Jelena Vuckovic

List of Publications by Year in Descending Order

292 papers	19,541 citations	69 h-index	133 g-index
494 ext. papers	23,726 ext. citations	7 avg, IF	6.95 L-index

#	Paper	IF	Citations
292	Quantum optics of soliton microcombs. *Nature Photonics*, **2022**, 16, 52-58	33.9	10
291	Inverse-Designed Photonic Crystal Circuits for Optical Beam Steering. *ACS Photonics*, **2021**, 8, 3085-3093	6.3	4
290	Generating arbitrary topological windings of a non-Hermitian band. *Science*, **2021**, 371, 1240-1245	33.3	35
289	Site-Controlled Quantum Emitters in Monolayer MoSe. *Nano Letters*, **2021**, 21, 2376-2381	11.5	10
288	Electrical Tuning of Tin-Vacancy Centers in Diamond. *Physical Review Applied*, **2021**, 15,	4.3	4
287	Convex restrictions in physical design. *Scientific Reports*, **2021**, 11, 12976	4.9	0
286	Quantum Photonic Interface for Tin-Vacancy Centers in Diamond. *Physical Review X*, **2021**, 11,	9.1	6
285	Optimal two-photon excitation of bound states in non-Markovian waveguide QED. *Physical Review A*, **2021**, 104,	2.6	2
284	A fluorescence sandwich immunoassay for the real-time continuous detection of glucose and insulin in live animals. *Nature Biomedical Engineering*, **2021**, 5, 53-63	19	15
283	Heuristic methods and performance bounds for photonic design. *Optics Express*, **2021**, 29, 2827-2854	3.3	5
282	Development of Quantum Interconnects (QuICs) for Next-Generation Information Technologies. *PRX Quantum*, **2021**, 2,	6.1	46
281	Quantum Simulators: Architectures and Opportunities. *PRX Quantum*, **2021**, 2,	6.1	47
280	Vibronic States and Their Effect on the Temperature and Strain Dependence of Silicon-Vacancy Qubits in 4H-SiC. *Physical Review Applied*, **2020**, 13,	4.3	29
279	Nanophotonic inverse design with SPINS: Software architecture and practical considerations. *Applied Physics Reviews*, **2020**, 7, 011407	17.3	43
278	Inverse-designed non-reciprocal pulse router for chip-based LiDAR. *Nature Photonics*, **2020**, 14, 369-374	33.9	73
277	Bounds for Scattering from Absorptionless Electromagnetic Structures. *Physical Review Applied*, **2020**, 14,	4.3	6
276	Inverse-Designed Photonics for Semiconductor Foundries. *ACS Photonics*, **2020**, 7, 569-575	6.3	27

275	Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth. *Nano Letters*, **2020**, 20, 1614-1619	11.5	18
274	Revealing multiple classes of stable quantum emitters in hexagonal boron nitride with correlated optical and electron microscopy. *Nature Materials*, **2020**, 19, 534-539	27	68
273	Integrated Quantum Photonics with Silicon Carbide: Challenges and Prospects. *PRX Quantum*, **2020**, 1,	6.1	24
272	Inverse-designed optical interconnect based on multimode photonics and mode-division multiplexing **2020**,		2
271	Nonreciprocal Devices in Silicon Photonics. *Optics and Photonics News*, **2020**, 31, 38	1.9	1
270	Optical parametric oscillation in silicon carbide nanophotonics. *Optica*, **2020**, 7, 1139	8.6	34
269	Toward inverse-designed optical interconnect **2020**,		1
268	Inverse design of microresonator dispersion for nonlinear optics **2020**,		1
267	Dispersion Engineering With Photonic Inverse Design. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26, 1-6	3.8	13
266	Generation of Non-Classical Light Using Semiconductor Quantum Dots. *Advanced Quantum Technologies*, **2020**, 3, 1900007	4.3	17
265	On-chip integrated laser-driven particle accelerator. *Science*, **2020**, 367, 79-83	33.3	64
264	4H-silicon-carbide-on-insulator for integrated quantum and nonlinear photonics. *Nature Photonics*, **2020**, 14, 330-334	33.9	112
263	Spectrally reconfigurable quantum emitters enabled by optimized fast modulation. *Npj Quantum Information*, **2020**, 6,	8.6	15
262	Crux of Using the Cascaded Emission of a Three-Level Quantum Ladder System to Generate Indistinguishable Photons. *Physical Review Letters*, **2020**, 125, 233605	7.4	15
261	Narrow-Linewidth Tin-Vacancy Centers in a Diamond Waveguide. *ACS Photonics*, **2020**, 7, 2356-2361	6.3	11
260	Analytic and geometric properties of scattering from periodically modulated quantum-optical systems. *Physical Review A*, **2020**, 102,	2.6	3
259	Beating absorption in solid-state high harmonics. *Communications Physics*, **2020**, 3,	5.4	6
258	Point-coupling Hamiltonian for frequency-independent linear optical devices. *Physical Review A*, **2019**, 100,	2.6	2

