Silicon-Vacancy Qubits in 4H-SiC. <i>Physical Review Applied</i> , 2020 , 13,	4.3	29
160	Second harmonic generation in photonic crystal cavities in (111)-oriented GaAs. <i>Applied Physics Letters</i> , 2013 , 103, 211117	3.4	29
159	Theory of electro-optic modulation via a quantum dot coupled to a nano-resonator. <i>Optics Express</i> , 2010 , 18, 3974-84	3.3	29
158	Fast quantum dot single photon source triggered at telecommunications wavelength. <i>Applied Physics Letters</i> , 2011 , 98, 083105	3.4	29
157	Characterization of optical and spin properties of single tin-vacancy centers in diamond nanopillars. <i>Physical Review B</i> , 2019 , 99,	3.3	28
156	Self-homodyne measurement of a dynamic Mollow triplet in the solid state. <i>Nature Photonics</i> , 2016 , 10, 163-166	33.9	28
155	All Optical Switching With a Single Quantum Dot Strongly Coupled to a Photonic Crystal Cavity. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 1812-1817	3.8	28
154	Inverse-Designed Photonics for Semiconductor Foundries. ACS Photonics, 2020, 7, 569-575	6.3	27
153	Ultrafast Polariton-Phonon Dynamics of Strongly Coupled Quantum Dot-Nanocavity Systems. <i>Physical Review X</i> , 2015 , 5,	9.1	27
152	Phonon-mediated coupling between quantum dots through an off-resonant microcavity. <i>Physical Review B</i> , 2012 , 85,	3.3	26
151	A direct analysis of photonic nanostructures. <i>Optics Express</i> , 2006 , 14, 3472-83	3.3	26
150	Cavity-Enhanced Raman Emission from a Single Color Center in a Solid. <i>Physical Review Letters</i> , 2018 , 121, 083601	7.4	25

149	Proposed coupling of an electron spin in a semiconductor quantum dot to a nanosize optical cavity. <i>Physical Review Letters</i> , 2013 , 111, 027402	7.4	25
148	Photoluminescence from In0.5Ga0.5As/GaP quantum dots coupled to photonic crystal cavities. <i>Physical Review B</i> , 2012 , 85,	3.3	25
147	Enhanced two-photon processes in single quantum dots inside photonic crystal nanocavities. <i>Physical Review B</i> , 2010 , 81,	3.3	25
146	Probing of single quantum dot dressed states via an off-resonant cavity. <i>Physical Review B</i> , 2011 , 84,	3.3	25
145	Nanobeam photonic crystal cavity light-emitting diodes. <i>Applied Physics Letters</i> , 2011 , 99, 071105	3.4	24
144	Sum-frequency generation in doubly resonant GaP photonic crystal nanocavities. <i>Applied Physics Letters</i> , 2010 , 97, 043103	3.4	24
143	Observation of transparency of Erbium-doped silicon nitride in photonic crystal nanobeam cavities. <i>Optics Express</i> , 2010 , 18, 13863-73	3.3	24
142	Dynamics of quantum dot photonic crystal lasers. <i>Applied Physics Letters</i> , 2007 , 90, 151102	3.4	24
141	Integrated Quantum Photonics with Silicon Carbide: Challenges and Prospects. <i>PRX Quantum</i> , 2020 , 1,	6.1	24
140	Scattering into one-dimensional waveguides from a coherently-driven quantum-optical system. <i>Quantum - the Open Journal for Quantum Science</i> ,2, 69		24
139	On-Chip Laser-Power Delivery System for Dielectric Laser Accelerators. <i>Physical Review Applied</i> , 2018 , 9,	4.3	24
138	Cavity-enhanced direct band electroluminescence near 1550 nm from germanium microdisk resonator diode on silicon. <i>Applied Physics Letters</i> , 2011 , 98, 211101	3.4	23
137	A photonic crystal cavity-optical fiber tip nanoparticle sensor for biomedical applications. <i>Applied Physics Letters</i> , 2012 , 100, 213702	3.4	23
136	Computational Bounds for Photonic Design. ACS Photonics, 2019, 6, 1232-1239	6.3	22
135	Multimode nanobeam cavities for nonlinear optics: high quality resonances separated by an octave. <i>Optics Express</i> , 2014 , 22, 26498-509	3.3	22
