Shanhui Fan

List of Publications by Year
in descending order

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295	40,211	2423	2617
papers	citations	97 h-index	194 g-index

300	300	300	17826
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prospects and applications of photonic neural networks. Advances in Physics: X, 2022, 7, .	1.5	54
2	Roadmap on topological photonics. JPhys Photonics, 2022, 4, 032501.	2.2	56
3	Photonics and thermodynamics concepts in radiative cooling. Nature Photonics, 2022, 16, 182-190.	15.6	187
4	Lineshape study of optical force spectra on resonant structures. Optics Express, 2022, 30, 6142.	1.7	1
5	Polarization-Independent Isotropic Nonlocal Metasurfaces with Wavelength-Controlled Functionality. Physical Review Applied, 2022, 17, .	1.5	14
6	Efficient method for accelerating line searches in adjoint optimization of photonic devices by combining Schur complement domain decomposition and Born series expansions. Optics Express, 2022, 30, 6413.	1.7	5
7	Protecting ice from melting under sunlight via radiative cooling. Science Advances, 2022, 8, eabj9756.	4.7	80
8	Tunable Frequency Filter Based on Twisted Bilayer Photonic Crystal Slabs. ACS Photonics, 2022, 9, 800-805.	3.2	14
9	Internal transformations and internal symmetries in linear photonic systems. Physical Review A, 2022, 105, .	1.0	11
10	Topological dissipation in a time-multiplexed photonic resonator network. Nature Physics, 2022, 18, 442-449.	6.5	58
11	Topological Materials for Functional Optoelectronic Devices. Advanced Functional Materials, 2022, 32, .	7.8	15
12	Design of Compact Meta-Crystal Slab for General Optical Convolution. ACS Photonics, 2022, 9, 1358-1365.	3.2	12
13	Subwavelength Bayer RGB color routers with perfect optical efficiency. Nanophotonics, 2022, 11, 2381-2387.	2.9	11
14	Spectral emissivity modeling in multi-resonant systems using coupled-mode theory. Optics Express, 2022, 30, 9463.	1.7	7
15	Violation of Kirchhoffâ€™s Law of Thermal Radiation with Spaceâ€“Time Modulated Grating. ACS Photonics, 2022, 9, 1157-1164.	3.2	13
16	Observation of Weyl exceptional rings in thermal diffusion. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2110018119.	3.3	21
17	Nighttime electric power generation at a density of 50â€‰mW/m2 via radiative cooling of a photovoltaic cell. Applied Physics Letters, 2022, 120, .	1.5	21
18	Concentrated radiative cooling and its constraint from reciprocity. Optics Express, 2022, 30, 275.	1.7	12

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19	Coloured low-emissivity films for building envelopes for year-round energy savings. Nature Sustainability, 2022, 5, 339-347.	11.5	80
20	Reaching the Ultimate Efficiency of Solar Energy Harvesting with a Nonreciprocal Multijunction Solar Cell. Nano Letters, 2022, 22, 448-452.	4.5	56
21	Low-overhead distribution strategy for simulation and optimization of large-area metasurfaces. Npj Computational Materials, 2022, 8, .	3.5	19
22	Nonreciprocal infrared absorption via resonant magneto-optical coupling to InAs. Science Advances, 2022, 8, eabm4308.	4.7	58
23	Truncation-dependent <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="script">PT</mml:mi></mml:math> phase transition for the edge states of a two-dimensional non-Hermitian system. Physical Review B, 2022, 105, .	1.1	6
24	Adjoint Kirchhoffâ€™s Law and General Symmetry Implications for All Thermal Emitters. Physical Review X, 2022, 12, .	2.8	15
25	Creating boundaries along a synthetic frequency dimension. Nature Communications, 2022, 13, .	5.8	21
26	Temporal modulation brings metamaterials into new era. Light: Science and Applications, 2022, 11, .	7.7	10
27	Trajectory tracking through the control of non-equilibrium Casimir force. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 289, 108281.	1.1	2
28	Mirror symmetric on-chip frequency circulation of light. Nature Photonics, 2022, 16, 603-608.	15.6	12
29	Perfect RGBâ€IR Color Routers for Subâ€Wavelength Size CMOS Image Sensor Pixels. Advanced Photonics Research, 2021, 2, 2000048.	1.7	31
30	Scalable and hierarchically designed polymer film as a selective thermal emitter for high-performance all-day radiative cooling. Nature Nanotechnology, 2021, 16, 153-158.	15.6	405
31	Nighttime Radiative Cooling for Water Harvesting from Solar Panels. ACS Photonics, 2021, 8, 269-275.	3.2	41
32	Photonic arbitrary linear transformations in the frequency synthetic dimension. , 2021, , .		1
33	Self-Focused Thermal Emission and Holography Realized by Mesoscopic Thermal Emitters. ACS Photonics, 2021, 8, 497-504.	3.2	18
34	Arbitrary control and direct measurement of topological windings of a non-Hermitian band. , 2021, , .		0
35	Dynamic band structure measurement in the synthetic space. Science Advances, 2021, 7, .	4.7	31
36	Three-Dimensional Printable Nanoporous Polymer Matrix Composites for Daytime Radiative Cooling. Nano Letters, 2021, 21, 1493-1499.	4.5	102

