Bing Wang

List of Publications by Year
in descending order

141 papers	5,889 citations	94269 37 h-index	79541 73 g-index
141 all docs	141 docs citations	141 times ranked	5601 citing authors

#	Article	IF	Citations
1	Broadband graphene polarizer. Nature Photonics, 2011, 5, 411-415.	15.6	961
2	Optical coupling of surface plasmons between graphene sheets. Applied Physics Letters, 2012, 100, .	1.5	291
3	Plasmon Bragg reflectors and nanocavities on flat metallic surfaces. Applied Physics Letters, 2005, 87, 013107.	1.5	243
4	Coherent steering of nonlinear chiral valley photons with a synthetic Auâ€“WS2 metasurface. Nature Photonics, 2019, 13, 467-472.	15.6	236
5	Strong Coupling of Surface Plasmon Polaritons in Monolayer Graphene Sheet Arrays. Physical Review Letters, 2012, 109, 073901.	2.9	217
6	Surface plasmon polariton propagation in nanoscale metal gap waveguides. Optics Letters, 2004, 29, 1992.	1.7	205
7	A microscopic view of the electromagnetic properties of sub-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si103.gif" display="inline" overflow="scroll"><mml:mi>Î»</mml:mi></mml:math> metallic surfaces. Surface Science Reports, 2009, 64, 453-469.	3.8	190
8	Plasmonic absorption enhancement in periodic cross-shaped graphene arrays. Optics Express, 2015, 23, 8888.	1.7	185
9	Enhanced Surface Plasmon Resonance on a Smooth Silver Film with a Seed Growth Layer. ACS Nano, 2010, 4, 3139-3146.	7.3	174
10	Recent Advances of Plasmonic Nanoparticles and their Applications. Materials, 2018, 11, 1833.	1.3	146
11	Recent advances of two-dimensional materials in smart drug delivery nano-systems. Bioactive Materials, 2020, 5, 1071-1086.	8.6	119
12	Spectrum Control through Discrete Frequency Diffraction in the Presence of Photonic Gauge Potentials. Physical Review Letters, 2018, 120, 133901.	2.9	92
13	Tungsten Disulfideâ€“Gold Nanohole Hybrid Metasurfaces for Nonlinear Metalenses in the Visible Region. Nano Letters, 2018, 18, 1344-1350.	4.5	83
14	Efficient generation of surface plasmon by single-nanoslit illumination under highly oblique incidence. Applied Physics Letters, 2009, 94, .	1.5	75
15	High Aspect Subdiffraction-Limit Photolithography via a Silver Superlens. Nano Letters, 2012, 12, 1549-1554.	4.5	72
16	Metal heterowaveguides for nanometric focusing of light. Applied Physics Letters, 2004, 85, 3599-3601.	1.5	71
17	Exceptional Points and Asymmetric Mode Switching in Plasmonic Waveguides. Journal of Lightwave Technology, 2016, 34, 5258-5262.	2.7	71
18	Cooperative Enhancement of Twoâ€Photonâ€Absorptionâ€Induced Photoluminescence from a 2D Perovskiteâ€Microsphere Hybrid Dielectric Structure. Advanced Functional Materials, 2018, 28, 1707550.	7.8	70