134	Tunable-wavelength second harmonic generation from GaP photonic crystal cavities coupled to fiber tapers. <i>Optics Express</i> , 2010 , 18, 12176-84	3.3	22
133	Plasmonic enhancement of emission from Si-nanocrystals. <i>Applied Physics Letters</i> , 2009 , 94, 013106	3.4	22
132	Lithographic positioning of fluorescent molecules on high-Q photonic crystal cavities. <i>Applied Physics Letters</i> , 2009 , 95, 123113	3.4	22

Single photons for quantum information systems. <i>Progress in Informatics</i> , 2005 , 5		22
Effect of photogenerated carriers on the spectral diffusion of a quantum dot coupled to a photonic crystal cavity. <i>Physical Review B</i> , 2011 , 84,	3.3	20
Enhanced light emission from erbium doped silicon nitride in plasmonic metal-insulator-metal structures. <i>Optics Express</i> , 2009 , 17, 20642-50	3.3	20
Generation and manipulation of nonclassical light using photonic crystals. <i>Physica E:</i> Low-Dimensional Systems and Nanostructures, 2006 , 32, 466-470	3	20
Ultra-low power fiber-coupled gallium arsenide photonic crystal cavity electro-optic modulator. <i>Optics Express</i> , 2011 , 19, 7530-6	3.3	19
Multiply resonant high quality photonic crystal nanocavities. <i>Applied Physics Letters</i> , 2011 , 99, 013114	3.4	19
Submicrometer all-optical digital memory and integration of nanoscale photonic devices without isolators. <i>Journal of Lightwave Technology</i> , 2004 , 22, 2316-2322	4	19
Photon Blockade in Weakly Driven Cavity Quantum Electrodynamics Systems with Many Emitters. <i>Physical Review Letters</i> , 2019 , 122, 243602	7.4	18
Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth. <i>Nano Letters</i> , 2020 , 20, 1614-1619	11.5	18
On-Chip Architecture for Self-Homodyned Nonclassical Light. <i>Physical Review Applied</i> , 2017 , 7,	4.3	18
Deterministically charged quantum dots in photonic crystal nanoresonators for efficient spinphoton interfaces. <i>New Journal of Physics</i> , 2013 , 15, 113056	2.9	18
Electrically controlled modulation in a photonic crystal nanocavity. <i>Optics Express</i> , 2009 , 17, 15409-19	3.3	18
Self-homodyne-enabled generation of indistinguishable photons. <i>Optica</i> , 2016 , 3, 931	8.6	18
Few-photon scattering and emission from low-dimensional quantum systems. <i>Physical Review B</i> , 2018 , 98,	3.3	18
Pulsed Rabi oscillations in quantum two-level systems: beyond the area theorem. <i>Quantum Science and Technology</i> , 2018 , 3, 014006	5.5	17
Tuning the photon statistics of a strongly coupled nanophotonic system. <i>Physical Review A</i> , 2017 , 95,	2.6	17
Complete coherent control of silicon vacancies in diamond nanopillars containing single defect centers. <i>Optica</i> , 2017 , 4, 1317	8.6	17
Graphene for Tunable Nanophotonic Resonators. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014 , 20, 68-71	3.8	17
	Effect of photogenerated carriers on the spectral diffusion of a quantum dot coupled to a photonic crystal cavity. <i>Physical Review B</i> , 2011, 84. Enhanced light emission from erbium doped silicon nitride in plasmonic metal-insulator-metal structures. <i>Optics Express</i> , 2009, 17, 20642-50 Generation and manipulation of nonclassical light using photonic crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 32, 466-470 Ultra-low power fiber-coupled gallium arsenide photonic crystal cavity electro-optic modulator. <i>Optics Express</i> , 2011, 19, 7530-6 Multiply resonant high quality photonic crystal nanocavities. <i>Applied Physics Letters</i> , 2011, 99, 