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37	Inverse design of relativistic lightsail for efficient propulsion. , 2021, , .		0
38	Topological optical differentiator. Nature Communications, 2021, 12, 680.	5.8	94
39	Atomic-Scale Control of Coherent Thermal Radiation. ACS Photonics, 2021, 8, 872-878.	3.2	15
40	Transforming heat transfer with thermal metamaterials and devices. Nature Reviews Materials, 2021, 6, 488-507.	23.3	270
41	Generating arbitrary topological windings of a non-Hermitian band. Science, 2021, 371, 1240-1245.	6.0	159
42	Nondissipative non-Hermitian dynamics and exceptional points in coupled optical parametric oscillators. Optica, 2021, 8, 415.	4.8	27
43	Wide wavelength-tunable narrow-band thermal radiation from moirÃ© patterns. Applied Physics Letters, 2021, 118, .	1.5	20
44	Theory for Twisted Bilayer Photonic Crystal Slabs. Physical Review Letters, 2021, 126, 136101.	2.9	72
45	Arbitrary linear transformations for photons in the frequency synthetic dimension. Nature Communications, 2021, 12, 2401.	5.8	32
46	Correction to â€œAdjoint Method and Inverse Design for Nonlinear Nanophotonic Devicesâ€• ACS Photonics, 2021, 8, 1505-1505.	3.2	1
47	Control of non-equilibrium Casimir force. Applied Physics Letters, 2021, 118, .	1.5	6
48	Effect of Coulomb interaction on the transient optical response of electrons in field-coupled quantum dots. Physical Review A, 2021, 103, .	1.0	3
49	Engineering arbitrarily oriented spatiotemporal optical vortices using transmission nodal lines. Optica, 2021, 8, 966.	4.8	44
50	Single Gyrotropic Particle as a Heat Engine. ACS Photonics, 2021, 8, 1623-1629.	3.2	10
51	Photonic Modal Circulator Using Temporal Refractive-Index Modulation with Spatial Inversion Symmetry. Physical Review Letters, 2021, 126, 193901.	2.9	14
52	Deep-Subwavelength Thermal Switch via Resonant Coupling in Monolayer Hexagonal Boron Nitride. Physical Review Applied, 2021, 15, .	1.5	15
53	Quantum Entanglement and Modulation Enhancement of Free-Electronâ€“Bound-Electron Interaction. Physical Review Letters, 2021, 126, 233402.	2.9	43
54	Isotropic topological second-order spatial differentiator operating in transmission mode. Optics Letters, 2021, 46, 3247.	1.7	22

