

# Baile Zhang

## List of Publications by Year in Descending Order

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**Version:** 2024-04-23

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

114  
papers

4,359  
citations

31  
h-index

64  
g-index

128  
ext. papers

6,245  
ext. citations

9.6  
avg, IF

6.13  
L-index

#	Paper	IF	Citations
114	Time-periodic corner states from Floquet higher-order topology.. <i>Nature Communications</i> , <b>2022</b> , 13, 11	17.4	4
113	Surface Dyakonov-Cherenkov radiation. <i>ELight</i> , <b>2022</b> , 2,		3
112	Projectively Enriched Symmetry and Topology in Acoustic Crystals.. <i>Physical Review Letters</i> , <b>2022</b> , 128, 116802	7.4	7
111	Mode-selective single-dipole excitation and controlled routing of guided waves in a multi-mode topological waveguide. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 221702	3.4	0
110	Acoustic non-Hermitian skin effect from twisted winding topology. <i>Nature Communications</i> , <b>2021</b> , 12, 6297	17.4	5
109	Observation of Dislocation-Induced Topological Modes in a Three-Dimensional Acoustic Topological Insulator. <i>Physical Review Letters</i> , <b>2021</b> , 127, 214301	7.4	4
108	Non-Hermitian route to higher-order topology in an acoustic crystal. <i>Nature Communications</i> , <b>2021</b> , 12, 1888	17.4	21
107	Demonstration of topological wireless power transfer. <i>Science Bulletin</i> , <b>2021</b> , 66, 974-980	10.6	5
106	Vortex states in an acoustic Weyl crystal with a topological lattice defect. <i>Nature Communications</i> , <b>2021</b> , 12, 3654	17.4	8
105	Topological Valley Photonics: Physics and Device Applications. <i>Advanced Photonics Research</i> , <b>2021</b> , 2, 2100013	1.9	7
104	Antichiral edge states in an acoustic resonator lattice with staggered air flow. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 235103	2.5	3
103	Ideal type-II Weyl points in topological circuits. <i>National Science Review</i> , <b>2021</b> , 8, nwaa192	10.8	8
102	Image reconstruction through a multimode fiber with a simple neural network architecture. <i>Scientific Reports</i> , <b>2021</b> , 11, 896	4.9	10
101	Toggling Near-Field Directionality via Polarization Control of Surface Waves. <i>Laser and Photonics Reviews</i> , <b>2021</b> , 15, 2000388	8.3	7
100	Polarization Shaping of Free-Electron Radiation by Gradient Bianisotropic Metasurfaces. <i>Laser and Photonics Reviews</i> , <b>2021</b> , 15, 2000426	8.3	12
99	Topological slow light via coupling chiral edge modes with flatbands. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 071102	3.4	4
98	Negative refraction of ultra-squeezed in-plane hyperbolic designer polaritons. <i>Photonics Research</i> , <b>2021</b> , 9, 1540	6	3

