Xiaohu Wu

List of Publications by Year in descending order

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77 papers	1,331 citations	304743 22 h-index	414414 32 g-index
78 all docs	78 docs citations	78 times ranked	354 citing authors

#	Article	IF	Citations
1	Broadband wide-angle multilayer absorber based on a broadband omnidirectional optical Tamm state. Optics Express, 2021, 29, 23976.	3.4	75
2	Near-Field Radiative Heat Transfer Between Two Î±-MoO3 Biaxial Crystals. Journal of Heat Transfer, 2020, 142, .	2.1	68
3	Validity of Kirchhoff's law for semitransparent films made of anisotropic materials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 245, 106904.	2.3	66
4	Enhanced nonreciprocal radiation in Weyl semimetals by attenuated total reflection. AIP Advances, 2021, 11, .	1.3	45
5	Influence of hBN orientation on the near-field radiative heat transfer between graphene/hBN heterostructures. Journal of Photonics for Energy, 2018, 9, 1.	1.3	44
6	Tunable nonreciprocal thermal emitter based on metal grating and graphene. International Journal of Thermal Sciences, 2022, 172, 107316.	4.9	43
7	Dual-band nonreciprocal thermal radiation by coupling optical Tamm states in magnetophotonic multilayers. International Journal of Thermal Sciences, 2022, 175, 107457.	4.9	43
8	Near-field radiative modulator based on dissimilar hyperbolic materials with in-plane anisotropy. International Journal of Heat and Mass Transfer, 2021, 168, 120908.	4.8	38
9	Strong nonreciprocal radiation in magnetophotonic crystals. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107794.	2.3	38
10	Strong dual-band nonreciprocal radiation based on a four-part periodic metal grating. Optical Materials, 2021, 120, 111476.	3.6	38
11	The giant enhancement of nonreciprocal radiation in Thue-morse aperiodic structures. Optics and Laser Technology, 2022, 152, 108138.	4.6	36
12	Perfect metamaterial absorber for solar energy utilization. International Journal of Thermal Sciences, 2022, 179, 107638.	4.9	35
13	Near-field radiative heat transfer between uniaxial hyperbolic media: Role of volume and surface phonon polaritons. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 258, 107337.	2.3	33
14	Near-complete violation of Kirchhoffâ€™s law of thermal radiation in ultrathin magnetic Weyl semimetal films. Optical Materials Express, 2021, 11, 4058.	3.0	33
15	Effect of orientation on the directional and hemispherical emissivity of hyperbolic metamaterials. International Journal of Heat and Mass Transfer, 2019, 135, 1207-1217.	4.8	29
16	Solar absorption characteristics of SiO2@Au core-shell composite nanorods for the direct absorption solar collector. Renewable Energy, 2022, 189, 402-411.	8.9	29
17	Emergent asymmetries and enhancement in the absorption of natural hyperbolic crystals. Optica, 2019, 6, 1478.	9.3	28
18	Rotation-induced significant modulation of near-field radiative heat transfer between hyperbolic nanoparticles. International Journal of Heat and Mass Transfer, 2022, 189, 122666.	4.8	28