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55	Controllable finite ultra-narrow quality-factor peak in a perturbed Dirac-cone band structure of a photonic-crystal slab. Applied Physics Letters, 2021, 119, .	1.5	6
56	Arbitrary synthetic dimensions via multiboson dynamics on a one-dimensional lattice. Physical Review Research, 2021, 3, .	1.3	9
57	Inverse Design of Plasma Metamaterial Devices for Optical Computing. Physical Review Applied, 2021, 16, .	1.5	27
58	Synthetic frequency dimensions in dynamically modulated ring resonators. APL Photonics, 2021, 6, .	3.0	44
59	Inverse Design of Metasurfaces Based on Coupled-Mode Theory and Adjoint Optimization. ACS Photonics, 2021, 8, 2265-2273.	3.2	45
60	Shockley-Queisser analysis of the temperature-efficiency correlation of solar cells in the presence of non-radiative heat transfer. Optics Express, 2021, 29, 27554.	1.7	5
61	Violating Kirchhoffâ€™s Law of Thermal Radiation in Semitransparent Structures. ACS Photonics, 2021, 8, 2417-2424.	3.2	49
62	Generation of guided space-time wave packets using multilevel indirect photonic transitions in integrated photonics. Physical Review Research, 2021, 3, .	1.3	15
63	Configurable Phase Transitions in a Topological Thermal Material. Physical Review Letters, 2021, 127, 105901.	2.9	31
64	Structured 3D linear spaceâ€“time light bullets by nonlocal nanophotonics. Light: Science and Applications, 2021, 10, 160.	7.7	37
65	High-performance photonic transformers for DC voltage conversion. Nature Communications, 2021, 12, 4684.	5.8	11
66	Nontrivial point-gap topology and non-Hermitian skin effect in photonic crystals. Physical Review B, 2021, 104, .	1.1	40
67	Spaceâ€“Time Metasurfaces for Power Combining of Waves. ACS Photonics, 2021, 8, 3034-3041.	3.2	26
68	Exterior tuning and switching of non-equilibrium Casimir force. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 151.	0.9	6
69	Full Wave Simulation and Optimization of Large Area Metalens. , 2021, , .		1
70	Topological complex-energy braiding of non-Hermitian bands. Nature, 2021, 598, 59-64.	13.7	132
71	Phonon-induced anomalous gauge potential for photonic isolation in frequency space. Optica, 2021, 8, 1448.	4.8	10
72	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. Nature Communications, 2021, 12, 6122.	5.8	86

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73	Electron Pulse Compression with Optical Beat Note. Physical Review Letters, 2021, 127, 164802.	2.9	13
74	A perspective on the pathway toward full wave simulation of large area metalenses. Applied Physics Letters, 2021, 119, .	1.5	28
75	Deterministic photonic quantum computation in a synthetic time dimension. Optica, 2021, 8, 1515.	4.8	21
76	Adaptive four-level modeling of laser cooling of solids. Applied Physics Letters, 2021, 119, 181107.	1.5	2
77	Long-Range Directional Routing and Spatial Selection of High-Spin-Purity Valley Trion Emission in Monolayer WS₂. ACS Nano, 2021, 15, 18163-18171.	7.3	14
78	Subambient daytime radiative cooling textile based on nanoprocessed silk. Nature Nanotechnology, 2021, 16, 1342-1348.	15.6	178
79	Shockley-Queisser analysis of the temperature-efficiency correlation of solar cells in the presence of non-radiative heat transfer: erratum. Optics Express, 2021, 29, 39173.	1.7	0
80	Nonreciprocal Thermal Emitters Using Metasurfaces with Multiple Diffraction Channels. Physical Review Applied, 2021, 16, .	1.5	21
81	Perfect RGB-IR color routers for sub-wavelength size CMOS image sensor pixels. , 2021, , .		0
82	Universal Behavior of the Scattering Matrix Near Thresholds in Photonics. , 2021, , .		0
83	Thermodynamics of Light Management in Near-Field Thermophotovoltaics. Physical Review Applied, 2021, 16, .	1.5	13
84	Universal Behavior of the Scattering Matrix Near Thresholds in Photonics. Physical Review Letters, 2021, 127, 277401.	2.9	1
85	Nonequilibrium lateral force and torque by thermally excited nonreciprocal surface electromagnetic waves. Physical Review B, 2021, 104, .	1.1	17
86	Reprogrammable Electro-Optic Nonlinear Activation Functions for Optical Neural Networks. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-12.	1.9	168
87	A single photonic cavity with two independent physical synthetic dimensions. Science, 2020, 367, 59-64.	6.0	175
88	Radiative Thermal Router Based on Tunable Magnetic Weyl Semimetals. ACS Photonics, 2020, 7, 3257-3263.	3.2	57
89	Integrated Nonreciprocal Photonic Devices With Dynamic Modulation. Proceedings of the IEEE, 2020, 108, 1759-1784.	16.4	35
90	Higher-order topological insulators in synthetic dimensions. Light: Science and Applications, 2020, 9, 131.	7.7	75

