Shanhui Fan

List of Publications by Year in Descending Order

279 papers	40,200 citations	89 h-index	199 g-index
313 ext. papers	48,289 ext. citations	9.8 avg, IF	7.89 L-index

#	Paper	IF	Citations
279	Lineshape study of optical force spectra on resonant structures.. *Optics Express*, **2022**, 30, 6142-6160	3.3	
278	Protecting ice from melting under sunlight via radiative cooling.. *Science Advances*, **2022**, 8, eabj9756	14.3	9
277	Spectral emissivity modeling in multi-resonant systems using coupled-mode theory.. *Optics Express*, **2022**, 30, 9463-9472	3.3	0
276	Observation of Weyl exceptional rings in thermal diffusion.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2110018119	11.5	1
275	Nighttime electric power generation at a density of 50 mW/m2 via radiative cooling of a photovoltaic cell. *Applied Physics Letters*, **2022**, 120, 143901	3.4	1
274	Nonreciprocal infrared absorption via resonant magneto-optical coupling to InAs.. *Science Advances* , **2022**, 8, eabm4308	14.3	9
273	Temporal modulation brings metamaterials into new era. *Light: Science and Applications*, **2022**, 11,	16.7	1
272	Adaptive four-level modeling of laser cooling of solids. *Applied Physics Letters*, **2021**, 119, 181107	3.4	0
271	Subambient daytime radiative cooling textile based on nanoprocessed silk. *Nature Nanotechnology*, **2021**,	28.7	28
270	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. *Nature Communications*, **2021**, 12, 6122	17.4	17
269	Transforming heat transfer with thermal metamaterials and devices. *Nature Reviews Materials*, **2021**, 6, 488-507	73.3	68
268	Nondissipative non-Hermitian dynamics and exceptional points in coupled optical parametric oscillators. *Optica*, **2021**, 8, 415	8.6	6
267	Theory for Twisted Bilayer Photonic Crystal Slabs. *Physical Review Letters*, **2021**, 126, 136101	7.4	17
266	Photonic Modal Circulator Using Temporal Refractive-Index Modulation with Spatial Inversion Symmetry. *Physical Review Letters*, **2021**, 126, 193901	7.4	3
265	Scalable and hierarchically designed polymer film as a selective thermal emitter for high-performance all-day radiative cooling. *Nature Nanotechnology*, **2021**, 16, 153-158	28.7	132
264	Nighttime Radiative Cooling for Water Harvesting from Solar Panels. *ACS Photonics*, **2021**, 8, 269-275	6.3	14
263	Self-Focused Thermal Emission and Holography Realized by Mesoscopic Thermal Emitters. *ACS Photonics*, **2021**, 8, 497-504	6.3	6

262	Three-Dimensional Printable Nanoporous Polymer Matrix Composites for Daytime Radiative Cooling. *Nano Letters*, **2021**, 21, 1493-1499	11.5	34
261	Synthetic frequency dimensions in dynamically modulated ring resonators. *APL Photonics*, **2021**, 6, 071102	5.2	5
260	Generation of guided space-time wave packets using multilevel indirect photonic transitions in integrated photonics. *Physical Review Research*, **2021**, 3,	3.9	2
259	Configurable Phase Transitions in a Topological Thermal Material. *Physical Review Letters*, **2021**, 127, 105901	7.4	7
258	Nontrivial point-gap topology and non-Hermitian skin effect in photonic crystals. *Physical Review B*, **2021**, 104,	3.3	4
257	Inverse-designed non-reciprocal pulse router for chip-based LiDAR. *Nature Photonics*, **2020**, 14, 369-374	33.9	73
256	Nonreciprocal Metamaterial Obeying Time-Reversal Symmetry. *Physical Review Letters*, **2020**, 124, 257403	7.4	4
255	Bounds for Scattering from Absorptionless Electromagnetic Structures. *Physical Review Applied*, **2020**, 14,	4.3	6
254	Fundamental Limits of the Dew-Harvesting Technology. *Nanoscale and Microscale Thermophysical Engineering*, **2020**, 24, 43-52	3.7	12
253	Photonic Refrigeration from Time-Modulated Thermal Emission. *Physical Review Letters*, **2020**, 124, 077402	7.4	9
252	Nonreciprocal radiative heat transfer between two planar bodies. *Physical Review B*, **2020**, 101,	3.3	9
251	Thermodynamic limits for simultaneous energy harvesting from the hot sun and cold outer space. *Light: Science and Applications*, **2020**, 9, 68	16.7	33
250	Nonreciprocity in Bianisotropic Systems with Uniform Time Modulation. *Physical Review Letters*, **2020**, 125, 266102	7.4	16
249	Non-reciprocal polarization rotation using dynamic refractive index modulation. *Optics Express*, **2020**, 28, 11974-11982	3.3	6
248	Maximal nighttime electrical power generation via optimal radiative cooling. *Optics Express*, **2020**, 28, 25460-25470	3.3	20
247	A single photonic cavity with two independent physical synthetic dimensions. *Science*, **2020**, 367, 59-64	33.3	87
246	Ultrafast pyroelectric photodetection with on-chip spectral filters. *Nature Materials*, **2020**, 19, 158-162	27	53
245	Integrated Nonreciprocal Photonic Devices With Dynamic Modulation. *Proceedings of the IEEE*, **2020**, 108, 1759-1784	14.3	13