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19	Radiative Thermal Switch Exploiting Hyperbolic Surface Phonon Polaritons. Physical Review Applied, 2021, 15, .	3.8	27
20	Broadband and wide-angle solar absorber for the visible and near-infrared frequencies. Solar Energy, 2022, 238, 78-83.	6.1	27
21	Super-planckian thermal radiation in borophene sheets. International Journal of Heat and Mass Transfer, 2022, 183, 122140.	4.8	26
22	Strong chirality in twisted bilayer Î±-MoO₃. Chinese Physics B, 2022, 31, 044101.	1.4	26
23	Strong extrinsic chirality in biaxial hyperbolic material Î±-MoO₃ with in-plane anisotropy. Applied Optics, 2021, 60, 4599.	1.8	22
24	Manipulation of enhanced absorption with tilted hexagonal boron nitride slabs. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 209, 150-155.	2.3	21
25	Ultra-Broadband Perfect Absorption with Stacked Asymmetric Hyperbolic Metamaterial Slabs. Nanoscale and Microscale Thermophysical Engineering, 2018, 22, 114-123.	2.6	21
26	Chiral response of a twisted bilayer of hexagonal boron nitride. Optics Communications, 2019, 452, 124-129.	2.1	20
27	Thermal conductivity of micro/nano-porous polymers: Prediction models and applications. Frontiers of Physics, 2022, 17, 1.	5.0	19
28	Hyperbolic volume and surface phonon polaritons excited in an ultrathin hyperbolic slab: connection of dispersion and topology. Nanoscale and Microscale Thermophysical Engineering, 2021, 25, 64-71.	2.6	18
29	Strong nonreciprocal thermal radiation in Weyl semimetal-dielectric multilayer structure. International Journal of Thermal Sciences, 2022, 181, 107788.	4.9	18
30	Unidirectional transmission based on polarization conversion and excitation of magnetic or surface polaritons. AIP Advances, 2017, 7, .	1.3	17
31	Theoretical investigation of the effect of hexagonal boron nitride on perfect absorption in infrared regime. Optics Communications, 2018, 425, 172-175.	2.1	17
32	Near-field radiative heat transfer in hyperbolic materials. International Journal of Extreme Manufacturing, 2022, 4, 032002.	12.7	17
33	Polariton topological transition effects on radiative heat transfer. Physical Review B, 2021, 103, .	3.2	16
34	A Time Varying Ventilation and Dust Control Strategy Based on the Temporospatial Characteristics of Dust Dispersion. Minerals (Basel, Switzerland), 2017, 7, 59.	2.0	15
35	Goosâ€“Hanchen shifts in tilted uniaxial crystals. Optics Communications, 2018, 416, 181-184.	2.1	15
36	Amplification and modulation effect of elliptical surface polaritons on a thermal diode. International Journal of Heat and Mass Transfer, 2021, 180, 121794.	4.8	15

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37	Optical Properties of Plasma Dimer Nanoparticles for Solar Energy Absorption. Nanomaterials, 2021, 11, 2722.	4.1	15
38	Chiral Absorbers Based on Polarization Conversion and Excitation of Magnetic Polaritons. ES Energy & Environments, 2020, , .	1.1	13
39	Near-field Radiative Heat Transfer between Graphene Covered Biaxial Hyperbolic Materials. ES Energy & Environments, 2020, , .	1.1	13
40	Broadband tunable absorption based on phase change materials. Results in Physics, 2021, 20, 103704.	4.1	12
41	Near-infrared chirality of plasmonic metasurfaces with gold rectangular holes. Advanced Composites and Hybrid Materials, 2022, 5, 2527-2535.	21.1	11
42	Giant enhancement of the transverse magneto-optical Kerr effect based on the Tamm plasmon polaritons and its application in sensing. Optics and Laser Technology, 2022, 154, 108353.	4.6	11
43	Strong Nonreciprocal Radiation in a InAs Film by Critical Coupling with a Dielectric Grating. ES Energy & Environments, 2021, , .	1.1	10
44	Radiative modulator based on MoirÃ© hybridization with elliptic plasmons. Applied Physics Letters, 2021, 118, 173103.	3.3	10
45	Surface and volume phonon polaritons in a uniaxial hyperbolic material: optic axis parallel versus perpendicular to the surface. Optics Express, 2021, 29, 39824.	3.4	10
46	The Promising Structure to Verify the Kirchhoffâ€™s Law for Nonreciprocal Materials. ES Energy & Environments, 2020, , .	1.1	9
47	Super-resolution reconstruction of terahertz images based on a deep-learning network with a residual channel attention mechanism. Applied Optics, 2022, 61, 3363.	1.8	9
48	Tunable multichannel terahertz perfect graphene absorber with Fibonacci quasiperiodic photonic crystal. Advanced Composites and Hybrid Materials, 2022, 5, 2399-2405.	21.1	9
49	Eigenvalues analysis for EM waves in anisotropic materials and its applications for unidirectional transmission and unidirectional invisibility. Optics Communications, 2017, 402, 507-510.	2.1	8
50	Near-Field Radiative Heat Transfer via Coupling Graphene Plasmons with Different Phonon Polaritons in the Reststrahlen Bands. Engineered Science, 2021, , .	2.3	8
51	Strong circular dichroism triggered by near-field perturbation. Optical Materials, 2021, 118, 111255.	3.6	8
52	Frequency-tunable terahertz angular selectivity based on a dielectric-graphene multilayer structure. Applied Optics, 2021, 60, 2811.	1.8	7
53	Terahertz composite plasmonic slabs based on double-layer metallic gratings. Optics Express, 2020, 28, 18212.	3.4	7
54	Optical topological transition and refraction control in crystal quartz by tilting the optical axis. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1452.	2.1	6