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91	Single-Photon Transport in a Topological Waveguide from a Dynamically Modulated Photonic System. Physical Review Applied, 2020, 14, .	1.5	8
92	Inference in artificial intelligence with deep optics and photonics. Nature, 2020, 588, 39-47.	13.7	418
93	Terrestrial radiative cooling: Using the cold universe as a renewable and sustainable energy source. Science, 2020, 370, 786-791.	6.0	370
94	Theoretical constraints on reciprocal and non-reciprocal many-body radiative heat transfer. Physical Review B, 2020, 102, .	1.1	20
95	Inverse Design of Lightweight Broadband Reflector for Relativistic Lightsail Propulsion. ACS Photonics, 2020, 7, 2350-2355.	3.2	54
96	Tutorial on Electromagnetic Nonreciprocity and its Origins. Proceedings of the IEEE, 2020, 108, 1684-1727.	16.4	114
97	Creating an Ecoâ€Friendly Building Coating with Smart Subambient Radiative Cooling. Advanced Materials, 2020, 32, e1906751.	11.1	196
98	Experimental demonstration of silicon photonic devices optimized by a flexible and deterministic pixel-by-pixel technique. Applied Physics Letters, 2020, 117, 071104.	1.5	5
99	Beating absorption in solid-state high harmonics. Communications Physics, 2020, 3, .	2.0	14
100	Efficient and robust wireless power transfer based on parity-time symmetry. AIP Conference Proceedings, 2020, , .	0.3	2
101	Homotopy characterization of non-Hermitian Hamiltonians. Physical Review B, 2020, 101, .	1.1	86
102	Inverse Design of Photonic Crystals through Automatic Differentiation. ACS Photonics, 2020, 7, 1729-1741.	3.2	114
103	Meron Spin Textures in Momentum Space. Physical Review Letters, 2020, 124, 106103.	2.9	44
104	Inverse-designed non-reciprocal pulse router for chip-based LiDAR. Nature Photonics, 2020, 14, 369-374.	15.6	145
105	Experimental demonstration of acoustic semimetal with topologically charged nodal surface. Science Advances, 2020, 6, eaav2360.	4.7	60
106	Nonreciprocal Metamaterial Obeying Time-Reversal Symmetry. Physical Review Letters, 2020, 124, 257403.	2.9	26
107	Fundamental Limits of the Dew-Harvesting Technology. Nanoscale and Microscale Thermophysical Engineering, 2020, 24, 43-52.	1.4	31
108	Photonic Refrigeration from Time-Modulated Thermal Emission. Physical Review Letters, 2020, 124, 077402.	2.9	29

