

# Weiliang Jin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8112739/publications.pdf>

Version: 2024-02-01

35  
papers

1,908  
citations

430874

18  
h-index

414414

32  
g-index

36  
all docs

36  
docs citations

36  
times ranked

1847  
citing authors

#	ARTICLE	IF	CITATIONS
1	Inverse design in nanophotonics. Nature Photonics, 2018, 12, 659-670.	31.4	1,014
2	Integrated cooling (i-Cool) textile of heat conduction and sweat transportation for personal perspiration management. Nature Communications, 2021, 12, 6122.	12.8	86
3	Coloured low-emissivity films for building envelopes for year-round energy savings. Nature Sustainability, 2022, 5, 339-347.	23.7	80
4	Fluctuating volume-current formulation of electromagnetic fluctuations in inhomogeneous media: Incandescence and luminescence in arbitrary geometries. Physical Review B, 2015, 92, .	3.2	73
5	Optimizing detection limits in whispering gallery mode biosensing. Optics Express, 2014, 22, 5491.	3.4	59
6	Inverse Design of Lightweight Broadband Reflector for Relativistic Lightsail Propulsion. ACS Photonics, 2020, 7, 2350-2355.	6.6	54
7	400%/W second harmonic conversion efficiency in 14 $\mu$ m-diameter gallium phosphide-on-oxide resonators. Optics Express, 2018, 26, 33687.	3.4	47
8	Maximal nighttime electrical power generation via optimal radiative cooling. Optics Express, 2020, 28, 25460.	3.4	47
9	Inverse-designed photonic fibers and metasurfaces for nonlinear frequency conversion [Invited]. Photonics Research, 2018, 6, B82.	7.0	44
10	Engineering arbitrarily oriented spatiotemporal optical vortices using transmission nodal lines. Optica, 2021, 8, 966.	9.3	44
11	Fundamental Limits to Radiative Heat Transfer: The Limited Role of Nanostructuring in the Near-Field. Physical Review Letters, 2020, 124, 013904.	7.8	35
12	Fundamental limits to radiative heat transfer: Theory. Physical Review B, 2020, 101, .	3.2	31
13	Enhanced nonlinear frequency conversion and Purcell enhancement at exceptional points. Physical Review B, 2017, 96, .	3.2	28
14	$\langle T \rangle$ Operator Bounds on Angle-Integrated Absorption and Thermal Radiation for Arbitrary Objects. Physical Review Letters, 2019, 123, 257401.	7.8	26
15	Global $\langle T \rangle$ operator bounds on electromagnetic scattering: Upper bounds on far-field cross sections. Physical Review Research, 2020, 2, .	3.6	26
16	Material scaling and frequency-selective enhancement of near-field radiative heat transfer for lossy metals in two dimensions via inverse design. Physical Review B, 2019, 99, .	3.2	23
17	Active Control of Multiple, Simultaneous Nonlinear Optical Processes in Plasmonic Nanogap Cavities. ACS Photonics, 2020, 7, 901-907.	6.6	21
18	Strongly coupled near-field radiative and conductive heat transfer between planar bodies. Physical Review B, 2016, 94, .	3.2	19

#	ARTICLE	IF	CITATIONS
19	Inverse design of compact multimode cavity couplers. <i>Optics Express</i> , 2018, 26, 26713.	3.4	19
20	Temperature control of thermal radiation from composite bodies. <i>Physical Review B</i> , 2016, 93, .	3.2	18
21	Overcoming limits to near-field radiative heat transfer in uniform planar media through multilayer optimization. <i>Optics Express</i> , 2017, 25, 14746.	3.4	18
22	Giant frequency-selective near-field energy transfer in activeâ€“passive structures. <i>Physical Review B</i> , 2016, 94, .	3.2	16
23	Polarization-Independent Isotropic Nonlocal Metasurfaces with Wavelength-Controlled Functionality. <i>Physical Review Applied</i> , 2022, 17, .	3.8	14
24	Temperature-insensitive detection of low-concentration nanoparticles using a functionalized high-Q microcavity. <i>Applied Optics</i> , 2013, 52, 155.	1.8	13
25	Design of Compact Meta-Crystal Slab for General Optical Convolution. <i>ACS Photonics</i> , 2022, 9, 1358-1365.	6.6	12
26	Amplified and directional spontaneous emission from arbitrary composite bodies: A self-consistent treatment of Purcell effect below threshold. <i>Physical Review B</i> , 2016, 93, .	3.2	11
27	Subwavelength Bayer RGB color routers with perfect optical efficiency. <i>Nanophotonics</i> , 2022, 11, 2381-2387.	6.0	11
28	Exact formulas for radiative heat transfer between planar bodies under arbitrary temperature profiles: Modified asymptotics and sign-flip transitions. <i>Physical Review B</i> , 2016, 94, .	3.2	8
29	General formulation of coupled radiative and conductive heat transfer between compact bodies. <i>Physical Review B</i> , 2017, 95, .	3.2	6
30	Near-Field Radiative Heat Transfer under Temperature Gradients and Conductive Transfer. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2017, 72, 141-149.	1.5	2
31	Adaptive four-level modeling of laser cooling of solids. <i>Applied Physics Letters</i> , 2021, 119, 181107.	3.3	2
32	Design of Nighttime Power Generation System to Optimally Utilize Outer Space Darkness. , 2021, , .		0
33	Inverse design of relativistic lightsail for efficient propulsion. , 2021, , .		0
34	High Efficiency Second Harmonic Generation in Gallium Phosphide Ring Resonators on Oxide. , 2019, , .		0
35	Temporal coupled-mode theory for the line shape of the optical force spectrum. , 2021, , .		0