257	Photon Blockade in Weakly Driven Cavity Quantum Electrodynamics Systems with Many Emitters. *Physical Review Letters*, **2019**, 122, 243602	7.4	18
256	Analytical level set fabrication constraints for inverse design. *Scientific Reports*, **2019**, 9, 8999	4.9	39
255	Characterization of optical and spin properties of single tin-vacancy centers in diamond nanopillars. *Physical Review B*, **2019**, 99,	3.3	28
254	Computational Bounds for Photonic Design. *ACS Photonics*, **2019**, 6, 1232-1239	6.3	22
253	High-Quality GaAs Planar Coalescence over Embedded Dielectric Microstructures Using an All-MBE Approach. *Crystal Growth and Design*, **2019**, 19, 3085-3091	3.5	8
252	Nanodiamond Integration with Photonic Devices. *Laser and Photonics Reviews*, **2019**, 13, 1800316	8.3	32
251	Inverse-designed diamond photonics. *Nature Communications*, **2019**, 10, 3309	17.4	60
250	Spatiotemporal light control with frequency-gradient metasurfaces. *Science*, **2019**, 365, 374-377	33.3	65
249	4H-SiC-on-Insulator Platform for Quantum Photonics **2019**,		3
248	Inverse Designed Cavity-Waveguide Couplers **2019**,		1
247	Waveguide-integrated dielectric laser particle accelerators through the inverse design of photonics **2019**,		1
246	Data-driven acceleration of photonic simulations. *Scientific Reports*, **2019**, 9, 19728	4.9	13
245	Silicon-Compatible Fabrication of Inverse Woodpile Photonic Crystals with a Complete Band Gap. *ACS Photonics*, **2019**, 6, 368-373	6.3	2
244	Inverse Design and Demonstration of Broadband Grating Couplers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-7	3.8	38
243	Room temperature lasing unraveled by a strong resonance between gain and parasitic absorption in uniaxially strained germanium. *Physical Review B*, **2018**, 97,	3.3	13
242	Strongly Cavity-Enhanced Spontaneous Emission from Silicon-Vacancy Centers in Diamond. *Nano Letters*, **2018**, 18, 1360-1365	11.5	79
241	Pulsed Rabi oscillations in quantum two-level systems: beyond the area theorem. *Quantum Science and Technology*, **2018**, 3, 014006	5.5	17
240	Quantum Properties of Dichroic Silicon Vacancies in Silicon Carbide. *Physical Review Applied*, **2018**, 9,	4.3	65

