

Weiliang Jin

List of Publications by Year in descending order

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Version: 2024-02-01

35
papers

1,908
citations

430874

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414414

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docs citations

36
times ranked

1847
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarization-Independent Isotropic Nonlocal Metasurfaces with Wavelength-Controlled Functionality. <i>Physical Review Applied</i> , 2022, 17, .	3.8	14
2	Design of Compact Meta-Crystal Slab for General Optical Convolution. <i>ACS Photonics</i> , 2022, 9, 1358-1365.	6.6	12
3	Subwavelength Bayer RGB color routers with perfect optical efficiency. <i>Nanophotonics</i> , 2022, 11, 2381-2387.	6.0	11
4	Coloured low-emissivity films for building envelopes for year-round energy savings. <i>Nature Sustainability</i> , 2022, 5, 339-347.	23.7	80
5	Design of Nighttime Power Generation System to Optimally Utilize Outer Space Darkness. , 2021, , .		0
6	Inverse design of relativistic lightsail for efficient propulsion. , 2021, , .		0
7	Engineering arbitrarily oriented spatiotemporal optical vortices using transmission nodal lines. <i>Optica</i> , 2021, 8, 966.	9.3	44
8	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. <i>Nature Communications</i> , 2021, 12, 6122.	12.8	86
9	Adaptive four-level modeling of laser cooling of solids. <i>Applied Physics Letters</i> , 2021, 119, 181107.	3.3	2
10	Temporal coupled-mode theory for the line shape of the optical force spectrum. , 2021, , .		0
11	Inverse Design of Lightweight Broadband Reflector for Relativistic Lightsail Propulsion. <i>ACS Photonics</i> , 2020, 7, 2350-2355.	6.6	54
12	Active Control of Multiple, Simultaneous Nonlinear Optical Processes in Plasmonic Nanogap Cavities. <i>ACS Photonics</i> , 2020, 7, 901-907.	6.6	21
13	Fundamental Limits to Radiative Heat Transfer: The Limited Role of Nanostructuring in the Near-Field. <i>Physical Review Letters</i> , 2020, 124, 013904.	7.8	35
14	Fundamental limits to radiative heat transfer: Theory. <i>Physical Review B</i> , 2020, 101, .	3.2	31
15	Global $\langle T \rangle$ operator bounds on electromagnetic scattering: Upper bounds on far-field cross sections. <i>Physical Review Research</i> , 2020, 2, .	3.6	26
16	Maximal nighttime electrical power generation via optimal radiative cooling. <i>Optics Express</i> , 2020, 28, 25460.	3.4	47
17	$\langle T \rangle$ Operator Bounds on Angle-Integrated Absorption and Thermal Radiation for Arbitrary Objects. <i>Physical Review Letters</i> , 2019, 123, 257401.	7.8	26
18	Material scaling and frequency-selective enhancement of near-field radiative heat transfer for lossy metals in two dimensions via inverse design. <i>Physical Review B</i> , 2019, 99, .	3.2	23

#	ARTICLE	IF	CITATIONS
19	High Efficiency Second Harmonic Generation in Gallium Phosphide Ring Resonators on Oxide. , 2019, , .		0
20	Inverse design in nanophotonics. Nature Photonics, 2018, 12, 659-670.	31.4	1,014
21	Inverse-designed photonic fibers and metasurfaces for nonlinear frequency conversion [Invited]. Photonics Research, 2018, 6, B82.	7.0	44
22	Inverse design of compact multimode cavity couplers. Optics Express, 2018, 26, 26713.	3.4	19
23	400%/W second harmonic conversion efficiency in 14 μ m-diameter gallium phosphide-on-oxide resonators. Optics Express, 2018, 26, 33687.	3.4	47
24	Near-Field Radiative Heat Transfer under Temperature Gradients and Conductive Transfer. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 141-149.	1.5	2
25	General formulation of coupled radiative and conductive heat transfer between compact bodies. Physical Review B, 2017, 95, .	3.2	6
26	Enhanced nonlinear frequency conversion and Purcell enhancement at exceptional points. Physical Review B, 2017, 96, .	3.2	28
27	Overcoming limits to near-field radiative heat transfer in uniform planar media through multilayer optimization. Optics Express, 2017, 25, 14746.	3.4	18
28	Giant frequency-selective near-field energy transfer in activeâ€“passive structures. Physical Review B, 2016, 94, .	3.2	16
29	Strongly coupled near-field radiative and conductive heat transfer between planar bodies. Physical Review B, 2016, 94, .	3.2	19
30	Exact formulas for radiative heat transfer between planar bodies under arbitrary temperature profiles: Modified asymptotics and sign-flip transitions. Physical Review B, 2016, 94, .	3.2	8
31	Amplified and directional spontaneous emission from arbitrary composite bodies: A self-consistent treatment of Purcell effect below threshold. Physical Review B, 2016, 93, .	3.2	11
32	Temperature control of thermal radiation from composite bodies. Physical Review B, 2016, 93, .	3.2	18
33	Fluctuating volume-current formulation of electromagnetic fluctuations in inhomogeneous media: Incandescence and luminescence in arbitrary geometries. Physical Review B, 2015, 92, .	3.2	73
34	Optimizing detection limits in whispering gallery mode biosensing. Optics Express, 2014, 22, 5491.	3.4	59
35	Temperature-insensitive detection of low-concentration nanoparticles using a functionalized high-Q microcavity. Applied Optics, 2013, 52, 155.	1.8	13