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19	Precise Determination of the Crystallographic Orientations in Single ZnS Nanowires by Second-Harmonic Generation Microscopy. Nano Letters, 2015, 15, 3351-3357.	4.5	66
20	Two-dimensional non-Hermitian Skin Effect in a Synthetic Photonic Lattice. Physical Review Applied, 2020, 14, .	1.5	66
21	Topological bound modes in anti-PT-symmetric optical waveguide arrays. Optics Express, 2019, 27, 13858.	1.7	64
22	Efficient Mode Transfer on a Compact Silicon Chip by Encircling Moving Exceptional Points. Physical Review Letters, 2020, 124, 153903.	2.9	58
23	Harmonic Resonance Enhanced Second-Harmonic Generation in the Monolayer WS₂â€“Ag Nanocavity. ACS Photonics, 2020, 7, 562-568.	3.2	53
24	Plasmonic waveguide ring resonator at terahertz frequencies. Applied Physics Letters, 2006, 89, 133106.	1.5	51
25	Ultrasmooth Silver Thin Film on PEDOT:PSS Nucleation Layer for Extended Surface Plasmon Propagation. ACS Applied Materials & Interfaces, 2012, 4, 1247-1253.	4.0	51
26	Optical bistability in defective photonic multilayers doped by graphene. Optical and Quantum Electronics, 2017, 49, 1.	1.5	48
27	Numerical Study on Plasmonic Absorption Enhancement by a Rippled Graphene Sheet. Journal of Lightwave Technology, 2017, 35, 320-324.	2.7	47
28	Backscattering in monomode periodic waveguides. Physical Review B, 2008, 78, .	1.1	45
29	Directional beaming of light from a nanoslit surrounded by metallic heterostructures. Applied Physics Letters, 2006, 88, 013114.	1.5	43
30	Optically tunable plasmonic color filters. Applied Physics A: Materials Science and Processing, 2012, 107, 49-54.	1.1	42
31	Effect of Surface Morphology on the Optical Properties in Metalâ^'Dielectricâ^'Metal Thin Film Systems. ACS Applied Materials & Interfaces, 2011, 3, 1148-1153.	4.0	41
32	Exceptional points in Fano-resonant graphene metamaterials. Optics Express, 2017, 25, 7203.	1.7	41
33	Topological edge modes in non-Hermitian plasmonic waveguide arrays. Optics Express, 2017, 25, 11132.	1.7	40
34	Booming development and present advances of two dimensional MXenes for photodetectors. Chemical Engineering Journal, 2021, 403, 126336.	6.6	40
35	Structuring Nonlinear Wavefront Emitted from Monolayer Transition-Metal Dichalcogenides. Research, 2020, 2020, 9085782.	2.8	40
36	Nano-antenna in a photoconductive photomixer for highly efficient continuous wave terahertz emission. Scientific Reports, 2013, 3, 2824.	1.6	39

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37	Low-loss plasmonic supermodes in graphene multilayers. Optics Express, 2014, 22, 25324.	1.7	39
38	Surface Plasmonic Lattice Solitons in Semi-Infinite Graphene Sheet Arrays. Journal of Lightwave Technology, 2017, 35, 2960-2965.	2.7	37
39	Present advances and perspectives of broadband photo-detectors based on emerging 2D-Xenes beyond graphene. Nano Research, 2020, 13, 891-918.	5.8	36
40	Optical Imaginary Directional Couplers. Journal of Lightwave Technology, 2018, 36, 2510-2516.	2.7	35
41	Recent development and advances in Photodetectors based on two-dimensional topological insulators. Journal of Materials Chemistry C, 2020, 8, 15526-15574.	2.7	35
42	Giant Goos-HÃnchen shifts in non-Hermitian dielectric multilayers incorporated with graphene. Optics Express, 2018, 26, 2817.	1.7	34
43	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
44	Topological Edge Modes in Non-Hermitian Photonic Aharonov-Bohm Cages. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.	1.9	34
45	High Contrast Superlens Lithography Engineered by Loss Reduction. Advanced Functional Materials, 2012, 22, 3777-3783.	7.8	32
46	Liquid-crystal-loaded chiral metasurfaces for reconfigurable multiband spin-selective light absorption. Optics Express, 2018, 26, 25305.	1.7	32
47	Topological interface modes in graphene multilayer arrays. Optics and Laser Technology, 2018, 103, 272-278.	2.2	31
48	Optical Transmission Enhancement and Tuning by Overlaying Liquid Crystals on a Gold Film with Patterned Nanoholes. Plasmonics, 2011, 6, 659-664.	1.8	30
49	Real-time observation of frequency Bloch oscillations with fibre loop modulation. Light: Science and Applications, 2021, 10, 48.	7.7	30
50	Optical bistability of graphene embedded in parity-time-symmetric photonic lattices. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 1731.	0.9	30
51	Talbot effect in weakly coupled monolayer graphene sheet arrays. Optics Letters, 2014, 39, 3371.	1.7	28
52	Topological mode switching in a graphene doublet with exceptional points. Optical and Quantum Electronics, 2017, 49, 1.	1.5	28
53	Enhancement of the Second Harmonic Generation from WS₂ Monolayers by Cooperating with Dielectric Microspheres. Advanced Optical Materials, 2019, 7, 1801270.	3.6	28
54	Rabi Oscillations of Plasmonic Supermodes in Graphene Multilayer Arrays. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 125-129.	1.9	27