239	Fully-automated optimization of grating couplers. *Optics Express*, **2018**, 26, 4023-4034	3.3	68
238	Enhanced high-harmonic generation from an all-dielectric metasurface. *Nature Physics*, **2018**, 14, 1006-1010	16.2	132
237	Pulsed coherent drive in the Jaynes-Cummings model. *Physical Review A*, **2018**, 98,	2.6	7
236	Cavity-Enhanced Raman Emission from a Single Color Center in a Solid. *Physical Review Letters*, **2018**, 121, 083601	7.4	25
235	Inverse Design and Demonstration of a Compact on-Chip Narrowband Three-Channel Wavelength Demultiplexer. *ACS Photonics*, **2018**, 5, 301-305	6.3	99
234	Design of a tapered slot waveguide dielectric laser accelerator for sub-relativistic electrons. *Optics Express*, **2018**, 26, 22801-22815	3.3	4
233	Inverse design in nanophotonics. *Nature Photonics*, **2018**, 12, 659-670	33.9	485
232	Few-photon scattering and emission from low-dimensional quantum systems. *Physical Review B*, **2018**, 98,	3.3	18
231	Level-set Fabrication Constraints for Gradient-based Optimization of Optical Devices **2018**,		1
230	Quantum dot single-photon sources with ultra-low multi-photon probability. *Npj Quantum Information*, **2018**, 4,	8.6	67
229	On-Chip Laser-Power Delivery System for Dielectric Laser Accelerators. *Physical Review Applied*, **2018**, 9,	4.3	24
228	Observation of Mollow Triplets with Tunable Interactions in Double Lambda Systems of Individual Hole Spins. *Physical Review Letters*, **2017**, 118, 013602	7.4	12
227	Scalable Quantum Photonics with Single Color Centers in Silicon Carbide. *Nano Letters*, **2017**, 17, 1782-1786	11.5	85
226	Signatures of two-photon pulses from a quantum two-level system. *Nature Physics*, **2017**, 13, 649-654	16.2	34
225	Vertical-Substrate MPCVD Epitaxial Nanodiamond Growth. *Nano Letters*, **2017**, 17, 1489-1495	11.5	46
224	Fabrication-constrained nanophotonic inverse design. *Scientific Reports*, **2017**, 7, 1786	4.9	124
223	Nonclassical Light Generation From III-V and Group-IV Solid-State Cavity Quantum Systems. *Advances in Atomic, Molecular and Optical Physics*, **2017**, 66, 111-179	1.7	7
222	On-Chip Architecture for Self-Homodyned Nonclassical Light. *Physical Review Applied*, **2017**, 7,	4.3	18

221	Photon blockade in two-emitter-cavity systems. *Physical Review A*, **2017**, 96,	2.6	33
220	Tuning the photon statistics of a strongly coupled nanophotonic system. *Physical Review A*, **2017**, 95,	2.6	17
219	Hybrid metal-dielectric nanocavity for enhanced light-matter interactions. *Optical Materials Express*, **2017**, 7, 231	2.6	13
218	Complete coherent control of silicon vacancies in diamond nanopillars containing single defect centers. *Optica*, **2017**, 4, 1317	8.6	17
217	Tuning the Photon Statistics of a Strongly Coupled Nanophotonic System **2017**,		1
216	Initialization of a spin qubit in a site-controlled nanowire quantum dot. *New Journal of Physics*, **2016** , 18, 053024	2.9	12
215	Self-homodyne measurement of a dynamic Mollow triplet in the solid state. *Nature Photonics*, **2016**, 10, 163-166	33.9	28
214	Hybrid Group IV Nanophotonic Structures Incorporating Diamond Silicon-Vacancy Color Centers. *Nano Letters*, **2016**, 16, 212-7	11.5	35
213	Direct Bandgap Light Emission from Strained Germanium Nanowires Coupled with High-Q Nanophotonic Cavities. *Nano Letters*, **2016**, 16, 2168-73	11.5	47
212	Reply to R On nanostructured silicon successR *Nature Photonics*, **2016**, 10, 143-144	33.9	1
211	Self-homodyne-enabled generation of indistinguishable photons. *Optica*, **2016**, 3, 931	8.6	18
210	Ultrafast coherent manipulation of trions in site-controlled nanowire quantum dots. *Optica*, **2016**, 3, 1430	8.6	9
209	Dynamical modeling of pulsed two-photon interference. *New Journal of Physics*, **2016**, 18, 113053	2.9	33
208	Complete Coherent Control of a Quantum Dot Strongly Coupled to a Nanocavity. *Scientific Reports*, **2016**, 6, 25172	4.9	34
207	Emission redistribution from a quantum dot-bowtie nanoantenna. *Journal of Nanophotonics*, **2016**, 10, 033509	1.1	9
206	3C-SiC Microdisks for Visible Photonics. *Materials Science Forum*, **2016**, 858, 711-714	0.4	
205	Towards on-chip generation, routing and detection of non-classical light **2015**,		3
204	On-Chip Generation, Routing, and Detection of Resonance Fluorescence. *Nano Letters*, **2015**, 15, 5208-13	11.5	57