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109	Axion-Field-Enabled Nonreciprocal Thermal Radiation in Weyl Semimetals. Nano Letters, 2020, 20, 1923-1927.	4.5	152
110	Nonreciprocal radiative heat transfer between two planar bodies. Physical Review B, 2020, 101, .	1.1	23
111	Compact Incoherent Image Differentiation with Nanophotonic Structures. ACS Photonics, 2020, 7, 338-343.	3.2	53
112	Absence of unidirectionally propagating surface plasmon-polaritons at nonreciprocal metal-dielectric interfaces. Nature Communications, 2020, 11, 674.	5.8	54
113	Thermodynamic limits for simultaneous energy harvesting from the hot sun and cold outer space. Light: Science and Applications, 2020, 9, 68.	7.7	70
114	Universal programmable photonic architecture for quantum information processing. Physical Review A, 2020, 101, .	1.0	16
115	Robust and efficient wireless power transfer using a switch-mode implementation of a nonlinear parityâ€“time symmetric circuit. Nature Electronics, 2020, 3, 273-279.	13.1	78
116	Subâ€Wavelength Passive Optical Isolators Using Photonic Structures Based on Weyl Semimetals. Advanced Optical Materials, 2020, 8, 2000100.	3.6	79
117	Integrated near-field thermo-photovoltaics for heat recycling. Nature Communications, 2020, 11, 2545.	5.8	85
118	Nonreciprocity in Bianisotropic Systems with Uniform Time Modulation. Physical Review Letters, 2020, 125, 266102.	2.9	43
119	Maximal nighttime electrical power generation via optimal radiative cooling. Optics Express, 2020, 28, 25460.	1.7	47
120	Determining the optimal learning rate in gradient-based electromagnetic optimization using the Shanks transformation in the Lippmannâ€“Schwinger formalism. Optics Letters, 2020, 45, 595.	1.7	4
121	Nonreciprocal Devices in Silicon Photonics. Optics and Photonics News, 2020, 31, 38.	0.4	1
122	Squeeze free space with nonlocal flat optics. Optica, 2020, 7, 1133.	4.8	58
123	Design of a multichannel photonic crystal dielectric laser accelerator. Photonics Research, 2020, 8, 1586.	3.4	14
124	Creating locally interacting Hamiltonians in the synthetic frequency dimension for photons. Photonics Research, 2020, 8, B8.	3.4	20
125	Scattering of a single plasmon polariton by multiple atoms for in-plane control of light. Nanophotonics, 2020, 10, 579-587.	2.9	3
126	CHEMICAL POTENTIAL OF PHOTONS AND ITS IMPLICATIONS FOR CONTROLLING RADIATIVE HEAT TRANSFER. Annual Review of Heat Transfer, 2020, 23, 397-431.	0.3	8

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127	Large permittivity increments for efficient predictive photonic devices optimization. , 2020, , .		1
128	Controlling the dopant profile for SRH suppression at low current densities in Î»â€‰â‰ˆâ€‰1330â€‰nm GaInAsP light-emitting diodes. Applied Physics Letters, 2020, 116, 203503.	1.5	1
129	Constructing an effective Hamiltonian with local interaction in the synthetic space for photons. , 2020, , .		0
130	Recurrent Machine Learning and Computing with Nonlinear Optical Waves. , 2020, , .		0
131	Experimental band structure spectroscopy along a synthetic dimension. Nature Communications, 2019, 10, 3122.	5.8	95
132	Penetration Depth Reduction with Plasmonic Metafilms. ACS Photonics, 2019, 6, 2049-2055.	3.2	5
133	Forward-Mode Differentiation of Maxwellâ€™s Equations. ACS Photonics, 2019, 6, 3010-3016.	3.2	43
134	Generating Light from Darkness. Joule, 2019, 3, 2679-2686.	11.7	158
135	High Reflection from a One-Dimensional Array of Graphene Nanoribbons. ACS Photonics, 2019, 6, 339-344.	3.2	11
136	Reconfigurable Photonic Circuit for Controlled Power Delivery to Laser-Driven Accelerators on a Chip. Physical Review Applied, 2019, 11, .	1.5	13
137	Self-sustaining thermophotonic circuits. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11596-11601.	3.3	7
138	Experimental demonstration of energy harvesting from the sky using the negative illumination effect of a semiconductor photodiode. Applied Physics Letters, 2019, 114, .	1.5	37
139	Connection of temporal coupled-mode-theory formalisms for a resonant optical system and its time-reversal conjugate. Physical Review A, 2019, 99, .	1.0	40
140	Photonic Gauge Potential in One Cavity with Synthetic Frequency and Orbital Angular Momentum Dimensions. Physical Review Letters, 2019, 122, 083903.	2.9	54
141	Temperature Regulation in Colored Infrared-Transparent Polyethylene Textiles. Joule, 2019, 3, 1478-1486.	11.7	213
142	Relation between photon thermal Hall effect and persistent heat current in nonreciprocal radiative heat transfer. Physical Review B, 2019, 100, .	1.1	17
143	Wave physics as an analog recurrent neural network. Science Advances, 2019, 5, eaay6946.	4.7	201
144	Simultaneously and Synergistically Harvest Energy from the Sun and Outer Space. Joule, 2019, 3, 101-110.	11.7	117