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55	Discrete diffraction and Bloch oscillations in non-Hermitian frequency lattices induced by complex photonic gauge fields. Physical Review B, 2020, 101, .	1.1	27
56	High efficiency 90Â° bending metal heterowaveguides for nanophotonic integration. Applied Physics Letters, 2006, 89, 243120.	1.5	26
57	Highly Sensitive Detection of the Lattice Distortion in Single Bent ZnO Nanowires by Second-Harmonic Generation Microscopy. ACS Photonics, 2016, 3, 1308-1314.	3.2	26
58	Nearâ€Field Characterization of Graphene Plasmons by Photoâ€Induced Force Microscopy. Laser and Photonics Reviews, 2018, 12, 1800040.	4.4	26
59	Tunable broadband transmission and phase modulation of light through graphene multilayers. Journal of Applied Physics, 2014, 115, .	1.1	24
60	Tunable broadband plasmonic field enhancement on a graphene surface using a normal-incidence plane wave at mid-infrared frequencies. Scientific Reports, 2015, 5, 11195.	1.6	23
61	High-efficiency energy transfer in perovskite heterostructures. Optics Express, 2018, 26, 18448.	1.7	23
62	Plasmon-negative refraction at the heterointerface of graphene sheet arrays. Optics Letters, 2014, 39, 5957.	1.7	22
63	Vector plasmonic lattice solitons in nonlinear graphene-pair arrays. Optics Letters, 2016, 41, 3619.	1.7	22
64	Discrete temporal Talbot effect in synthetic mesh lattices. Optics Express, 2018, 26, 19235.	1.7	21
65	Rabi oscillations of optical modes in a waveguide with dynamic modulation. Optical and Quantum Electronics, 2017, 49, 1.	1.5	20
66	Airy pulse shaping using time-dependent power-law potentials. Physical Review A, 2018, 97, .	1.0	20
67	Planar metal heterostructures for nanoplasmonic waveguides. Applied Physics Letters, 2007, 90, 013114.	1.5	18
68	Active near infrared linear polarizer based on VO2 phase transition. Journal of Applied Physics, 2013, 114, 163103.	1.1	18
69	Enhanced plasmonic nanofocusing of terahertz waves in tapered graphene multilayers. Optics Express, 2016, 24, 14765.	1.7	18
70	Plasmon assisted enhanced second-harmonic generation in single hybrid Au/ZnS nanowires. Optical Materials, 2017, 64, 257-261.	1.7	18
71	Gigahertz acoustic vibrations of Ga-doped ZnO nanoparticle array. Nanotechnology, 2019, 30, 305201.	1.3	18
72	Two dimensional nanomaterials-enabled smart light regulation technologies: Recent advances and developments. Optik, 2020, 220, 165191.	1.4	18

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73	On-chip experiment for chiral mode transfer without enclosing an exceptional point. Physical Review A, 2021, 103, .	1.0	18
74	Evanescent coupling of transmitted light through an array of holes in a metallic film assisted by transverse surface current. Journal of Physics Condensed Matter, 2003, 15, 8147-8156.	0.7	16
75	Subwavelength lithography by waveguide mode interference. Applied Physics Letters, 2011, 99, 151106.	1.5	16
76	Near-resonant second-order nonlinear susceptibility in c-axis oriented ZnO nanorods. Applied Physics Letters, 2014, 105, 071906.	1.5	16
77	Surface plasmon polaritons locally excited on the ridges of metallic gratings. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 1432.	0.8	15
78	Non-reciprocal Phase Shift and Mode Modulation in Dynamic Graphene Waveguides. Journal of Lightwave Technology, 2016, , 1-1.	2.7	15
79	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="script">P</mml:mi><mml:mi mathvariant="script">T</mml:mi></mml:mrow></mml:math> -symmetric Talbot effect in a temporal mesh lattice. Physical Review A, 2018, 98, .	1.0	15
80	Plasmonic Bloch oscillations in monolayer graphene sheet arrays. Optics Letters, 2014, 39, 6827.	1.7	14
81	Plasmonic routing in aperiodic graphene sheet arrays. Optics Letters, 2014, 39, 4867.	1.7	14
82	Photonic Weyl phase transition in dynamically modulated brick-wall waveguide arrays. Optics Express, 2018, 26, 20929.	1.7	14
83	Chirality-selected second-harmonic holography with phase and binary amplitude manipulation. Nanoscale, 2020, 12, 13330-13337.	2.8	14
84	Improved photoemission and stability of 2D organic-inorganic lead iodide perovskite films by polymer passivation. Nanotechnology, 2020, 31, 42LT01.	1.3	14
85	Photoinduced Trap Passivation for Enhanced Photoluminescence in 2D Organicâ€“Inorganic Hybrid Perovskites. Advanced Optical Materials, 2020, 8, 1901695.	3.6	14
86	Non-Hermitian flat bands in rhombic microring resonator arrays. Optics Express, 2021, 29, 24373.	1.7	14
87	Bloch oscillations in photonic spectral lattices through phase-mismatched four-wave mixing. Optics Letters, 2019, 44, 5430.	1.7	14
88	How many surface plasmons are locally excited on the ridges of metallic lamellar gratings?. Applied Physics Letters, 2010, 96, 051115.	1.5	13
89	Discrete refraction and reflection in temporal lattice heterostructures. Optics Letters, 2019, 44, 363.	1.7	13
90	Metal heterostructure-based nanophotonic devices: finite-difference time-domain numerical simulations. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 1660.	0.9	12