013114 Submicrometer all-optical digital memory and integration of nanoscale photonic devices without isolators. <i>Journal of Lightwave Technology</i> , 2004, 22, 2316-2322 Photon Blockade in Weakly Driven Cavity Quantum Electrodynamics Systems with Many Emitters. <i>Physical Review Letters</i> , 2019, 122, 243602 Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth. <i>Nano Letters</i> , 2020, 20, 1614-1619 On-Chip Architecture for Self-Homodyned Nonclassical Light. <i>Physical Review Applied</i> , 2017, 7, Deterministically charged quantum dots in photonic crystal nanoresonators for efficient spinjhoton interfaces. <i>New Journal of Physics</i> , 2013, 15, 113056 Electrically controlled modulation in a photonic crystal nanocavity. <i>Optics Express</i> , 2009, 17, 15409-19 Self-homodyne-enabled generation of indistinguishable photons. <i>Optica</i> , 2016, 3, 931 Few-photon scattering and emission from low-dimensional quantum systems. <i>Physical Review B</i> , 2018, 98, Pulsed Rabi oscillations in quantum two-level systems: beyond the area theorem. <i>Quantum Science and Technology</i> , 2018, 3, 014006 Tuning the photon statistics of a strongly coupled nanophotonic system. <i>Physical Review A</i> , 2017, 95,	Effect of photogenerated carriers on the spectral diffusion of a quantum dot coupled to a photonic crystal cavity, <i>Physical Review B</i> , 2011, 84, Enhanced light emission from erbium doped silicon nitride in plasmonic metal-insulator-metal structures. <i>Optics Express</i> , 2009, 17, 20642-50 Generation and manipulation of nonclassical light using photonic crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 32, 466-470 Ultra-low power fiber-coupled gallium arsenide photonic crystal cavity electro-optic modulator. <i>Optics Express</i> , 2011, 19, 7530-6 Multiply resonant high quality photonic crystal nanocavities. <i>Applied Physics Letters</i> , 2011, 99, 013114 Submicrometer all-optical digital memory and integration of nanoscale photonic devices without isolators. <i>Journal of Lightwave Technology</i> , 2004, 22, 2316-2322 Photon Blockade in Weakly Driven Cavity Quantum Electrodynamics Systems with Many Emitters. <i>Physical Review Letters</i> , 2019, 122, 243602 Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth. <i>Nano Letters</i> , 2020, 20, 1614-1619 On-Chip Architecture for Self-Homodyned Nonclassical Light. <i>Physical Review Applied</i> , 2017, 7, 43 Deterministically charged quantum dots in photonic crystal nanoresonators for efficient spinjhoton interfaces. <i>New Journal of Physics</i> , 2013, 15, 113056 Electrically controlled modulation in a photonic crystal nanocavity. <i>Optics Express</i> , 2009, 17, 15409-19 333 Self-homodyne-enabled generation of indistinguishable photons. <i>Optica</i> , 2016, 3, 931 866 Everyphoton scattering and emission from low-dimensional quantum systems. <i>Physical Review B</i> , 2018, 98, Pulsed Rabi oscillations in quantum two-level systems: beyond the area theorem. <i>Quantum Science and Technology</i> , 2018, 3, 014006 Tuning the photon statistics of a strongly coupled nanophotonic system. <i>Physical Review A</i> , 2017, 95,

113	Generation of Non-Classical Light Using Semiconductor Quantum Dots. <i>Advanced Quantum Technologies</i> , 2020 , 3, 1900007	4.3	17
112	Photoluminescence from silicon dioxide photonic crystal cavities with embedded silicon nanocrystals. <i>Physical Review B</i> , 2010 , 81,	3.3	16
111	Quantum dots in photonic crystals: From quantum information processing to single photon nonlinear optics. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2009 , 7, 56-62	2.6	16