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55	Perfect absorption in cascaded asymmetric hyperbolic metamaterial slabs. Superlattices and Microstructures, 2018, 124, 10-16.	3.1	5
56	Broadband and high-contrast-ratio optical diodes based on polarization conversion and photonic bandgap. Journal of Optics (United Kingdom), 2018, 20, 075603.	2.2	5
57	The application of asymmetric transmission in daytime radiative cooling cannot increase the cooling power. Solar Energy Materials and Solar Cells, 2020, 215, 110662.	6.2	5
58	High extinction ratio hexagonal boron nitride polarizer. Optik, 2018, 175, 290-295.	2.9	4
59	Angular Optical Transparency Induced by Photonic Topological Transition in Hexagonal Boron Nitride. Plasmonics, 2019, 14, 973-977.	3.4	4
60	Frequency-tunable wide-angle polarization selection with a graphene-based anisotropic epsilon-near-zero metamaterial. Journal of Optics (United Kingdom), 2022, 24, 024004.	2.2	4
61	Broadband high contrast ratio optical diodes based on polarization conversion. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	3
62	The singularities in the 4â€¯Ã—â€¯4 matrix formalisms. Optik, 2018, 168, 10-12.	2.9	3
63	Investigation on the Optical Transition of Hexagonal Boron Nitride. Plasmonics, 2018, 13, 1695-1698.	3.4	3
64	Optimization Design of a Multilayer Structure for Broadband and Direction-Selective Emissivity. ES Energy & Environments, 2021, , .	1.1	3
65	RADIATIVE COOLING BY USING A SLAB OF HEXAGONAL BORON NITRIDE. , 2018, , .		3
66	Actively tunable hybrid plasmon-phonon polariton modes in ferroelectric/graphene heterostructure systems at low-THz frequencies. Optical Materials, 2022, 131, 112623.	3.6	3
67	Tunable high-quality-factor absorption in a graphene monolayer based on quasi-bound states in the continuum. Beilstein Journal of Nanotechnology, 0, 13, 675-681.	2.8	3
68	A new approach for accurately measuring the spectral emissivity via modulating the surrounding radiation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108277.	2.3	1
69	Calculation of the Spectral Hemispherical Emissivity of an Arbitrarily Orientated Uniaxial Crystal. , 2018, , .		0
70	Realizing optical transparency in a continuous metal film coated with double microcavities. Optik, 2018, 172, 1100-1103.	2.9	0
71	Tunable Transmission Realized with Phase Change Materials. Plasmonics, 2021, 16, 71-76.	3.4	0
72	Observation of high contrast ratio asymmetric transmission for linearly and circularly polarized waves. Journal of Physics Communications, 2021, 5, 035011.	1.2	0

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73	KIRCHHOFF'S LAW FOR ANISOTROPIC MEDIA INCLUDING THIN FILMS. , 2019, , .		0
74	Thermal switch with multiple discrete levels. ES Energy & Environments, 2020, , .	1.1	0
75	Calculation Method for Slab and Grating Structure Made of Anisotropic Materials. Springer Theses, 2021, , 15-28.	0.1	0
76	Unidirectional Transmission of Light. Springer Theses, 2021, , 29-45.	0.1	0
77	Broadband Perfect Absorption. Springer Theses, 2021, , 47-73.	0.1	0