244	Higher-order topological insulators in synthetic dimensions. *Light: Science and Applications*, **2020**, 9, 131	16.7	27
243	Single-Photon Transport in a Topological Waveguide from a Dynamically Modulated Photonic System. *Physical Review Applied*, **2020**, 14,	4.3	1
242	Terrestrial radiative cooling: Using the cold universe as a renewable and sustainable energy source. *Science*, **2020**, 370, 786-791	33.3	110
241	Tutorial on Electromagnetic Nonreciprocity and its Origins. *Proceedings of the IEEE*, **2020**, 108, 1684-1727	14.3	35
240	Creating an Eco-Friendly Building Coating with Smart Subambient Radiative Cooling. *Advanced Materials*, **2020**, 32, e1906751	24	68
239	Sub-Wavelength Passive Optical Isolators Using Photonic Structures Based on Weyl Semimetals. *Advanced Optical Materials*, **2020**, 8, 2000100	8.1	26
238	Generating Light from Darkness. *Joule*, **2019**, 3, 2679-2686	27.8	73
237	Fano resonance principles in photonic crystal slabs. *Semiconductors and Semimetals*, **2019**, 1-12	0.6	
236	Broadband Optical Switch based on an Achromatic Photonic Gauge Potential in Dynamically Modulated Waveguides. *Physical Review Applied*, **2019**, 11,	4.3	5
235	Experimental demonstration of energy harvesting from the sky using the negative illumination effect of a semiconductor photodiode. *Applied Physics Letters*, **2019**, 114, 161102	3.4	23
234	Connection of temporal coupled-mode-theory formalisms for a resonant optical system and its time-reversal conjugate. *Physical Review A*, **2019**, 99,	2.6	21
233	Photonic Gauge Potential in One Cavity with Synthetic Frequency and Orbital Angular Momentum Dimensions. *Physical Review Letters*, **2019**, 122, 083903	7.4	27
232	Experimental band structure spectroscopy along a synthetic dimension. *Nature Communications*, **2019**, 10, 3122	17.4	45
231	Penetration Depth Reduction with Plasmonic Metafilms. *ACS Photonics*, **2019**, 6, 2049-2055	6.3	2
230	Anti-parity-time symmetry in diffusive systems. *Science*, **2019**, 364, 170-173	33.3	116
229	Wave optics light-trapping theory: mathematical justification and ultimate limit on enhancement. *Journal of the Optical Society of America B: Optical Physics*, **2019**, 36, 2414	1.7	1
228	Nighttime radiative cooling in hot and humid climates. *Optics Express*, **2019**, 27, 31587-31598	3.3	33
227	Compact dynamic optical isolator based on tandem phase modulators. *Optics Letters*, **2019**, 44, 2240-2243	3	12