110	Fabrication of InAs quantum dots in AlAstaAs DBR pillar microcavities for single photon sources. Journal of Applied Physics, 2005, 97, 073507	2.5	16
109	Coupled fiber taper extraction of 1.53 microm photoluminescence from erbium doped silicon nitride photonic crystal cavities. <i>Optics Express</i> , 2010 , 18, 5964-73	3.3	15
108	Off-resonant coupling between a single quantum dot and a nanobeam photonic crystal cavity. <i>Applied Physics Letters</i> , 2011 , 99, 251907	3.4	15
107	An optical modulator based on a single strongly coupled quantum dotcavity system in a p-i-n junction. <i>Optics Express</i> , 2009 , 17, 18651-8	3.3	15
106	Spectrally reconfigurable quantum emitters enabled by optimized fast modulation. <i>Npj Quantum Information</i> , 2020 , 6,	8.6	15
105	Crux of Using the Cascaded Emission of a Three-Level Quantum Ladder System to Generate Indistinguishable Photons. <i>Physical Review Letters</i> , 2020 , 125, 233605	7.4	15
104	A fluorescence sandwich immunoassay for the real-time continuous detection of glucose and insulin in live animals. <i>Nature Biomedical Engineering</i> , 2021 , 5, 53-63	19	15
103	A carrier relaxation bottleneck probed in single InGaAs quantum dots using integrated superconducting single photon detectors. <i>Applied Physics Letters</i> , 2014 , 105, 081107	3.4	14
102	Electrically Driven Photonic Crystal Nanocavity Devices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 1700-1710	3.8	14
101	Room temperature lasing unraveled by a strong resonance between gain and parasitic absorption in uniaxially strained germanium. <i>Physical Review B</i> , 2018 , 97,	3.3	13
100	Hybrid metal-dielectric nanocavity for enhanced light-matter interactions. <i>Optical Materials Express</i> , 2017 , 7, 231	2.6	13
99	Nonlinear frequency conversion using high-quality modes in GaAs nanobeam cavities. <i>Optics Letters</i> , 2014 , 39, 5673-6	3	13
98	Efficient terahertz room-temperature photonic crystal nanocavity laser. <i>Applied Physics Letters</i> , 2007 , 91, 071126	3.4	13
97	Dispersion Engineering With Photonic Inverse Design. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020 , 26, 1-6	3.8	13
96	Data-driven acceleration of photonic simulations. <i>Scientific Reports</i> , 2019 , 9, 19728	4.9	13

(2016-2017)

95	Observation of Mollow Triplets with Tunable Interactions in Double Lambda Systems of Individual Hole Spins. <i>Physical Review Letters</i> , 2017 , 118, 013602	7.4	12	
94	Initialization of a spin qubit in a site-controlled nanowire quantum dot. <i>New Journal of Physics</i> , 2016 , 18, 053024	2.9	12	
93	Focus on integrated quantum optics. New Journal of Physics, 2013, 15, 035016	2.9	12	
92	Fabrication and Analysis of Epitaxially Grown Ge\$_{1-x}\$Sn\$_x\$ Microdisk Resonator With 20-nm Free-Spectral Range. <i>IEEE Photonics Technology Letters</i> , 2011 , 23, 1535-1537	2.2	12	
91	Bichromatic driving of a solid-state cavity quantum electrodynamics system. <i>New Journal of Physics</i> , 2012 , 14, 013028	2.9	12	
90	Photonic Crystal and Plasmonic Silicon-Based Light Sources. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 132-140	3.8	12	
89	Low-energy electron beam focusing in self-organized porous alumina vacuum windows. <i>Applied Physics Letters</i> , 2000 , 76, 3635-3637	3.4	12	
88	Narrow-Linewidth Tin-Vacancy Centers in a Diamond Waveguide. ACS Photonics, 2020, 7, 2356-2361	6.3	11	
87	Spontaneous emission control in high-extraction efficiency plasmonic crystals. <i>Optics Express</i> , 2008 , 16, 426-34	3.3	10	