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91	Highly Tunable Enhancement and Switching of Nonlinear Emission from All-Inorganic Lead Halide Perovskites via Electric Field. Nano Letters, 2021, 21, 10230-10237.	4.5	12
92	Simulations of nanoscale interferometer and array focusing by metal heterowaveguides. Optics Express, 2005, 13, 10558.	1.7	11
93	Rabi oscillations of surface plasmon polaritons in graphene-pair arrays. Optics Express, 2015, 23, 31136.	1.7	11
94	Photonic non-Bloch quadrupole topological insulators in coupled ring resonators. Physical Review A, 2021, 103, .	1.0	11
95	Inelastic scattering of surface plasmons in oscillating metallic waveguides. Applied Physics Letters, 2011, 98, 263111.	1.5	10
96	Plasmonic lattice solitons in nonlinear graphene sheet arrays. Optics Express, 2015, 23, 32679.	1.7	10
97	Asymmetric plasmonic supermodes in nonlinear graphene multilayers. Optics Express, 2017, 25, 1234.	1.7	10
98	Frequency diffraction management through arbitrary engineering of photonic band structures. Optics Express, 2018, 26, 25721.	1.7	10
99	Bloch mode engineering in graphene modulated periodic waveguides and cavities. Journal of the Optical Society of America B: Optical Physics, 2015, 32, 1748.	0.9	9
100	Optimization of metal-enhanced fluorescence by different concentrations of gold-silica coreâ€“shell nanoparticles. Optics Communications, 2015, 349, 180-184.	1.0	9
101	Surface plasmonic resonances and enhanced IR spectra in GZO nano-triangle arrays. Materials Letters, 2016, 172, 36-39.	1.3	9
102	Accelerating self-imaging effect for Airy pulse trains. Physical Review A, 2019, 99, .	1.0	9
103	Sub-30 nm thick plasmonic films and structures with ultralow loss. Nanoscale, 2014, 6, 3243-3249.	2.8	8
104	Branchlike nano-electrodes for enhanced terahertz emission in photomixers. Nanotechnology, 2015, 26, 255201.	1.3	8
105	Tuning the photoinduced charge transfer from CdTe quantum dots to ZnO nanofilms through Ga doping. Optical Materials, 2019, 96, 109311.	1.7	8
106	Scattering singularities of optical waveguides under complex modulation. Physical Review A, 2020, 101, .	1.0	8
107	Electrically switchable photonic crystals based on liquid-crystal-infiltrated TiO₂-inverse opals. Optics Express, 2019, 27, 15391.	1.7	8
108	Subspace-induced Dirac point and nondissipative wave dynamics in a non-Hermitian optical lattice. Physical Review A, 2022, 105, .	1.0	8