203	Inverse design and demonstration of a compact and broadband on-chip wavelength demultiplexer. *Nature Photonics*, **2015**, 9, 374-377	33.9	441
202	Monolayer semiconductor nanocavity lasers with ultralow thresholds. *Nature*, **2015**, 520, 69-72	50.4	545
201	Investigation of germanium quantum-well light sources. *Optics Express*, **2015**, 23, 22424-30	3.3	9
200	Visible Photoluminescence in Cubic (3C) Silicon Carbide Coupled to High Quality Microdisk Resonators **2015**,		1
199	Inverse design and implementation of a wavelength demultiplexing grating coupler **2015**,		1
198	Ge microdisk with lithographically-tunable strain using CMOS-compatible process. *Optics Express*, **2015**, 23, 33249-54	3.3	9
197	Coherent Generation of Nonclassical Light on Chip via Detuned Photon Blockade. *Physical Review Letters*, **2015**, 114, 233601	7.4	83
196	A novel, highly-strained structure with an integrated optical cavity for a low threshold germanium laser **2015**,		2
195	Ultrafast Polariton-Phonon Dynamics of Strongly Coupled Quantum Dot-Nanocavity Systems. *Physical Review X*, **2015**, 5,	9.1	27
194	Focus on cavity and circuit quantum electrodynamics in solids. *New Journal of Physics*, **2015**, 17, 010201	2.9	7
193	Visible Photoluminescence from Cubic (3C) Silicon Carbide Microdisks Coupled to High Quality Whispering Gallery Modes. *ACS Photonics*, **2015**, 2, 14-19	6.3	31
192	Inverse design and implementation of a wavelength demultiplexing grating coupler. *Scientific Reports*, **2014**, 4, 7210	4.9	76
191	Control of two-dimensional excitonic light emission via photonic crystal. *2D Materials*, **2014**, 1, 011001	5.9	124
190	A direct measurement of the electronic structure of Si nanocrystals and its effect on optoelectronic properties. *Journal of Applied Physics*, **2014**, 115, 103515	2.5	9
189	Second-Harmonic Generation in GaAs Photonic Crystal Cavities in (111)B and (001) Crystal Orientations. *ACS Photonics*, **2014**, 1, 516-523	6.3	33
188	Photo-oxidative tuning of individual and coupled GaAs photonic crystal cavities. *Optics Express*, **2014**, 22, 15017-23	3.3	9
187	Multimode nanobeam cavities for nonlinear optics: high quality resonances separated by an octave. *Optics Express*, **2014**, 22, 26498-509	3.3	22
186	A carrier relaxation bottleneck probed in single InGaAs quantum dots using integrated superconducting single photon detectors. *Applied Physics Letters*, **2014**, 105, 081107	3.4	14

185	Nonlinear frequency conversion using high-quality modes in GaAs nanobeam cavities. *Optics Letters* , **2014**, 39, 5673-6	3	13
184	Hole-spin pumping and repumping in a p-type □doped InAs quantum dot. *Physical Review B*, **2014**, 90,	3.3	5
183	Nonclassical higher-order photon correlations with a quantum dot strongly coupled to a photonic-crystal nanocavity. *Physical Review A*, **2014**, 90,	2.6	55
182	Graphene for Tunable Nanophotonic Resonators. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 68-71	3.8	17
181	The subchronic effects of 3,4-methylendioxymethamphetamine on oxidative stress in rat brain. *Archives of Biological Sciences*, **2014**, 66, 1075-1081	0.7	
180	Proposed coupling of an electron spin in a semiconductor quantum dot to a nanosize optical cavity. *Physical Review Letters*, **2013**, 111, 027402	7.4	25
179	Direct bandgap germanium nanowires inferred from 5.0% uniaxial tensile strain **2013**,		2
178	Single-cell photonic nanocavity probes. *Nano Letters*, **2013**, 13, 4999-5005	11.5	80
177	Electrical control of silicon photonic crystal cavity by graphene. *Nano Letters*, **2013**, 13, 515-8	11.5	162
176	Ultra-low power all-optical switching with a single quantum dot in a photonic-crystal cavity **2013**,		2
175	Strain-induced pseudoheterostructure nanowires confining carriers at room temperature with nanoscale-tunable band profiles. *Nano Letters*, **2013**, 13, 3118-23	11.5	81
174	Photonic crystal cavities in cubic (3C) polytype silicon carbide films. *Optics Express*, **2013**, 21, 32623-9	3.3	50
173	Nanophotonic computational design. *Optics Express*, **2013**, 21, 13351-67	3.3	158
172	Deterministically charged quantum dots in photonic crystal nanoresonators for efficient spin□photon interfaces. *New Journal of Physics*, **2013**, 15, 113056	2.9	18
171	Photon blockade with a four-level quantum emitter coupled to a photonic-crystal nanocavity. *New Journal of Physics*, **2013**, 15, 025014	2.9	33
170	Focus on integrated quantum optics. *New Journal of Physics*, **2013**, 15, 035016	2.9	12
169	Second harmonic generation in photonic crystal cavities in (111)-oriented GaAs. *Applied Physics Letters*, **2013**, 103, 211117	3.4	29
168	Third-order photon correlations from a quantum dot coupled to a photonic-crystal nanocavity **2013** ,		1