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145	Direction-dependent parity-time phase transition and nonreciprocal amplification with dynamic gain-loss modulation. Physical Review A, 2019, 99, .	1.0	34
146	Arbitrary Polarization Conversion with a Photonic Crystal Slab. Advanced Optical Materials, 2019, 7, 1801453.	3.6	33
147	Electronically programmable photonic molecule. Nature Photonics, 2019, 13, 36-40.	15.6	155
148	Experimental Demonstration of Dynamical Input Isolation in Nonadiabatically Modulated Photonic Cavities. ACS Photonics, 2019, 6, 162-169.	3.2	13
149	Thermal meta-device in analogue of zero-index photonics. Nature Materials, 2019, 18, 48-54.	13.3	172
150	Efficient pixel-by-pixel optimization of photonic devices utilizing the Dysonâ€™s equation in a Greenâ€™s function formalism: Part I Implementation with the method of discrete dipole approximation. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2378.	0.9	16
151	Efficient pixel-by-pixel optimization of photonic devices utilizing the Dysonâ€™s equation in a Greenâ€™s function formalism: Part II Implementation using standard electromagnetic solvers. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2387.	0.9	13
152	Casimir force between two plasmonic metallic plates from a real frequency perspective. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2981.	0.9	5
153	Accelerating adjoint variable method based photonic optimization with Schur complement domain decomposition. Optics Express, 2019, 27, 20711.	1.7	12
154	Nighttime radiative cooling in hot and humid climates. Optics Express, 2019, 27, 31587.	1.7	58
155	Silicon nitride waveguide as a power delivery component for on-chip dielectric laser accelerators. Optics Letters, 2019, 44, 335.	1.7	14
156	Compact dynamic optical isolator based on tandem phase modulators. Optics Letters, 2019, 44, 2240.	1.7	16
157	Near-complete violation of Kirchhoffâ€™s law of thermal radiation with a 03â€‰â€‰T magnetic field. Optics Letters, 2019, 44, 4203.	1.7	101
158	Radiative Cooling: Harvesting the Coldness of the Universe. Optics and Photonics News, 2019, 30, 32.	0.4	40
159	Doubly resonant Ï‡⁽²⁾ nonlinear photonic crystal cavity based on a bound state in the continuum. Optica, 2019, 6, 1039.	4.8	77
160	Practical efficiency limits of electroluminescent cooling. , 2019, , .		1
161	Theory of many-body radiative heat transfer without the constraint of reciprocity. Physical Review B, 2018, 97, .	1.1	53
162	Nonreciprocal Optical Dissipation Based on Direction-Dependent Rabi Splitting. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-7.	1.9	15

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163	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.	3.3	78
164	Significant Enhancement of Near-Field Electromagnetic Heat Transfer in a Multilayer Structure through Multiple Surface-States Coupling. Physical Review Letters, 2018, 120, 063901.	2.9	70
165	Nanoporous polyethylene microfibres for large-scale radiative cooling fabric. Nature Sustainability, 2018, 1, 105-112.	11.5	370
166	Synthetic space with arbitrary dimensions in a few rings undergoing dynamic modulation. Physical Review B, 2018, 97, .	1.1	59
167	Enhancing Mo:BiVO₄ Solar Water Splitting with Patterned Au Nanospheres by Plasmonâ€Induced Energy Transfer. Advanced Energy Materials, 2018, 8, 1701765.	10.2	92
168	Optimization of Multilayer Optical Films with a Memetic Algorithm and Mixed Integer Programming. ACS Photonics, 2018, 5, 684-691.	3.2	103
169	Zero-Index Bound States in the Continuum. Physical Review Letters, 2018, 121, 263901.	2.9	98
170	Adjoint Method and Inverse Design for Nonlinear Nanophotonic Devices. ACS Photonics, 2018, 5, 4781-4787.	3.2	188
171	Design of a tapered slot waveguide dielectric laser accelerator for sub-relativistic electrons. Optics Express, 2018, 26, 22801.	1.7	10
172	Unidirectional light transport in dynamically modulated waveguides. Physical Review Applied, 2018, 10, .	1.5	9
173	Photonic thermal management of coloured objects. Nature Communications, 2018, 9, 4240.	5.8	139
174	A three-dimensional photonic topological insulator using a two-dimensional ring resonator lattice with a synthetic frequency dimension. Science Advances, 2018, 4, eaat2774.	4.7	66
175	Isotropic wavevector domain image filters by a photonic crystal slab device. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 1685.	0.8	30
176	Pulse shortening in an actively mode-locked laser with parity-time symmetry. APL Photonics, 2018, 3, 086103.	3.0	20
177	On-Chip Laser-Power Delivery System for Dielectric Laser Accelerators. Physical Review Applied, 2018, 9, .	1.5	37
178	Training of photonic neural networks through in situ backpropagation and gradient measurement. Optica, 2018, 5, 864.	4.8	319
179	Photonic crystal slab Laplace operator for image differentiation. Optica, 2018, 5, 251.	4.8	185
180	Self-adaptive radiative cooling based on phase change materials. Optics Express, 2018, 26, A777.	1.7	202

