

Jesper Moerk

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

314
papers

7,738
citations

43
h-index

72
g-index

479
ext. papers

9,385
ext. citations

3.7
avg, IF

6.07
L-index

#	Paper	IF	Citations
3 ¹⁴	Cavity-induced exciton localization and polariton blockade in two-dimensional semiconductors coupled to an electromagnetic resonator. <i>Physical Review Research</i> , 2022 , 4,	3.9	1
3 ¹³	Crosstalk-free all-optical switching enabled by Fano resonance in a multi-mode photonic crystal nanocavity.. <i>Optics Express</i> , 2022 , 30, 7457-7466	3.3	0
3 ¹²	Quantum theory of two-dimensional materials coupled to electromagnetic resonators. <i>Physical Review B</i> , 2022 , 105,	3.3	1
3 ¹¹	Unidirectional quantum transport in optically driven V-type quantum dot chains. <i>Physical Review B</i> , 2021 , 103,	3.3	1
3 ¹⁰	Theory of microscopic semiconductor lasers with external optical feedback. <i>Optics Express</i> , 2021 , 29, 14182-14188	3.3	1
3 ⁰⁹	Quantum Langevin approach for superradiant nanolasers. <i>New Journal of Physics</i> , 2021 , 23, 063010	2.9	5
3 ⁰⁸	Physics and Applications of High- μ Micro- and Nanolasers. <i>Advanced Optical Materials</i> , 2021 , 9, 2100415	8.1	5
3 ⁰⁷	Non-Markovian perturbation theories for phonon effects in strong-coupling cavity quantum electrodynamics. <i>Physical Review B</i> , 2021 , 103,	3.3	3
3 ⁰⁶	Ultra-coherent Fano laser based on a bound state in the continuum. <i>Nature Photonics</i> , 2021 , 15, 758-764	33.9	11
3 ⁰⁵	Few-photon transport in Fano-resonance waveguide geometries. <i>Physical Review A</i> , 2020 , 101,	2.6	2
3 ⁰⁴	Optical signatures of electron-phonon decoupling due to strong light-matter interactions. <i>Physical Review B</i> , 2020 , 102,	3.3	8
3 ⁰³	Efficient stochastic simulation of rate equations and photon statistics of nanolasers. <i>Optics Express</i> , 2020 , 28, 32632-32646	3.3	2
3 ⁰²	All-optical non-linear activation function for neuromorphic photonic computing using semiconductor Fano lasers. <i>Optics Letters</i> , 2020 , 45, 3844-3847	3	9
3 ⁰¹	Theory of slow-light semiconductor optical amplifiers. <i>Optics Letters</i> , 2020 , 45, 6022-6025	3	1
3 ⁰⁰	Phonon effects in quantum dot single-photon sources. <i>Optical Materials Express</i> , 2020 , 10, 222	2.6	13
299	Squeezing of intensity noise in nanolasers and nanoLEDs with extreme dielectric confinement. <i>Optica</i> , 2020 , 7, 1641	8.6	7
298	Collective Quantum Memory Activated by a Driven Central Spin. <i>Physical Review Letters</i> , 2019 , 123, 140502	7.2	14