97	A Brewster route to Cherenkov detectors. <i>Nature Communications</i> , <b>2021</b> , 12, 5554	17.4	7
96	Giant Enhancement of Unconventional Photon Blockade in a Dimer Chain.. <i>Physical Review Letters</i> , <b>2021</b> , 127, 240402	7.4	1
95	Demonstration of negative refraction induced by synthetic gauge fields. <i>Science Advances</i> , <b>2021</b> , 7, eabj2062	17.3	2
94	Aperiodic Metagratings for High-Performance Multifunctional Acoustic Lenses. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 2000542	6.8	7
93	Observation of an acoustic octupole topological insulator. <i>Nature Communications</i> , <b>2020</b> , 11, 2442	17.4	46
92	Observation of topological edge states induced solely by non-Hermiticity in an acoustic crystal. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	23
91	Broadband enhancement of on-chip single-photon extraction via tilted hyperbolic metamaterials. <i>Applied Physics Reviews</i> , <b>2020</b> , 7, 021403	17.3	17
90	Circuit implementation of a four-dimensional topological insulator. <i>Nature Communications</i> , <b>2020</b> , 11, 2356	17.4	30
89	Non-Hermitian Dirac Cones. <i>Physical Review Letters</i> , <b>2020</b> , 124, 236403	7.4	15
88	Observation of Protected Photonic Edge States Induced by Real-Space Topological Lattice Defects. <i>Physical Review Letters</i> , <b>2020</b> , 124, 243602	7.4	21
87	Electrically pumped topological laser with valley edge modes. <i>Nature</i> , <b>2020</b> , 578, 246-250	50.4	151
86	Terahertz topological photonics for on-chip communication. <i>Nature Photonics</i> , <b>2020</b> , 14, 446-451	33.9	174
85	Performing optical logic operations by a diffractive neural network. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 59	16.7	65
84	Observation of an unpaired photonic Dirac point. <i>Nature Communications</i> , <b>2020</b> , 11, 1873	17.4	15
83	Observation of Photonic Antichiral Edge States. <i>Physical Review Letters</i> , <b>2020</b> , 125, 263603	7.4	10
82	A conformal transformation approach to wide-angle illusion device and absorber. <i>Nanophotonics</i> , <b>2020</b> , 9, 3243-3249	6.3	2
81	Directing Cherenkov photons with spatial nonlocality. <i>Nanophotonics</i> , <b>2020</b> , 9, 3435-3442	6.3	6
80	Ideal Unconventional Weyl Point in a Chiral Photonic Metamaterial. <i>Physical Review Letters</i> , <b>2020</b> , 125, 143001	7.4	13

79	SUPERSCATTERING OF LIGHT IN REFRACTIVE-INDEX NEAR-ZERO ENVIRONMENTS. <i>Progress in Electromagnetics Research</i> , <b>2020</b> , 168, 15-23	3.8	17
78	Topology-Controlled Photonic Cavity Based on the Near-Conservation of the Valley Degree of Freedom. <i>Physical Review Letters</i> , <b>2020</b> , 125, 213902	7.4	8
77	Chiral Plasmons with Twisted Atomic Bilayers. <i>Physical Review Letters</i> , <b>2020</b> , 125, 077401	7.4	28
76	Photonic amorphous topological insulator. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 133	16.7	20
75	Confined transverse-electric graphene plasmons in negative refractive-index systems. <i>Npj 2D Materials and Applications</i> , <b>2020</b> , 4,	8.8	5
74	Nonlocality Induced Cherenkov Threshold. <i>Laser and Photonics Reviews</i> , <b>2020</b> , 14, 2000149	8.3	11
73	Topological Anderson Insulator in Disordered Photonic Crystals. <i>Physical Review Letters</i> , <b>2020</b> , 125, 133603	7.4	17
72	Enhancing and controlling valley magnetic response in MoS/WS heterostructures by all-optical route. <i>Nature Communications</i> , <b>2019</b> , 10, 4226	17.4	20
71	Controlling photonic spin Hall effect via exceptional points. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	31
70	Realization of an Acoustic Third-Order Topological Insulator. <i>Physical Review Letters</i> , <b>2019</b> , 122, 244301	7.4	73
69	Valley-Hall Photonic Topological Insulators with Dual-Band Kink States. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900036	8.1	26
68	Topological triply degenerate point with double Fermi arcs. <i>Nature Physics</i> , <b>2019</b> , 15, 645-649	16.2	43
67	Type-I hyperbolic metasurfaces for highly-squeezed designer polaritons with negative group velocity. <i>Nature Communications</i> , <b>2019</b> , 10, 2002	17.4	13
66	Topologically enhanced harmonic generation in a nonlinear transmission line metamaterial. <i>Nature Communications</i> , <b>2019</b> , 10, 1102	17.4	59
65	Engineering Valley Polarization of Monolayer WS : A Physical Doping Approach. <i>Small</i> , <b>2019</b> , 15, e1805503	11.1	30
64	Experimental Observation of Superscattering. <i>Physical Review Letters</i> , <b>2019</b> , 122, 063901	7.4	54
63	Transformation-Invariant Metamaterials. <i>Physical Review Letters</i> , <b>2019</b> , 123, 067701	7.4	20
62	Valley Kink States and Topological Channel Intersections in Substrate-Integrated Photonic Circuitry. <i>Laser and Photonics Reviews</i> , <b>2019</b> , 13, 1900159	8.3	24