226	Doubly resonant (Ω/2) nonlinear photonic crystal cavity based on a bound state in the continuum. *Optica*, **2019**, 6, 1039	8.6	44
225	Simultaneously and Synergistically Harvest Energy from the Sun and Outer Space. *Joule*, **2019**, 3, 101-110	27.8	71
224	Direction-dependent parity-time phase transition and nonreciprocal amplification with dynamic gain-loss modulation. *Physical Review A*, **2019**, 99,	2.6	22
223	Electronically programmable photonic molecule. *Nature Photonics*, **2019**, 13, 36-40	33.9	77
222	Nonreciprocal Optical Dissipation Based on Direction-Dependent Rabi Splitting. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-7	3.8	10
221	Thermodynamic limits of energy harvesting from outgoing thermal radiation. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E3609-E3615	11.5	46
220	Effects of non-Hermitian perturbations on Weyl Hamiltonians with arbitrary topological charges. *Physical Review B*, **2018**, 97,	3.3	75
219	Metamaterials for radiative sky cooling. *National Science Review*, **2018**, 5, 132-133	10.8	35
218	Nanoporous polyethylene microfibres for large-scale radiative cooling fabric. *Nature Sustainability*, **2018**, 1, 105-112	22.1	206
217	Accelerating convergence of an iterative solution of finite difference frequency domain problems via schur complement domain decomposition. *Optics Express*, **2018**, 26, 16925-16939	3.3	2
216	Adjoint-based optimization of active nanophotonic devices. *Optics Express*, **2018**, 26, 3236-3248	3.3	23
215	Self-adaptive radiative cooling based on phase change materials. *Optics Express*, **2018**, 26, A777-A787	3.3	105
214	Relation between absorption and emission directivities for dipoles coupled with optical antennas. *Physical Review A*, **2018**, 98,	2.6	3
213	Nanophotonic control of thermal radiation for energy applications [Invited]. *Optics Express*, **2018**, 26, 15995-16021	3.3	151
212	Nonreciprocal Photonics Without Magneto-Optics. *IEEE Antennas and Wireless Propagation Letters*, **2018**, 17, 1948-1952	3.8	12
211	Spectrally Selective Nanocomposite Textile for Outdoor Personal Cooling. *Advanced Materials*, **2018**, 30, e1802152	24	181
210	Broadband Control of Topological Nodes in Electromagnetic Fields. *Physical Review Letters*, **2018**, 120, 193903	7.4	1
209	Effective electric-field force for a photon in a synthetic frequency lattice created in a waveguide modulator. *Physical Review A*, **2018**, 97,	2.6	22

208	Synthetic dimension in photonics. *Optica*, **2018**, 5, 1396	8.6	133
207	Optimization of Multilayer Optical Films with a Memetic Algorithm and Mixed Integer Programming. *ACS Photonics*, **2018**, 5, 684-691	6.3	70
206	Zero-Index Bound States in the Continuum. *Physical Review Letters*, **2018**, 121, 263901	7.4	55
205	Unidirectional light transport in dynamically modulated waveguides. *Physical Review Applied*, **2018**, 10,	4.3	6
204	Photonic thermal management of coloured objects. *Nature Communications*, **2018**, 9, 4240	17.4	80
203	A three-dimensional photonic topological insulator using a two-dimensional ring resonator lattice with a synthetic frequency dimension. *Science Advances*, **2018**, 4, eaat2774	14.3	41
202	Pulse shortening in an actively mode-locked laser with parity-time symmetry. *APL Photonics*, **2018**, 3, 086103	5.2	13
201	Daytime Radiative Cooling Using Near-Black Infrared Emitters. *ACS Photonics*, **2017**, 4, 626-630	6.3	333
200	Synthetic gauge potential and effective magnetic field in a Raman medium undergoing molecular modulation. *Physical Review A*, **2017**, 95,	2.6	6
199	Universal modal radiation laws for all thermal emitters. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4336-4341	11.5	47
198	Unidirectional reflectionless light propagation at exceptional points. *Nanophotonics*, **2017**, 6, 977-996	6.3	47
197	Exact solution to the steady-state dynamics of a periodically modulated resonator. *APL Photonics*, **2017**, 2, 076101	5.2	31
196	Robust wireless power transfer using a nonlinear parity-time-symmetric circuit. *Nature*, **2017**, 546, 387-390	36.4	292
195	A Comprehensive Photonic Approach for Solar Cell Cooling. *ACS Photonics*, **2017**, 4, 774-782	6.3	166
194	Photonic Chern insulator through homogenization of an array of particles. *Physical Review B*, **2017**, 96,	3.3	20
193	Creating anyons from photons using a nonlinear resonator lattice subject to dynamic modulation. *Physical Review A*, **2017**, 96,	2.6	3
192	Topologically Protected Complete Polarization Conversion. *Physical Review Letters*, **2017**, 119, 167401	7.4	50
191	Non-reciprocal geometric phase in nonlinear frequency conversion. *Optics Letters*, **2017**, 42, 1990-1993	3	17