297	Semiconductor Fano Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019 , 25, 1-14	3.8	7
296	Comparison of processing-induced deformations of InP bonded to Si determined by e-beam metrology: Direct vs. adhesive bonding. <i>Microelectronic Engineering</i> , 2019 , 214, 93-99	2.5	6
295	Ultrafast parametric process in a photonic-crystal nanocavity switch. <i>Physical Review A</i> , 2019 , 99,	2.6	1
294	Generating Maximal Entanglement between Spectrally Distinct Solid-State Emitters. <i>Physical Review Letters</i> , 2019 , 123, 023603	7.4	3
293	A Simple Coupled-Bloch-Mode Approach to Study Active Photonic Crystal Waveguides and Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2019 , 25, 1-11	3.8	1
292	Light Scattering from Solid-State Quantum Emitters: Beyond the Atomic Picture. <i>Physical Review Letters</i> , 2019 , 123, 167403	7.4	20
291	Two-dimensional phase-space picture of the photonic crystal Fano laser. <i>Physical Review A</i> , 2019 , 100,	2.6	3
290	In-Plane Photonic Crystal Devices using Fano Resonances. <i>Laser and Photonics Reviews</i> , 2019 , 13, 1900054	5.3	18
289	On collective Rabi splitting in nanolasers and nano-LEDs. <i>Optics Letters</i> , 2019 , 44, 1415-1418	3	6
288	Photonic crystal laser based on Fano interference allows for ultrafast frequency modulation in the THz range 2019 ,		1
287	Quantum light-matter interaction and controlled phonon scattering in a photonic Fano cavity. <i>Physical Review B</i> , 2019 , 100,	3.3	12
286	Suppression of Coherence Collapse in Semiconductor Fano Lasers. <i>Physical Review Letters</i> , 2019 , 123, 233904	7.4	9
285	Rate equation description of quantum noise in nanolasers with few emitters. <i>Applied Physics Letters</i> , 2018 , 112, 141103	3.4	26
284	Benchmarking five numerical simulation techniques for computing resonance wavelengths and quality factors in photonic crystal membrane line defect cavities. <i>Optics Express</i> , 2018 , 26, 11366-11392	3.3	10
283	Modes, stability, and small-signal response of photonic crystal Fano lasers. <i>Optics Express</i> , 2018 , 26, 16365-16376	3.3	16
282	Pulse carving using nanocavity-enhanced nonlinear effects in photonic crystal Fano structures. <i>Optics Letters</i> , 2018 , 43, 955-958	3	11
281	Signal reshaping and noise suppression using photonic crystal Fano structures. <i>Optics Express</i> , 2018 , 26, 19596-19605	3.3	15
280	Driving-induced population trapping and linewidth narrowing via the quantum Zeno effect. <i>Physical Review A</i> , 2018 , 97,	2.6	1

279	Numerical solutions to the Laser Rate Equations with noise: technical issues, implementation and pitfalls 2018 ,		5
278	Maximizing the quality factor to mode volume ratio for ultra-small photonic crystal cavities. <i>Applied Physics Letters</i> , 2018 , 113, 241101	3-4	37
277	Cavity-waveguide interplay in optical resonators and its role in optimal single-photon sources. <i>Physical Review B</i> , 2018 , 98,	3-3	9
276	Small and Large Signal Analysis of Photonic Crystal Fano Laser. <i>Journal of Lightwave Technology</i> , 2018 , 36, 5611-5616	4	6
275	Intrinsic and environmental effects on the interference properties of a high-performance quantum dot single-photon source. <i>Physical Review B</i> , 2018 , 97,	3-3	16
274	Demonstration of a self-pulsing photonic crystal Fano laser. <i>Nature Photonics</i> , 2017 , 11, 81-84	33-9	101
273	Type-II quantum-dot-in-nanowire structures with large oscillator strength for optical quantum gate applications. <i>Physical Review B</i> , 2017 , 96,	3-3	9
272	Limitations of two-level emitters as nonlinearities in two-photon controlled-phase gates. <i>Physical Review A</i> , 2017 , 95,	2.6	10
271	Theory of Self-pulsing in Photonic Crystal Fano Lasers. <i>Laser and Photonics Reviews</i> , 2017 , 11, 1700089	8-3	16
270	Probing Electron-Phonon Interaction through Two-Photon Interference in Resonantly Driven Semiconductor Quantum Dots. <i>Physical Review Letters</i> , 2017 , 118, 233602	7-4	40
269	Phonon scattering inhibits simultaneous near-unity efficiency and indistinguishability in semiconductor single-photon sources. <i>Nature Photonics</i> , 2017 , 11, 521-526	33-9	100
268	On the Theory of Coupled Modes in Optical Cavity-Waveguide Structures. <i>Journal of Lightwave Technology</i> , 2017 , 35, 4247-4259	4	19
267	Limits to coherent scattering and photon coalescence from solid-state quantum emitters. <i>Physical Review B</i> , 2017 , 95,	3-3	21
266	Protocol for generating multiphoton entangled states from quantum dots in the presence of nuclear spin fluctuations. <i>Physical Review A</i> , 2017 , 96,	2.6	5
265	Self-consistent Maxwell-Bloch model of quantum-dot photonic-crystal-cavity lasers. <i>Physical Review A</i> , 2017 , 96,	2.6	14
264	2017 ,		1
263	Optical time domain demultiplexing using fano resonance in InP photonic crystals 2017 ,		2
262	Control of exceptional points in photonic crystal slabs. <i>Optics Letters</i> , 2017 , 42, 2866-2869	3	9