167	Objective-First Nanophotonic Design. *Topics in Applied Physics*, **2013**, 147-173	0.5	2
166	Ultrafast photon-photon interaction in a strongly coupled quantum dot-cavity system. *Physical Review Letters*, **2012**, 108, 093604	7.4	131
165	Photoluminescence from In0.5Ga0.5As/GaP quantum dots coupled to photonic crystal cavities. *Physical Review B*, **2012**, 85,	3.3	25
164	Electrically Driven Photonic Crystal Nanocavity Devices. *IEEE Journal of Selected Topics in Quantum Electronics*, **2012**, 18, 1700-1710	3.8	14
163	All Optical Switching With a Single Quantum Dot Strongly Coupled to a Photonic Crystal Cavity. *IEEE Journal of Selected Topics in Quantum Electronics*, **2012**, 18, 1812-1817	3.8	28
162	Engineered quantum dot single-photon sources. *Reports on Progress in Physics*, **2012**, 75, 126503	14.4	255
161	Bichromatic driving of a solid-state cavity quantum electrodynamics system. *New Journal of Physics*, **2012**, 14, 013028	2.9	12
160	Objective-first design of high-efficiency, small-footprint couplers between arbitrary nanophotonic waveguide modes. *Optics Express*, **2012**, 20, 7221-36	3.3	66
159	Quasiresonant excitation of InP/InGaP quantum dots using second harmonic generated in a photonic crystal cavity. *Applied Physics Letters*, **2012**, 101, 161116	3.4	3
158	A photonic crystal cavity-optical fiber tip nanoparticle sensor for biomedical applications. *Applied Physics Letters*, **2012**, 100, 213702	3.4	23
157	Design and analysis of photonic crystal coupled cavity arrays for quantum simulation. *Physical Review B*, **2012**, 86,	3.3	56
156	Cavity quantum electrodynamics with a single quantum dot coupled to a photonic molecule. *Physical Review B*, **2012**, 86,	3.3	69
155	Phonon-mediated coupling between quantum dots through an off-resonant microcavity. *Physical Review B*, **2012**, 85,	3.3	26
154	Probing the ladder of dressed states and nonclassical light generation in quantum-dot□avity QED. *Physical Review A*, **2012**, 85,	2.6	66
153	Nonlinear temporal dynamics of a strongly coupled quantum-dot□avity system. *Physical Review A*, **2012**, 85,	2.6	38
152	Loss-enabled sub-poissonian light generation in a bimodal nanocavity. *Physical Review Letters*, **2012** , 108, 183601	7.4	121
151	Electrical properties of GaAs photonic crystal cavity lateral p-i-n diodes. *Applied Physics Letters*, **2012**, 101, 011104	3.4	3
150	Electrically driven photonic crystal nanocavity devices **2012**,		3