190	Warming up human body by nanoporous metallized polyethylene textile. *Nature Communications*, **2017**, 8, 496	17.4	162
189	Sub-ambient non-evaporative fluid cooling with the sky. *Nature Energy*, **2017**, 2,	62.3	218
188	Theory of solar cell light trapping through a nonequilibrium GreenS function formulation of MaxwellS equations. *Physical Review B*, **2017**, 96,	3.3	10
187	Thermal Photonics and Energy Applications. *Joule*, **2017**, 1, 264-273	27.8	90
186	A dual-mode textile for human body radiative heating and cooling. *Science Advances*, **2017**, 3, e1700895	14.3	222
185	Complete photonic band gaps in supercell photonic crystals. *Physical Review A*, **2017**, 96,	2.6	19
184	Achieving Arbitrary Control over Pairs of Polarization States Using Complex Birefringent Metamaterials. *Physical Review Letters*, **2017**, 118, 253902	7.4	29
183	Optical Circulation and Isolation Based on Indirect Photonic Transitions of Guided Resonance Modes. *ACS Photonics*, **2017**, 4, 1639-1645	6.3	53
182	Passive cooling of solar cells with a comprehensive photonic approach **2017**,		2
181	Radiative human body cooling by nanoporous polyethylene textile. *Science*, **2016**, 353, 1019-1023	33.3	464
180	Bloch oscillation and unidirectional translation of frequency in a dynamically modulated ring resonator. *Optica*, **2016**, 3, 1014	8.6	57
179	Plasmonic Circuit Theory for Multiresonant Light Funneling to a Single Spatial Hot Spot. *Nano Letters*, **2016**, 16, 5764-9	11.5	13
178	Thermal-to-electrical energy conversion by diodes under negative illumination. *Physical Review B*, **2016**, 93,	3.3	49
177	Exceptional Contours and Band Structure Design in Parity-Time Symmetric Photonic Crystals. *Physical Review Letters*, **2016**, 116, 203902	7.4	77
176	Fano interference in two-photon transport. *Physical Review A*, **2016**, 94,	2.6	5
175	Highly tunable refractive index visible-light metasurface from block copolymer self-assembly. *Nature Communications*, **2016**, 7, 12911	17.4	109
174	Time reversal of a wave packet with temporal modulation of gauge potential. *Physical Review B*, **2016**, 94,	3.3	13
173	Roadmap on optical energy conversion. *Journal of Optics (United Kingdom)*, **2016**, 18, 073004	1.7	69

172	Photonic gauge potential in a system with a synthetic frequency dimension. *Optics Letters*, **2016**, 41, 741-4	3	119
171	Broadband Absorption Enhancement in Solar Cells with an Atomically Thin Active Layer. *ACS Photonics*, **2016**, 3, 571-577	6.3	46
170	Radiative cooling of solar absorbers using a transparent photonic crystal thermal blackbody **2016**,		2
169	Achieving the gauge potential for the photon in a synthetic space **2016**,		1
168	Multi-frequency finite-difference frequency-domain algorithm for active nanophotonic device simulations. *Optica*, **2016**, 3, 1256	8.6	27
167	Subwavelength Plasmonic Two-Conductor Waveguides **2016**, 1-15		
166	Effects of non-uniform distributions of gain and loss in photonic crystals. *New Journal of Physics*, **2016**, 18, 125007	2.9	7
165	Photonic Weyl point in a two-dimensional resonator lattice with a synthetic frequency dimension. *Nature Communications*, **2016**, 7, 13731	17.4	114
164	Dynamic non-reciprocal meta-surfaces with arbitrary phase reconfigurability based on photonic transition in meta-atoms. *Applied Physics Letters*, **2016**, 108, 021110	3.4	47
163	Radiative cooling to deep sub-freezing temperatures through a 24-h day-night cycle. *Nature Communications*, **2016**, 7, 13729	17.4	371
162	Photonic Structure Textile Design for Localized Thermal Cooling Based on a Fiber Blending Scheme. *ACS Photonics*, **2016**, 3, 2420-2426	6.3	40
161	Angle-selective perfect absorption with two-dimensional materials. *Light: Science and Applications*, **2016**, 5, e16052	16.7	70
160	Eigenvalue dynamics in the presence of nonuniform gain and loss. *Physical Review A*, **2016**, 94,	2.6	12
159	Roadmap on optical metamaterials. *Journal of Optics (United Kingdom)*, **2016**, 18, 093005	1.7	89
158	Theory of Half-Space Light Absorption Enhancement for Leaky Mode Resonant Nanowires. *Nano Letters*, **2015**, 15, 5513-8	11.5	13
157	Three-Dimensional Dynamic Localization of Light from a Time-Dependent Effective Gauge Field for Photons. *Physical Review Letters*, **2015**, 114, 243901	7.4	26
156	Radiative cooling of solar absorbers using a visibly transparent photonic crystal thermal blackbody. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 12282-7	11.5	301
155	Radiative cooling for solar cells **2015**,		1