261	Switching dynamics in InP photonic-crystal nanocavity. <i>Frontiers of Optoelectronics</i> , 2016 , 9, 395-398	2.8	
260	All-Optical Switching Improvement Using Photonic-Crystal Fano Structures. <i>IEEE Photonics Journal</i> , 2016 , 8, 1-8	1.8	9
259	Threshold Characteristics of Slow-Light Photonic Crystal Lasers. <i>Physical Review Letters</i> , 2016 , 116, 063904	4.4	42
258	Photonic crystal Fano structures and their application to ultrafast switching and lasers 2016 ,		1
257	Ultrafast Coherent Dynamics of a Photonic Crystal All-Optical Switch. <i>Physical Review Letters</i> , 2016 , 117, 233901	7.4	20
256	Ultrahigh-speed Si-integrated on-chip laser with tailored dynamic characteristics. <i>Scientific Reports</i> , 2016 , 6, 38801	4.9	5
255	Spectral symmetry of Fano resonances in a waveguide coupled to a microcavity. <i>Optics Letters</i> , 2016 , 41, 2065-8	3	12
254	A broadband tapered nanocavity for efficient nonclassical light emission. <i>Optics Express</i> , 2016 , 24, 20904	3.24	16
253	Numerical Investigation of Vertical Cavity Lasers With High-Contrast Gratings Using the Fourier Modal Method. <i>Journal of Lightwave Technology</i> , 2016 , 34, 4240-4251	4	7
252	Scattering of two photons on a quantum emitter in a one-dimensional waveguide: exact dynamics and induced correlations. <i>New Journal of Physics</i> , 2015 , 17, 023030	2.9	29
251	Strong nonlinearity-induced correlations for counterpropagating photons scattering on a two-level emitter. <i>Physical Review A</i> , 2015 , 91,	2.6	11
250	Ultracompact resonator with high quality-factor based on a hybrid grating structure. <i>Optics Express</i> , 2015 , 23, 14913-21	3.3	17
249	Thermal analysis of line-defect photonic crystal lasers. <i>Optics Express</i> , 2015 , 23, 18277-87	3.3	8
248	Ultrafast all-optical modulation using a photonic-crystal Fano structure with broken symmetry. <i>Optics Letters</i> , 2015 , 40, 2357-60	3	29
247	III-V/SOI vertical cavity laser structure for 120 Gbit/s speed 2015 ,		2
246	Observation of resonance fluorescence and the Mollow triplet from a coherently driven site-controlled quantum dot. <i>Optica</i> , 2015 , 2, 1072	8.6	16
245	Hybrid vertical-cavity laser with lateral emission into a silicon waveguide. <i>Laser and Photonics Reviews</i> , 2015 , 9, L11	8.3	31
244	Impact of slow-light enhancement on optical propagation in active semiconductor photonic-crystal waveguides. <i>Physical Review A</i> , 2015 , 92,	2.6	3