86	Generation of single photons and correlated photon pairs using InAs quantum dots. <i>Fortschritte Der Physik</i> , 2004 , 52, 1180-1188	5.7	10	
85	Quantum optics of soliton microcombs. <i>Nature Photonics</i> , 2022 , 16, 52-58	33.9	10	
84	Site-Controlled Quantum Emitters in Monolayer MoSe. <i>Nano Letters</i> , 2021 , 21, 2376-2381	11.5	10	
83	Investigation of germanium quantum-well light sources. <i>Optics Express</i> , 2015 , 23, 22424-30	3.3	9	
82	A direct measurement of the electronic structure of Si nanocrystals and its effect on optoelectronic properties. <i>Journal of Applied Physics</i> , 2014 , 115, 103515	2.5	9	
81	Ge microdisk with lithographically-tunable strain using CMOS-compatible process. <i>Optics Express</i> , 2015 , 23, 33249-54	3.3	9	
80	Photo-oxidative tuning of individual and coupled GaAs photonic crystal cavities. <i>Optics Express</i> , 2014 , 22, 15017-23	3.3	9	
79	Analysis of a quantum nondemolition measurement scheme based on Kerr nonlinearity in photonic crystal waveguides. <i>Optics Express</i> , 2007 , 15, 5559-71	3.3	9	
78	Ultrafast coherent manipulation of trions in site-controlled nanowire quantum dots. <i>Optica</i> , 2016 , 3, 1430	8.6	9	

77	Emission redistribution from a quantum dot-bowtie nanoantenna. <i>Journal of Nanophotonics</i> , 2016 , 10, 033509	1.1	9
76	High-Quality GaAs Planar Coalescence over Embedded Dielectric Microstructures Using an All-MBE Approach. <i>Crystal Growth and Design</i> , 2019 , 19, 3085-3091	3.5	8
75	Nonclassical Light Generation From IIIIV and Group-IV Solid-State Cavity Quantum Systems. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2017 , 66, 111-179	1.7	7
74	Pulsed coherent drive in the Jaynes-Cummings model. <i>Physical Review A</i> , 2018 , 98,	2.6	7
73	Focus on cavity and circuit quantum electrodynamics in solids. New Journal of Physics, 2015, 17, 010201	2.9	7
7 2	Low power resonant optical excitation of an optomechanical cavity. <i>Optics Express</i> , 2011 , 19, 1429-40	3.3	7
71	An efficient source of single photons: a single quantum dot in a micropost microcavity. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003 , 17, 564-567	3	7
7º	Bounds for Scattering from Absorptionless Electromagnetic Structures. <i>Physical Review Applied</i> , 2020 , 14,	4.3	6
69	Differential reflection spectroscopy of a single quantum dot strongly coupled to a photonic crystal cavity. <i>Applied Physics Letters</i> , 2010 , 97, 053111	3.4	6
68	Proposal for high-speed and high-fidelity electron-spin initialization in a negatively charged quantum dot coupled to a microcavity in a weak external magnetic field. <i>Physical Review A</i> , 2010 , 82,	2.6	6
67	Patterned femtosecond laser excitation of terahertz leaky modes in GaAs photonic crystals. <i>Applied Physics Letters</i> , 2006 , 89, 241112	3.4	6
66	Single photons on demand. <i>Europhysics News</i> , 2005 , 36, 56-8	0.2	6
65	Beating absorption in solid-state high harmonics. <i>Communications Physics</i> , 2020 , 3,	5.4	6
64	Quantum Photonic Interface for Tin-Vacancy Centers in Diamond. <i>Physical Review X</i> , 2021 , 11,	9.1	6
63	Hole-spin pumping and repumping in a p-type Edoped InAs quantum dot. <i>Physical Review B</i> , 2014 , 90,	3.3	5
62	Time-resolved lasing action from single and coupled photonic crystal nanocavity array lasers emitting in the telecom band. <i>Journal of Applied Physics</i> , 2009 , 105, 093110	2.5	5
61	Heuristic methods and performance bounds for photonic design. Optics Express, 2021, 29, 2827-2854	3.3	5