154	Resonator-free realization of effective magnetic field for photons. *New Journal of Physics*, **2015**, 17, 075008	2.8	3
153	Current–Voltage Enhancement of a Single Coaxial Nanowire Solar Cell. *ACS Photonics*, **2015**, 2, 1698-1704	6.3	9
152	Condition for Perfect Resonant Antireflection. *Materials Research Society Symposia Proceedings*, **2015**, 1788, 7-12		
151	Topologically nontrivial Floquet band structure in a system undergoing photonic transitions in the ultrastrong-coupling regime. *Physical Review A*, **2015**, 92,	2.6	20
150	Analog of superradiant emission in thermal emitters. *Physical Review B*, **2015**, 92,	3.3	20
149	Limitations of nonlinear optical isolators due to dynamic reciprocity. *Nature Photonics*, **2015**, 9, 388-392	33.9	246
148	Achieving nonreciprocal unidirectional single-photon quantum transport using the photonic Aharonov-Bohm effect. *Optics Letters*, **2015**, 40, 5140-3	3	31
147	Towards ultra-thin plasmonic silicon wafer solar cells with minimized efficiency loss. *Scientific Reports*, **2014**, 4, 4939	4.9	83
146	Light management for photovoltaics using high-index nanostructures. *Nature Materials*, **2014**, 13, 451-60	27	670
145	Efficiency above the Shockley-Queisser limit by using nanophotonic effects to create multiple effective bandgaps with a single semiconductor. *Nano Letters*, **2014**, 14, 66-70	11.5	27
144	Light trapping in photonic crystals. *Energy and Environmental Science*, **2014**, 7, 2725	35.4	49
143	Optical impedance transformer for transparent conducting electrodes. *Nano Letters*, **2014**, 14, 2755-8	11.5	5
142	Detailed balance analysis and enhancement of open-circuit voltage in single-nanowire solar cells. *Nano Letters*, **2014**, 14, 1011-5	11.5	46
141	Non-reciprocal phase shift induced by an effective magnetic flux for light. *Nature Photonics*, **2014**, 8, 701-705	33.9	214
140	Light Guiding by Effective Gauge Field for Photons. *Physical Review X*, **2014**, 4,	9.1	37
139	Photonic Aharonov-Bohm effect in photon-phonon interactions. *Nature Communications*, **2014**, 5, 3225	17.4	96
138	Nearly Total Solar Absorption in Ultrathin Nanostructured Iron Oxide for Efficient Photoelectrochemical Water Splitting. *ACS Photonics*, **2014**, 1, 235-240	6.3	71
137	Progress in 2D photonic crystal Fano resonance photonics. *Progress in Quantum Electronics*, **2014**, 38, 1-74	9.1	165