243	Two-photon interference from a quantum dot microcavity: Persistent pure dephasing and suppression of time jitter. <i>Physical Review B</i> , 2015 , 91,	3.3	24
242	Vertical-cavity in-plane heterostructures: Physics and applications. <i>Applied Physics Letters</i> , 2015 , 107, 181107	3.4	17
241	Highly directive and Gaussian far-field emission from giant photonic trumpets. <i>Applied Physics Letters</i> , 2015 , 107, 141106	3.4	25
240	Ultrafast low-energy all-optical switching using a photonic-crystal asymmetric Fano structure 2015 ,		2
239	Semianalytical quasi-normal mode theory for the local density of states in coupled photonic crystal cavity-waveguide structures. <i>Optics Letters</i> , 2015 , 40, 5790-3	3	15
238	Laser Rate Equation-Based Filtering for Carrier Recovery in Characterization and Communication. <i>Journal of Lightwave Technology</i> , 2015 , 33, 3271-3279	4	8
237	Nonreciprocal transmission in a nonlinear photonic-crystal Fano structure with broken symmetry. <i>Laser and Photonics Reviews</i> , 2015 , 9, 241-247	8.3	95
236	Effect of In-plane Mirror Dispersion on Vertical Cavities Based on High-Contrast Grating Mirrors 2015 ,		2
235	Decoherence in semiconductor cavity QED systems due to phonon couplings. <i>Physical Review B</i> , 2014 , 90,	3.3	28
234	Wavelength Conversion of a 9.35-Gb/s RZ OOK Signal in an InP Photonic Crystal Nanocavity. <i>IEEE Photonics Technology Letters</i> , 2014 , 26, 257-260	2.2	15
233	Noise Spectrum of a Semiconductor Optical Amplifier Excited by a Modulated Signal. <i>IEEE Journal of Quantum Electronics</i> , 2014 , 50, 243-254	2	1
232	Fano resonance control in a photonic crystal structure and its application to ultrafast switching. <i>Applied Physics Letters</i> , 2014 , 105, 061117	3.4	74
231	Slow-light-enhanced gain in active photonic crystal waveguides. <i>Nature Communications</i> , 2014 , 5, 5039	17.4	48
230	All-optical signal processing using InP photonic-crystal nanocavity switches 2014 ,		1
229	Photonic crystal Fano laser: terahertz modulation and ultrashort pulse generation. <i>Physical Review Letters</i> , 2014 , 113, 163901	7.4	45
228	Roundtrip matrix method for calculating the leaky resonant modes of open nanophotonic structures. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014 , 31, 2142-51	1.8	20
227	Dual-resonances approach to broadband cavity-assisted optical signal processing beyond the carrier relaxation rate. <i>Optics Letters</i> , 2014 , 39, 3189-92	3	1
226	Bright single photon source based on self-aligned quantum dot-cavity systems. <i>Optics Express</i> , 2014 , 22, 8136-42	3.3	36

225	Hybrid grating reflector with high reflectivity and broad bandwidth. <i>Optics Express</i> , 2014 , 22, 21175-84	3.3	20
224	Nonlinear switching dynamics in a photonic-crystal nanocavity. <i>Applied Physics Letters</i> , 2014 , 105, 071112	3.4	13
223	Comparison of different numerical methods for quality factor calculation of nano and micro photonic cavities 2014 ,		2
222	Low-power 10 Gbit/s RZ-OOK all-optical modulation using a novel photonic-crystal Fano switch 2014 ,		1
221	Random nanolasing in the Anderson localized regime. <i>Nature Nanotechnology</i> , 2014 , 9, 285-9	28.7	117
220	Ultra-fast low energy switching using an InP photonic crystal H0 nanocavity 2013 ,		2
219	Dynamical Properties of Nanolasers Based on Few Discrete Emitters. <i>IEEE Journal of Quantum Electronics</i> , 2013 , 49, 945-954	2	18
218	Modeling and Design of High-Efficiency Single-Photon Sources. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013 , 19, 1-16	3.8	26
217	Heterodyne pump probe measurements of nonlinear dynamics in an indium phosphide photonic crystal cavity. <i>Applied Physics Letters</i> , 2013 , 103, 181120	3.4	24
216	Microscopic theory of indistinguishable single-photon emission from a quantum dot coupled to a cavity: The role of non-Markovian phonon-induced decoherence. <i>Physical Review B</i> , 2013 , 87,	3.3	42
215	Proposed quenching of phonon-induced processes in photoexcited quantum dots due to electron-hole asymmetries. <i>Physical Review Letters</i> , 2013 , 110, 087401	7.4	12
214	Dielectric GaAs antenna ensuring an efficient broadband coupling between an InAs quantum dot and a Gaussian optical beam. <i>Physical Review Letters</i> , 2013 , 110, 177402	7.4	99
213	Theory of nanolaser devices: Rate equation analysis versus microscopic theory. <i>Physical Review B</i> , 2013 , 87,	3.3	21
212	VCSELs with a high-index-contrast grating for mode-division multiplexing 2013 ,		1
211	Improved switching using Fano resonances in photonic crystal structures. <i>Optics Letters</i> , 2013 , 38, 2466-8		83
210	A comparison between experiment and theory on few-quantum-dot nanolasing in a photonic-crystal cavity. <i>Optics Express</i> , 2013 , 21, 28507-12	3.3	6
209	Theory of carrier depletion and light amplification in active slow light photonic crystal waveguides. <i>Optics Express</i> , 2013 , 21, 29392-400	3.3	4
208	Switching characteristics of an InP photonic crystal nanocavity: experiment and theory. <i>Optics Express</i> , 2013 , 21, 31047-61	3.3	37