149	Photonic Crystal Cavity Lasers **2012**, 131-158		
148	Optical fiber tips functionalized with semiconductor photonic crystal cavities. *Applied Physics Letters*, **2011**, 99, 191102	3.4	31
147	Integrated quantum optical networks based on quantum dots and photonic crystals. *New Journal of Physics*, **2011**, 13, 055025	2.9	75
146	Low power resonant optical excitation of an optomechanical cavity. *Optics Express*, **2011**, 19, 1429-40	3.3	7
145	Ultra-low power fiber-coupled gallium arsenide photonic crystal cavity electro-optic modulator. *Optics Express*, **2011**, 19, 7530-6	3.3	19
144	Inverse design of a three-dimensional nanophotonic resonator. *Optics Express*, **2011**, 19, 10563-70	3.3	37
143	Multiply resonant photonic crystal nanocavities for nonlinear frequency conversion. *Optics Express*, **2011**, 19, 22198-207	3.3	54
142	Ultralow-threshold electrically pumped quantum-dot photonic-crystal nanocavity laser. *Nature Photonics*, **2011**, 5, 297-300	33.9	303
141	Nanobeam photonic crystal cavity light-emitting diodes. *Applied Physics Letters*, **2011**, 99, 071105	3.4	24
140	Ultrafast direct modulation of a single-mode photonic crystal nanocavity light-emitting diode. *Nature Communications*, **2011**, 2, 539	17.4	89
139	Ge quantum well resonator modulators **2011**,		2
138	Off-resonant coupling between a single quantum dot and a nanobeam photonic crystal cavity. *Applied Physics Letters*, **2011**, 99, 251907	3.4	15
137	Fabrication and Analysis of Epitaxially Grown Ge$_{1-x}$Sn$_x$ Microdisk Resonator With 20-nm Free-Spectral Range. *IEEE Photonics Technology Letters*, **2011**, 23, 1535-1537	2.2	12
136	Fast quantum dot single photon source triggered at telecommunications wavelength. *Applied Physics Letters*, **2011**, 98, 083105	3.4	29
135	Multiply resonant high quality photonic crystal nanocavities. *Applied Physics Letters*, **2011**, 99, 013114	3.4	19
134	Phonon mediated off-resonant quantum dot□avity coupling under resonant excitation of the quantum dot. *Physical Review B*, **2011**, 84,	3.3	73
133	Effect of photogenerated carriers on the spectral diffusion of a quantum dot coupled to a photonic crystal cavity. *Physical Review B*, **2011**, 84,	3.3	20
132	Probing of single quantum dot dressed states via an off-resonant cavity. *Physical Review B*, **2011**, 84,	3.3	25

131	Strong enhancement of direct transition photoluminescence with highly tensile-strained Ge grown by molecular beam epitaxy. *Applied Physics Letters*, **2011**, 98, 011111	3.4	114
130	Cavity-enhanced direct band electroluminescence near 1550 nm from germanium microdisk resonator diode on silicon. *Applied Physics Letters*, **2011**, 98, 211101	3.4	23
129	Silicon Nanocavity Based Light Sources. *Materials Research Society Symposia Proceedings*, **2011**, 1305, 1		
128	Double-layer silicon photonic crystal fiber tip sensor **2011**,		1
127	Second harmonic generation in GaP photonic crystal waveguides. *Applied Physics Letters*, **2011**, 98, 263113	3.4	36
126	Optimization of Light emission from Silicon nanocrystals grown by PECVD. *Materials Research Society Symposia Proceedings*, **2010**, 1257, 1		
125	(Invited) Characterizations of Direct Band Gap Photoluminescence and Electroluminescence from epi-Ge on Si. *ECS Transactions*, **2010**, 33, 545-554	1	3
124	Sum-frequency generation in doubly resonant GaP photonic crystal nanocavities. *Applied Physics Letters*, **2010**, 97, 043103	3.4	24
123	Enhanced two-photon processes in single quantum dots inside photonic crystal nanocavities. *Physical Review B*, **2010**, 81,	3.3	25
122	Direct band Ge photoluminescence near 1.6 μm coupled to Ge-on-Si microdisk resonators. *Applied Physics Letters*, **2010**, 97, 241102	3.4	33
121	Photonic crystal cavities in silicon dioxide. *Applied Physics Letters*, **2010**, 96, 031107	3.4	47
120	Linewidth broadening of a quantum dot coupled to an off-resonant cavity. *Physical Review B*, **2010**, 82,	3.3	37
119	Differential reflection spectroscopy of a single quantum dot strongly coupled to a photonic crystal cavity. *Applied Physics Letters*, **2010**, 97, 053111	3.4	6
118	Resonant excitation of a quantum dot strongly coupled to a photonic crystal nanocavity. *Physical Review Letters*, **2010**, 104, 073904	7.4	143
117	Electrically pumped photonic crystal nanocavity light sources using a laterally doped p-i-n junction. *Applied Physics Letters*, **2010**, 96, 181103	3.4	30
116	Fast electrical control of a quantum dot strongly coupled to a photonic-crystal cavity. *Physical Review Letters*, **2010**, 104, 047402	7.4	63
115	Inverse design of nanophotonic structures using complementary convex optimization. *Optics Express*, **2010**, 18, 3793-804	3.3	34
114	Theory of electro-optic modulation via a quantum dot coupled to a nano-resonator. *Optics Express*, **2010**, 18, 3974-84	3.3	29