136	Condition for perfect antireflection by optical resonance at material interface. *Optica*, **2014**, 1, 388	8.6	38
135	Passive radiative cooling below ambient air temperature under direct sunlight. *Nature*, **2014**, 515, 540-4	50.4	1183
134	Radiative cooling of solar cells. *Optica*, **2014**, 1, 32	8.6	285
133	Parity-time-symmetric whispering-gallery microcavities. *Nature Physics*, **2014**, 10, 394-398	16.2	1394
132	Compact bends for multi-mode photonic crystal waveguides with high transmission and suppressed modal crosstalk. *Optics Express*, **2013**, 21, 8069-75	3.3	22
131	Controlling the flow of light using the inhomogeneous effective gauge field that emerges from dynamic modulation. *Physical Review Letters*, **2013**, 111, 203901	7.4	66
130	Experimental demonstration of a photonic Aharonov-Bohm effect at radio frequencies. *Physical Review B*, **2013**, 87,	3.3	54
129	Ultrabroadband photonic structures to achieve high-performance daytime radiative cooling. *Nano Letters*, **2013**, 13, 1457-61	11.5	507
128	Enhancing far-field thermal emission with thermal extraction. *Nature Communications*, **2013**, 4, 1730	17.4	60
127	A transparent electrode based on a metal nanotrough network. *Nature Nanotechnology*, **2013**, 8, 421-5	28.7	749
126	Optimization of non-periodic plasmonic light-trapping layers for thin-film solar cells. *Nature Communications*, **2013**, 4, 2095	17.4	107
125	Fundamental bounds on decay rates in asymmetric single-mode optical resonators. *Optics Letters*, **2013**, 38, 100-2	3	54
124	Detailed balance analysis of nanophotonic solar cells. *Optics Express*, **2013**, 21, 1209-17	3.3	36
123	Photonic de Haas-van Alphen effect. *Optics Express*, **2013**, 21, 18216-24	3.3	15
122	Effective magnetic field for photons based on the magneto-optical effect. *Physical Review A*, **2013**, 88,	2.6	22
121	Fluorescence correlation spectroscopy at high concentrations using gold bowtie nanoantennas. *Chemical Physics*, **2012**, 406, 3-8	2.3	40
120	S4 : A free electromagnetic solver for layered periodic structures. *Computer Physics Communications*, **2012**, 183, 2233-2244	4.2	380
119	Comment on "Nonreciprocal light propagation in a silicon photonic circuit". *Science*, **2012**, 335, 38; author reply 38	33.3	93

118	Realizing effective magnetic field for photons by controlling the phase of dynamic modulation. *Nature Photonics*, **2012**, 6, 782-787	33.9	664
117	Photonic Aharonov-Bohm effect based on dynamic modulation. *Physical Review Letters*, **2012**, 108, 153901	7.4	240
116	Absorption enhancement in ultrathin crystalline silicon solar cells with antireflection and light-trapping nanocone gratings. *Nano Letters*, **2012**, 12, 1616-9	11.5	515
115	Hybrid silicon nanocone-polymer solar cells. *Nano Letters*, **2012**, 12, 2971-6	11.5	380
114	Broadband light management using low-Q whispering gallery modes in spherical nanoshells. *Nature Communications*, **2012**, 3, 664	17.4	174
113	Electrically driven nonreciprocity induced by interband photonic transition on a silicon chip. *Physical Review Letters*, **2012**, 109, 033901	7.4	412
112	From electromagnetically induced transparency to superscattering with a single structure: a coupled-mode theory for doubly resonant structures. *Physical Review Letters*, **2012**, 108, 083902	7.4	159
111	High-Efficiency Amorphous Silicon Solar Cell on a Periodic Nanocone Back Reflector. *Advanced Energy Materials*, **2012**, 2, 628-633	21.8	189
110	Optical Absorption Enhancement in Freestanding GaAs Thin Film Nanopyramid Arrays. *Advanced Energy Materials*, **2012**, 2, 1254-1260	21.8	42
109	Design for broadband on-chip isolator using Stimulated Brillouin Scattering in dispersion-engineered chalcogenide waveguides. *Optics Express*, **2012**, 20, 21235-46	3.3	90
108	Temporal coupled-mode theory for light scattering by an arbitrarily shaped object supporting a single resonance. *Physical Review A*, **2012**, 85,	2.6	43
107	Thermodynamic upper bound on broadband light coupling with photonic structures. *Physical Review Letters*, **2012**, 109, 173901	7.4	55
106	Absorption Enhancement in Ultrathin Solar Cells with Antireflection and Light-Trapping Nanocone Gratings **2012**,		1
105	Photonic Transition in Nanophotonics. *Springer Series in Optical Sciences*, **2012**, 343-364	0.5	
104	Complete All-Optical Silica Fiber Isolator via Stimulated Brillouin Scattering. *Journal of Lightwave Technology*, **2011**, 29, 2267-2275	4	60
103	Efficient computation of equifrequency surfaces and density of states in photonic crystals using Dirichlet-to-Neumann maps. *Journal of the Optical Society of America B: Optical Physics*, **2011**, 28, 1837	1.7	7
102	Dielectric nanostructures for broadband light trapping in organic solar cells. *Optics Express*, **2011**, 19, 19015-26	3.3	78
101	Design methodology for compact photonic-crystal-based wavelength division multiplexers. *Optics Letters*, **2011**, 36, 591-3	3	33