207	Polarization-independent high-index contrast grating and its fabrication tolerances. <i>Applied Optics</i> , 2013 , 52, 1049-53	1.7	24
206	The role of phonon scattering in the indistinguishability of photons emitted from semiconductor cavity QED systems. <i>New Journal of Physics</i> , 2013 , 15, 035027	2.9	33
205	High beta lasing in micropillar cavities with adiabatic layer design. <i>Applied Physics Letters</i> , 2013 , 102, 052114	3.4	18
204	Auger processes mediating the nonresonant optical emission from a semiconductor quantum dot embedded inside an optical cavity. <i>Physical Review Letters</i> , 2013 , 111, 067403	7.4	7
203	Measuring the effective phonon density of states of a quantum dot in cavity quantum electrodynamics. <i>Physical Review B</i> , 2013 , 88,	3.3	20
202	Optimal switching using coherent control. <i>Applied Physics Letters</i> , 2013 , 102, 041107	3.4	11
201	Three-dimensional integral equation approach to light scattering, extinction cross sections, local density of states, and quasi-normal modes. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2013 , 30, 1996	1.7	20
200	Speed enhancement in VCSELs employing grating mirrors 2013 ,		2
199	Fundamental limitations to gain enhancement in periodic media and waveguides. <i>Physical Review Letters</i> , 2012 , 108, 183903	7.4	32
198	Resonance fluorescence from semiconductor quantum dots: beyond the Mollow triplet. <i>Physical Review Letters</i> , 2012 , 108, 017401	7.4	34
197	Spontaneous emission from large quantum dots in nanostructures: Exciton-photon interaction beyond the dipole approximation. <i>Physical Review B</i> , 2012 , 86,	3.3	37
196	Nonlinear carrier dynamics in a quantum dash optical amplifier. <i>New Journal of Physics</i> , 2012 , 14, 013042.9		8
195	Multiple-scattering formalism beyond the quasistatic approximation: Analyzing resonances in plasmonic chains 2012 ,		1
194	Modeling of cavities using the analytic modal method and an open geometry formalism. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2012 , 29, 1237-46	1.8	3
193	Systematic design of loss-engineered slow-light waveguides. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2012 , 29, 2657-66	1.8	16
192	Quantum-dot nano-cavity lasers with Purcell-enhanced stimulated emission. <i>Applied Physics Letters</i> , 2012 , 100, 131107	3.4	30
191	Experimental demonstration of a four-port photonic crystal cross-waveguide structure. <i>Applied Physics Letters</i> , 2012 , 101, 251113	3.4	23
190	Microscopic theory of phonon-induced effects on semiconductor quantum dot decay dynamics in cavity QED. <i>Physical Review B</i> , 2012 , 86,	3.3	43