113	Coupled fiber taper extraction of 1.53 microm photoluminescence from erbium doped silicon nitride photonic crystal cavities. *Optics Express*, **2010**, 18, 5964-73	3.3	15
112	Nanobeam photonic crystal cavity quantum dot laser. *Optics Express*, **2010**, 18, 8781-9	3.3	80
111	Tunable-wavelength second harmonic generation from GaP photonic crystal cavities coupled to fiber tapers. *Optics Express*, **2010**, 18, 12176-84	3.3	22
110	Observation of transparency of Erbium-doped silicon nitride in photonic crystal nanobeam cavities. *Optics Express*, **2010**, 18, 13863-73	3.3	24
109	Analysis of the Purcell effect in photonic and plasmonic crystals with losses. *Optics Express*, **2010**, 18, 16546-60	3.3	52
108	Linewidth narrowing and Purcell enhancement in photonic crystal cavities on an Er-doped silicon nitride platform. *Optics Express*, **2010**, 18, 2601-12	3.3	39
107	Spontaneous Emission Control in a Plasmonic Structure **2010**, 1-26		
106	Photoluminescence from silicon dioxide photonic crystal cavities with embedded silicon nanocrystals. *Physical Review B*, **2010**, 81,	3.3	16
105	Deterministic coupling of a single nitrogen vacancy center to a photonic crystal cavity. *Nano Letters*, **2010**, 10, 3922-6	11.5	267
104	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. *Physical Review A*, **2010**, 82,	2.6	6
103	Generation of nonclassical states of light via photon blockade in optical nanocavities. *Physical Review A*, **2010**, 81,	2.6	46
102	Photonic Crystal and Plasmonic Silicon-Based Light Sources. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 132-140	3.8	12
101	Local temperature control of photonic crystal devices via micron-scale electrical heaters. *Applied Physics Letters*, **2009**, 95, 043102	3.4	40
100	Time-resolved lasing action from single and coupled photonic crystal nanocavity array lasers emitting in the telecom band. *Journal of Applied Physics*, **2009**, 105, 093110	2.5	5
99	Photonic quantum technologies. *Nature Photonics*, **2009**, 3, 687-695	33.9	1288
98	Quantum dots in photonic crystals: From quantum information processing to single photon nonlinear optics. *Photonics and Nanostructures - Fundamentals and Applications*, **2009**, 7, 56-62	2.6	16
97	Room temperature 1.6 microm electroluminescence from Ge light emitting diode on Si substrate. *Optics Express*, **2009**, 17, 10019-24	3.3	136
96	High-brightness single photon source from a quantum dot in a directional-emission nanocavity. *Optics Express*, **2009**, 17, 14618-26	3.3	89

95	Electrically controlled modulation in a photonic crystal nanocavity. *Optics Express*, **2009**, 17, 15409-19	3.3	18
94	An optical modulator based on a single strongly coupled quantum dot--cavity system in a p-i-n junction. *Optics Express*, **2009**, 17, 18651-8	3.3	15
93	Enhanced light emission from erbium doped silicon nitride in plasmonic metal-insulator-metal structures. *Optics Express*, **2009**, 17, 20642-50	3.3	20
92	Second harmonic generation in gallium phosphide photonic crystal nanocavities with ultralow continuous wave pump power. *Optics Express*, **2009**, 17, 22609-15	3.3	114
91	Plasmonic enhancement of emission from Si-nanocrystals. *Applied Physics Letters*, **2009**, 94, 013106	3.4	22
90	Lithographic positioning of fluorescent molecules on high-Q photonic crystal cavities. *Applied Physics Letters*, **2009**, 95, 123113	3.4	22
89	Pillar Microcavities for Single-Photon Generation. *Optical Science and Engineering*, **2009**, 53-132		
88	Physics and Applications of Quantum Dots in Photonic Crystals. *Nanoscience and Technology*, **2009**, 299-320		1
87	High Efficiency Solar Cells based on Spontaneous Emission Inhibition in Photonic Crystals **2009**,		1
86	Coherent generation of non-classical light on a chip via photon-induced tunnelling and blockade. *Nature Physics*, **2008**, 4, 859-863	16.2	403
85	Spontaneous emission control in high-extraction efficiency plasmonic crystals. *Optics Express*, **2008**, 16, 426-34	3.3	10
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