100	Nanophotonic light-trapping theory for solar cells. *Applied Physics A: Materials Science and Processing*, **2011**, 105, 329-339	2.6	53
99	Angular constraint on light-trapping absorption enhancement in solar cells. *Applied Physics Letters*, **2011**, 98, 011106	3.4	34
98	Dielectric nanostructures for broadband light trapping in organic solar cells **2011**,		5
97	Design and growth of III–V nanowire solar cell arrays on low cost substrates **2010**,		2
96	Exponential suppression of thermal conductance using coherent transport and heterostructures. *Physical Review B*, **2010**, 82,	3.3	1
95	Optical resonances created by photonic transitions. *Applied Physics Letters*, **2010**, 96, 011108	3.4	4
94	Nanodome solar cells with efficient light management and self-cleaning. *Nano Letters*, **2010**, 10, 1979-84	11.5	753
93	Fundamental limit of nanophotonic light trapping in solar cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 17491-6	11.5	596
92	Semiconductor nanowire optical antenna solar absorbers. *Nano Letters*, **2010**, 10, 439-45	11.5	438
91	Sensitivity enhancement in photonic crystal slab biosensors. *Optics Express*, **2010**, 18, 22702-14	3.3	134
90	Temporal coupled-mode theory for resonant apertures. *Journal of the Optical Society of America B: Optical Physics*, **2010**, 27, 1947	1.7	56
89	Fundamental limit of light trapping in grating structures. *Optics Express*, **2010**, 18 Suppl 3, A366-80	3.3	261
88	Efficient treatment of dispersive electric permittivity in finite-difference time-domain simulations of advanced photonic devices **2010**,		2
87	Dynamic photonic structure for integrated photonics **2010**,		1
86	Integrated Nonmagnetic Optical Isolators Based on Photonic Transitions ^{ast}. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 459-466	3.8	27
85	Nanostructured photon management for high performance solar cells. *Materials Science and Engineering Reports*, **2010**, 70, 330-340	30.9	129
84	Slow and Stopped Light in Coupled Resonator Systems. *Springer Series in Optical Sciences*, **2010**, 165-180	0.5	1
83	Optical isolation based on nonreciprocal phase shift induced by interband photonic transitions. *Applied Physics Letters*, **2009**, 94, 171116	3.4	52

82	Theory of single-photon transport in a single-mode waveguide. I. Coupling to a cavity containing a two-level atom. *Physical Review A*, **2009**, 79,	2.6	266
81	Complete optical isolation created by indirect interband photonic transitions. *Nature Photonics*, **2009**, 3, 91-94	33.9	713
80	Large single-molecule fluorescence enhancements produced by a bowtie nanoantenna. *Nature Photonics*, **2009**, 3, 654-657	33.9	1550
79	Absorber and emitter for solar thermo-photovoltaic systems to achieve efficiency exceeding the Shockley-Queisser limit. *Optics Express*, **2009**, 17, 15145-59	3.3	309
78	Optical absorption enhancement in amorphous silicon nanowire and nanocone arrays. *Nano Letters*, **2009**, 9, 279-82	11.5	1062
77	GaN-based two-dimensional surface-emitting photonic crystal lasers with AlN/GaN distributed Bragg reflector. *Applied Physics Letters*, **2008**, 92, 011129	3.4	57
76	One-way electromagnetic waveguide formed at the interface between a plasmonic metal under a static magnetic field and a photonic crystal. *Physical Review Letters*, **2008**, 100, 023902	7.4	343
75	Aligning microcavity resonances in silicon photonic-crystal slabs using laser-pumped thermal tuning. *Applied Physics Letters*, **2008**, 92, 103114	3.4	32
74	Photonic crystal theory **2008**, 431-454		3
73	Manipulating light with photonic crystals. *Physica B: Condensed Matter*, **2007**, 394, 221-228	2.8	14
72	The nonlinear effect from the interplay between the nonlinearity and the supercollimation of photonic crystal. *Applied Physics Letters*, **2007**, 91, 031105	3.4	14
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