189	Linearly polarized, single-mode spontaneous emission in a photonic nanowire. <i>Physical Review Letters</i> , 2012 , 108, 077405	7.4	35
188	Enhanced gain in photonic crystal amplifiers 2012 ,		1
187	A Non-Hermitian Approach to Non-Linear Switching Dynamics in Coupled Cavity-Waveguide Systems 2012 ,		1
186	Active III \bar{V} semiconductor photonic crystal waveguides 2011 ,		1
185	The Influence of Optical Filtering on the Noise Performance of Microwave Photonic Phase Shifters Based on SOAs. <i>Journal of Lightwave Technology</i> , 2011 , 29, 1746-1752	4	5
184	Simple and efficient methods for the accurate evaluation of patterning effects in ultrafast photonic switches. <i>Optics Express</i> , 2011 , 19, 155-61	3.3	7
183	Energy-bandwidth trade-off in all-optical photonic crystal microcavity switches. <i>Optics Express</i> , 2011 , 19, 18410-22	3.3	15
182	High-index-contrast grating reflector with beam steering ability for the transmitted beam. <i>Optics Express</i> , 2011 , 19, 23567-72	3.3	33
181	Demultiplexing of OTDM-DPSK signals based on a single semiconductor optical amplifier and optical filtering. <i>Optics Letters</i> , 2011 , 36, 1560-2	3	0
180	Coherent single-photon absorption by single emitters coupled to one-dimensional nanophotonic waveguides. <i>New Journal of Physics</i> , 2011 , 13, 103010	2.9	44
179	Dependence of the modulation response of quantum dot based nanocavity devices on the number of emitters. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 1145-1148		1
178	Modulation response of quantum dot nanolight-emitting-diodes exploiting purcell-enhanced spontaneous emission. <i>Applied Physics Letters</i> , 2011 , 98, 211109	3.4	15
177	Tunable true-time delay of a microwave photonic signal realized by cross gain modulation in a semiconductor waveguide. <i>Applied Physics Letters</i> , 2011 , 99, 231102	3.4	4
176	Decay dynamics of radiatively coupled quantum dots in photonic crystal slabs. <i>Physical Review B</i> , 2011 , 83,	3.3	25
175	Phase-locking regimes of photonic crystal nanocavity laser arrays. <i>Applied Physics Letters</i> , 2011 , 99, 251104	3.4	3
174	Switch-on dynamics of nanocavity laser devices. <i>Applied Physics Letters</i> , 2011 , 99, 151110	3.4	7
173	Influence of carrier dynamics on the modulation bandwidth of quantum-dot based nanocavity devices. <i>Applied Physics Letters</i> , 2010 , 97, 211106	3.4	8
172	Silicon-photonics light source realized by III \bar{V} /Si-grating-mirror laser. <i>Applied Physics Letters</i> , 2010 , 97, 151113	3.4	40

171	Non-markovian model of photon-assisted dephasing by electron-phonon interactions in a coupled quantum-dot-cavity system. <i>Physical Review Letters</i> , 2010 , 104, 157401	7.4	81
170	Slow and fast light in semiconductor waveguides. <i>Semiconductor Science and Technology</i> , 2010 , 25, 083002	3.3	11
169	Ultrahigh-Frequency Microwave Phase Shifts Mediated by Ultrafast Dynamics in Quantum-Dot Semiconductor Optical Amplifiers. <i>IEEE Photonics Technology Letters</i> , 2010 , 22, 935-937	2.2	1
168	Transverse-mode-selectable microlens vertical-cavity surface-emitting laser. <i>Optics Express</i> , 2010 , 18, 4138-47	3.3	9
167	Wideband 360 degrees microwave photonic phase shifter based on slow light in semiconductor optical amplifiers. <i>Optics Express</i> , 2010 , 18, 6156-63	3.3	70
166	Modulation response of nanoLEDs and nanolasers exploiting Purcell enhanced spontaneous emission. <i>Optics Express</i> , 2010 , 18, 11230-41	3.3	67
165	Spontaneous decay of a single quantum dot coupled to a metallic slot waveguide in the presence of leaky plasmonic modes. <i>Optics Express</i> , 2010 , 18, 12489-98	3.3	25
164	Slow-light enhanced absorption in a hollow-core fiber. <i>Optics Express</i> , 2010 , 18, 14270-9	3.3	12
163	Theory of passively mode-locked photonic crystal semiconductor lasers. <i>Optics Express</i> , 2010 , 18, 18003-14	3.3	21
162	Designs for high-efficiency electrically pumped photonic nanowire single-photon sources. <i>Optics Express</i> , 2010 , 18, 21204-18	3.3	40
161	Enhancing slow- and fast-light effects in quantum-dot semiconductor waveguides through ultrafast dynamics. <i>Optics Letters</i> , 2010 , 35, 697-9	3	8
160	Concept for phase-to-intensity conversion in SOAs by facet reflections. <i>Optics Letters</i> , 2010 , 35, 775-7	3	3
159	On the use of slow light for enhancing waveguide properties. <i>Optics Letters</i> , 2010 , 35, 2834-6	3	14
158	Light propagation in finite-sized photonic crystals: multiple scattering using an electric field integral equation. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010 , 27, 228	1.7	11
157	A scheme comparison of Autler-Townes based slow light in inhomogeneously broadened quantum dot media. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2010 , 27, 2654	1.7	11
156	Slow and Fast Light Effects and Their Applications to Microwave Photonics Using Semiconductor Optical Amplifiers. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2010 , 58, 3022-3038	4.1	27
155	High-index-contrast subwavelength grating VCSEL 2010 ,		9
154	Finite-element modeling of spontaneous emission of a quantum emitter at nanoscale proximity to plasmonic waveguides. <i>Physical Review B</i> , 2010 , 81,	3.3	104