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181	Enhanced high-harmonic generation from an all-dielectric metasurface. Nature Physics, 2018, 14, 1006-1010.	6.5	215
182	First-principles simulation of photonic crystal surface-emitting lasers using rigorous coupled wave analysis. Applied Physics Letters, 2018, 113, .	1.5	22
183	Nanophotonic control of thermal radiation for energy applications [Invited]. Optics Express, 2018, 26, 15995.	1.7	248
184	Spectrally Selective Nanocomposite Textile for Outdoor Personal Cooling. Advanced Materials, 2018, 30, e1802152.	11.1	362
185	Near-Field Thermophotonic Systems for Low-Grade Waste-Heat Recovery. Nano Letters, 2018, 18, 5224-5230.	4.5	44
186	MESH: A free electromagnetic solver for far-field and near-field radiative heat transfer for layered periodic structures. Computer Physics Communications, 2018, 231, 163-172.	3.0	28
187	Effective electric-field force for a photon in a synthetic frequency lattice created in a waveguide modulator. Physical Review A, 2018, 97, .	1.0	34
188	Synthetic dimension in photonics. Optica, 2018, 5, 1396.	4.8	276
189	Daytime Radiative Cooling Using Near-Black Infrared Emitters. ACS Photonics, 2017, 4, 626-630.	3.2	485
190	Planar, Ultrathin, Subwavelength Spectral Light Separator for Efficient, Wide-Angle Spectral Imaging. ACS Photonics, 2017, 4, 525-535.	3.2	12
191	Synthetic gauge potential and effective magnetic field in a Raman medium undergoing molecular modulation. Physical Review A, 2017, 95, .	1.0	10
192	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.	3.3	93
193	Plasmonic computing of spatial differentiation. Nature Communications, 2017, 8, 15391.	5.8	292
194	Exact solution to the steady-state dynamics of a periodically modulated resonator. APL Photonics, 2017, 2, .	3.0	44
195	Robust wireless power transfer using a nonlinear parityâ€“time-symmetric circuit. Nature, 2017, 546, 387-390.	13.7	467
196	Hot Carrier-Based Near-Field Thermophotovoltaic Energy Conversion. ACS Nano, 2017, 11, 3001-3009.	7.3	64
197	A Comprehensive Photonic Approach for Solar Cell Cooling. ACS Photonics, 2017, 4, 774-782.	3.2	262
198	High-performance near-field thermophotovoltaics for waste heat recovery. Nano Energy, 2017, 41, 344-350.	8.2	115

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199	Topologically Protected Complete Polarization Conversion. Physical Review Letters, 2017, 119, 167401.	2.9	78
200	High-performance near-field electroluminescent refrigeration device consisting of a GaAs light emitting diode and a Si photovoltaic cell. Journal of Applied Physics, 2017, 122, .	1.1	49
201	Warming up human body by nanoporous metallized polyethylene textile. Nature Communications, 2017, 8, 496.	5.8	280
202	Sub-ambient non-evaporative fluid cooling withÂtheÂsky. Nature Energy, 2017, 2, .	19.8	343
203	Theory of solar cell light trapping through a nonequilibrium Green's function formulation of Maxwell's equations. Physical Review B, 2017, 96, .	1.1	14
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