60	Indistinguishable single photons from a quantum dot. <i>Physica Status Solidi (B): Basic Research</i> , 2003 , 238, 305-308	1.3	4

59	Inverse-Designed Photonic Crystal Circuits for Optical Beam Steering. ACS Photonics, 2021, 8, 3085-30	93 6.3	4
58	Electrical Tuning of Tin-Vacancy Centers in Diamond. <i>Physical Review Applied</i> , 2021 , 15,	4.3	4
57	Design of a tapered slot waveguide dielectric laser accelerator for sub-relativistic electrons. <i>Optics Express</i> , 2018 , 26, 22801-22815	3.3	4
56	Towards on-chip generation, routing and detection of non-classical light 2015,		3
55	(Invited) Characterizations of Direct Band Gap Photoluminescence and Electroluminescence from epi-Ge on Si. <i>ECS Transactions</i> , 2010 , 33, 545-554	1	3
54	Quasiresonant excitation of InP/InGaP quantum dots using second harmonic generated in a photonic crystal cavity. <i>Applied Physics Letters</i> , 2012 , 101, 161116	3.4	3
53	Electrical properties of GaAs photonic crystal cavity lateral p-i-n diodes. <i>Applied Physics Letters</i> , 2012 , 101, 011104	3.4	3
52	Cavity-enhanced single photons from a quantum dot (Invited Paper) 2005,		3
51	CAVITY-ENHANCED SINGLE PHOTONS FROM A QUANTUM DOT. <i>Advanced Series in Applied Physics</i> , 2004 , 133-175		3
50	4H-SiC-on-Insulator Platform for Quantum Photonics 2019 ,		3
50	4H-SiC-on-Insulator Platform for Quantum Photonics 2019 , Electrically driven photonic crystal nanocavity devices 2012 ,		3
		2.6	
49	Electrically driven photonic crystal nanocavity devices 2012 , Analytic and geometric properties of scattering from periodically modulated quantum-optical	2.6	3
49	Electrically driven photonic crystal nanocavity devices 2012 , Analytic and geometric properties of scattering from periodically modulated quantum-optical systems. <i>Physical Review A</i> , 2020 , 102, Point-coupling Hamiltonian for frequency-independent linear optical devices. <i>Physical Review A</i> ,		3
49 48 47	Electrically driven photonic crystal nanocavity devices 2012 , Analytic and geometric properties of scattering from periodically modulated quantum-optical systems. <i>Physical Review A</i> , 2020 , 102, Point-coupling Hamiltonian for frequency-independent linear optical devices. <i>Physical Review A</i> , 2019 , 100,		3 2
49 48 47 46	Electrically driven photonic crystal nanocavity devices 2012, Analytic and geometric properties of scattering from periodically modulated quantum-optical systems. <i>Physical Review A</i> , 2020, 102, Point-coupling Hamiltonian for frequency-independent linear optical devices. <i>Physical Review A</i> , 2019, 100, Direct bandgap germanium nanowires inferred from 5.0% uniaxial tensile strain 2013, A novel, highly-strained structure with an integrated optical cavity for a low threshold germanium		3 2 2
49 48 47 46 45	Electrically driven photonic crystal nanocavity devices 2012, Analytic and geometric properties of scattering from periodically modulated quantum-optical systems. <i>Physical Review A</i> , 2020, 102, Point-coupling Hamiltonian for frequency-independent linear optical devices. <i>Physical Review A</i> , 2019, 100, Direct bandgap germanium nanowires inferred from 5.0% uniaxial tensile strain 2013, A novel, highly-strained structure with an integrated optical cavity for a low threshold germanium laser 2015,		3 2 2 2

41	Dipole induced transparency in cavity-waveguide drop-filter systems 2006,		2
40	Design of photonic crystal optical microcavities 2001,		2
39	Inverse-designed optical interconnect based on multimode photonics and mode-division multiplexing 2020 ,		2
38	Objective-First Nanophotonic Design. <i>Topics in Applied Physics</i> , 2013 , 147-173	0.5	2