153	Pulse Delay Measurements in Cascaded Quantum-Well Gain and Absorber Media. <i>IEEE Photonics Technology Letters</i> , 2010 , 22, 365-367	2.2	1
152	Investigation of Patterning Effects in Ultrafast SOA-Based Optical Switches. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 87-94	2	34
151	Broadband MEMS-Tunable High-Index-Contrast Subwavelength Grating Long-Wavelength VCSEL. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 1245-1253	2	33
150	Numerical and Experimental Study of the Q Factor of High- Q Micropillar Cavities. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 1470-1483	2	29
149	Modeling of Mode-Locked Coupled-Resonator Optical Waveguide Lasers. <i>IEEE Journal of Quantum Electronics</i> , 2010 , 46, 1804-1812	2	5
148	Oscillatory variations in the Q factors of high quality micropillar cavities. <i>Applied Physics Letters</i> , 2009 , 94, 061108	3.4	21
147	Slow light in quantum dot photonic crystal waveguides. <i>Applied Physics Letters</i> , 2009 , 94, 113111	3.4	19
146	Vectorial analysis of dielectric photonic crystal VCSEL 2009 ,		2
145	Investigation of patterning effect in ultrafast SOA-based optical switches 2009 ,		3
144	Slow and fast light: Controlling the speed of light using semiconductor waveguides. <i>Laser and Photonics Reviews</i> , 2009 , 3, 30-44	8.3	22
143	2R-Regeneration in a monolithically integrated four-section SOA χ A chip. <i>Optics Communications</i> , 2009 , 282, 117-121	2	6
142	Slow light pulse propagation in dispersive media. <i>Comptes Rendus Physique</i> , 2009 , 10, 957-963	1.4	2
141	Comparison of electromagnetically induced transparency schemes in semiconductor quantum dot structures: Impact of many-body interactions. <i>Physical Review B</i> , 2009 , 79,	3.3	21
140	Selectively-pumped grating-mirror long wavelength VCSEL 2009 ,		1
139	Microwave phase shifter with controllable power response based on slow- and fast-light effects in semiconductor optical amplifiers. <i>Optics Letters</i> , 2009 , 34, 929-31	3	40
138	Photonic generation of ultrawideband monocycle and doublet pulses by using a semiconductor-optical-amplifier-based wavelength converter. <i>Optics Letters</i> , 2009 , 34, 1336-8	3	12
137	The role of input chirp on phase shifters based on slow and fast light effects in semiconductor optical amplifiers. <i>Optics Express</i> , 2009 , 17, 1404-13	3.3	9
136	Widely Tunable Microwave Photonic Notch Filter Based on Slow and Fast Light Effects. <i>IEEE Photonics Technology Letters</i> , 2009 , 21, 167-169	2.2	55

135	Reducing the impact of inhomogeneous broadening on quantum dot based electromagnetically induced transparency. <i>Applied Physics Letters</i> , 2009 , 94, 071108	3.4	26
134	Quantum dot waveguides: Ultrafast dynamics and applications 2009 ,		1
133	Optical properties and optimization of electromagnetically induced transparency in strained InAs/GaAs quantum dot structures. <i>Physical Review B</i> , 2009 , 80,	3.3	36
132	General Method for Calculating the Response and Noise Spectra of Active FabryPerot Semiconductor Waveguides With External Optical Injection. <i>IEEE Journal of Quantum Electronics</i> , 2009 , 45, 950-963	2	3
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6	Measurement of the amplitude and phase transfer functions of an optical modulator using a heterodyne technique	1
5	Ultrafast optical signal processing using semiconductor quantum dot amplifiers	2
4	Fast processes in semiconductor optical amplifiers: Theory and experiment	1
3	Noise properties and cascadability of SOA-EA regenerators	2
2	Electrical versus optical pumping of quantum dot amplifiers	2
1	Experimental characterisation of wavelength conversion at 40Gb/s based on electroabsorption modulators	1