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109	Confining light in two-dimensional slab photonic crystal waveguides with metal plates. Applied Physics Letters, 2006, 88, 193128.	1.5	7
110	Plasmonic Zitterbewegung in binary graphene sheet arrays. Optics Letters, 2015, 40, 2945.	1.7	7
111	Plasmonic Zener tunneling in binary graphene sheet arrays. Optics Letters, 2016, 41, 2978.	1.7	7
112	Bleomycin: A novel osteogenesis inhibitor of dental follicle cells via a TGFâ€Î²1/SMAD7/RUNX2 pathway. British Journal of Pharmacology, 2021, 178, 312-327.	2.7	7
113	Local-field enhancement of optical nonlinearities in the AGZO nano-triangle array. Optical Materials, 2016, 60, 571-576.	1.7	6
114	Concentrated secondâ€harmonic generation from a single Alâ€covered ZnS nanobelt. Laser and Photonics Reviews, 2017, 11, 1600263.	4.4	6
115	Large second-harmonic vortex beam generation with quasi-nonlinear spinâ€“orbit interaction. Science Bulletin, 2021, 66, 449-456.	4.3	6
116	Generation of second harmonic Bessel beams through hybrid meta-axicons. Optics Express, 2020, 28, 3179.	1.7	6
117	Graphene-polymer multilayer heterostructure for terahertz metamaterials. , 2013, , .		5
118	Plasmonic absorption enhancement in periodic cross-shaped graphene arrays. , 2015, , .		5
119	Efficient Spectrum Reshaping with Photonic Gauge Potentials in Resonantly Modulated Fiber-Loop Circuits. Physical Review Applied, 2019, 12, .	1.5	5
120	Influences of Ga Doping on Crystal Structure and Polarimetric Pattern of SHG in ZnO Nanofilms. Nanomaterials, 2019, 9, 905.	1.9	5
121	Controllable Plexcitonic Coupling in a WS₂-Ag Nanocavity with Solvents. ACS Applied Materials & Interfaces, 2021, 13, 43554-43561.	4.0	5
122	Frequency control of surface plasmons with oscillating metal-insulator-metal waveguides. Applied Physics A: Materials Science and Processing, 2012, 107, 43-48.	1.1	4
123	Surface vector plasmonic lattice solitons in semi-infinite graphene-pair arrays. Optics Express, 2017, 25, 20708.	1.7	4
124	Quantitatively extracting the contribution of asymmetric local-field to Ï‡^(2) in cross-shaped Ag nanoholes. Optics Express, 2017, 25, 1296.	1.7	4
125	Spectrum Manipulation for Sound with Effective Gauge Fields in Cascading Temporally Modulated Waveguides. Physical Review Applied, 2019, 11, .	1.5	4
126	Two-photon-pumped amplified spontaneous emission from Ruddlesden-Popper perovskite flakes. Optics Express, 2022, 30, 21094.	1.7	4

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127	Temporal Imaging Using Dispersive Gradient-Index Time Lenses. Journal of Lightwave Technology, 2020, 38, 2383-2391.	2.7	3
128	Frequency manipulation of topological surface states by Weyl phase transitions. Optics Letters, 2021, 46, 5719.	1.7	3
129	Chiral/directional mode transfer based on a tunable non-Hermitian system. Optics Express, 2021, 29, 44146.	1.7	3
130	Waveguiding effect in 2D metalâ€“dielectricâ€“metal grating structure. Applied Physics A: Materials Science and Processing, 2012, 107, 127-132.	1.1	2
131	Surface plasmon supermodes in graphene multilayers. , 2015, , .		2
132	Directional Excitation of Surface Plasmon Polaritons by Circularly Polarized Vortex Beams. Plasmonics, 2020, 15, 727-734.	1.8	2
133	Giant Quantum Yield Enhancement in CdS/MgF₂/Ag Hybrid Nanobelt under Two-Photon Excitation. ACS Photonics, 2020, 7, 2987-2994.	3.2	2
134	Broadband frequency control of light using synthetic frequency lattices formed by four-wave-mixing Bragg scatterings. Physical Review A, 2021, 103, .	1.0	1
135	Electromagnetic energy transfer in nanoscale metallic waveguide arrays. , 2004, , .		0
136	Near-field analysis of surface waves generated by nanostructures. Proceedings of SPIE, 2010, , .	0.8	0
137	Plasmonic coupling in separated graphene sheets. , 2012, , .		0
138	Plasmonic beam control in strongly coupled graphene sheet arrays. , 2015, , .		0
139	54.1: Invited Paper: Spin Control of Light with Liquidâ€Crystalâ€Loaded Chiral Metasurfaces. Digest of Technical Papers SID International Symposium, 2019, 50, 587-588.	0.1	0
140	Optical Coupling in Layered Graphene Sheets. , 2012, , .		0
141	The polarization of the SHG in single ZnS NWs. , 2015, , .		0