37	Optimal two-photon excitation of bound states in non-Markovian waveguide QED. <i>Physical Review A</i> , 2021 , 104,	2.6	2
36	Silicon-Compatible Fabrication of Inverse Woodpile Photonic Crystals with a Complete Band Gap. <i>ACS Photonics</i> , 2019 , 6, 368-373	6.3	2
35	Photonic Inverse Design of On-Chip Microresonators. ACS Photonics,	6.3	2
34	Visible Photoluminescence in Cubic (3C) Silicon Carbide Coupled to High Quality Microdisk Resonators 2015 ,		1
33	Inverse design and implementation of a wavelength demultiplexing grating coupler 2015,		1
32	Reply to ROn nanostructured silicon successR <i>Nature Photonics</i> , 2016 , 10, 143-144	33.9	1
31	Double-layer silicon photonic crystal fiber tip sensor 2011 ,		1
30	Ultrafast photonic crystal nanocavity lasers and optical switches 2008,		1
29	Gallium phosphide photonic crystal nanocavities in the visible 2008,		1
28	Quantum networking with quantum dots coupled to micro-cavities 2007,		1
27	Two-dimensional porous silicon photonic crystal light emitters 2006,		1
26	Waveguiding in planar photonic crystals 2001,		1
25	Nano-scale optical and quantum optical devices based on photonic crystals		1
24	Third-order photon correlations from a quantum dot coupled to a photonic-crystal nanocavity 2013 ,		1

23	Tuning the Photon Statistics of a Strongly Coupled Nanophotonic System 2017,	1
22	Nonreciprocal Devices in Silicon Photonics. <i>Optics and Photonics News</i> , 2020 , 31, 38	1
21	Toward inverse-designed optical interconnect 2020 ,	1
20	Inverse Designed Cavity-Waveguide Couplers 2019 ,	1
19	Waveguide-integrated dielectric laser particle accelerators through the inverse design of photonics 2019 ,	1
18	Inverse design of microresonator dispersion for nonlinear optics 2020 ,	1
17	Physics and Applications of Quantum Dots in Photonic Crystals. <i>Nanoscience and Technology</i> , 2009 , 299-32 0	1
16	High Efficiency Solar Cells based on Spontaneous Emission Inhibition in Photonic Crystals 2009 ,	1
15	Level-set Fabrication Constraints for Gradient-based Optimization of Optical Devices 2018,	1
14	Photonic Technologies for Quantum Information Processing 2005 , 215-231	1
13	Convex restrictions in physical design. <i>Scientific Reports</i> , 2021 , 11, 12976 4.9	О
12	Optimization of Light emission from Silicon nanocrystals grown by PECVD. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1257, 1	
11	Spontaneous Emission Control in a Plasmonic Structure 2010 , 1-26	
10	Silicon Nanocavity Based Light Sources. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1305, 1	
9	Pillar Microcavities for Single-Photon Generation. Optical Science and Engineering, 2009, 53-132	
8	Quantum optics and quantum information processing with photonic crystal devices 2006 , LWG2	
7	Coupled arrays of photonic crystal nanocavites and their applications 2006 , 6128, 58	
6	Optimization of Q factor in optical nanocavities based on free-standing membranes 2002 , 4655, 192	

5	Regulated Single Photons and Entangled Photons From a Quantum Dot Microcavity. <i>Nanoscience and Technology</i> , 2002 , 277-305	0.6
4	Photonic Crystal Cavity Lasers 2012 , 131-158	
3	The subchronic effects of 3,4-methylendioxymethamphetamine on oxidative stress in rat brain. <i>Archives of Biological Sciences</i> , 2014 , 66, 1075-1081	0.7
2	3C-SiC Microdisks for Visible Photonics. <i>Materials Science Forum</i> , 2016 , 858, 711-714	0.4

Few-particle scattering from localized quantum systems in spatially structured bosonic baths.

Quantum - the Open Journal for Quantum Science,6, 691