61	Normal Doppler Frequency Shift in Negative Refractive-Index Systems. <i>Laser and Photonics Reviews</i> , <b>2019</b> , 13, 1900081	8.3	8
60	Observation of a topological nodal surface and its surface-state arcs in an artificial acoustic crystal. <i>Nature Communications</i> , <b>2019</b> , 10, 5185	17.4	18
59	Fermi-Arc-Induced Vortex Structure in Weyl Beam Shifts. <i>Physical Review Letters</i> , <b>2019</b> , 122, 066602	7.4	7
58	Acoustic higher-order topological insulator on a kagome lattice. <i>Nature Materials</i> , <b>2019</b> , 18, 108-112	27	286
57	Realization of a three-dimensional photonic topological insulator. <i>Nature</i> , <b>2019</b> , 565, 622-626	50.4	148
56	Multifrequency Superscattering from Subwavelength Hyperbolic Structures. <i>ACS Photonics</i> , <b>2018</b> , 5, 1506-1511	6.3	46
55	Group-Velocity-Controlled and Gate-Tunable Directional Excitation of Polaritons in Graphene-Boron Nitride Heterostructures. <i>Laser and Photonics Reviews</i> , <b>2018</b> , 12, 1800049	8.3	38
54	Acoustic valley edge states in a graphene-like resonator system. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 091713	2.5	30
53	Confined transverse electric phonon polaritons in hexagonal boron nitrides. <i>2D Materials</i> , <b>2018</b> , 5, 0150189	1.9	20
52	Tunable excitonic emission of monolayer WS <sub>2</sub> for the optical detection of DNA nucleobases. <i>Nano Research</i> , <b>2018</b> , 11, 1744-1754	10	14
51	Subwavelength wave manipulation in a thin surface-wave bandgap crystal. <i>Optics Letters</i> , <b>2018</b> , 43, 50-53		3
50	Superlight inverse Doppler effect. <i>Nature Physics</i> , <b>2018</b> , 14, 1001-1005	16.2	34
49	Metamaterials: Giant Asymmetric Radiation from an Ultrathin Bianisotropic Metamaterial (Adv. Sci. 7/2018). <i>Advanced Science</i> , <b>2018</b> , 5, 1870042	13.6	2
48	Spin Momentum Locked Surface States in Metamaterials without Topological Transition. <i>Laser and Photonics Reviews</i> , <b>2018</b> , 12, 1800002	8.3	5
47	Broadband Negative Refraction of Highly Squeezed Hyperbolic Polaritons in 2D Materials. <i>Research</i> , <b>2018</b> , 2018, 2532819	7.8	22
46	Some topological phases for sound <b>2018</b> , 25-48		
45	Topologically protected refraction of robust kink states in valley photonic crystals. <i>Nature Physics</i> , <b>2018</b> , 14, 140-144	16.2	213
44	Interferenceless Polarization Splitting Through Nanoscale van der Waals Heterostructures. <i>Physical Review Applied</i> , <b>2018</b> , 10,	4.3	10

43	Spoof Plasmonics: From Metamaterial Concept to Topological Description. <i>Advanced Materials</i> , <b>2018</b> , 30, e1706683	24	70
42	Controlling Cherenkov angles with resonance transition radiation. <i>Nature Physics</i> , <b>2018</b> , 14, 816-821	16.2	54
41	Flexible Photonic Topological Insulator. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800532	8.1	8
40	Splashing transients of 2D plasmons launched by swift electrons. <i>Science Advances</i> , <b>2017</b> , 3, e1601192	14.3	52
39	Forward/Backward Switching of Plasmonic Wave Propagation Using Sign-Reversal Coupling. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700018	24	24
38	All-angle negative refraction of highly squeezed plasmon and phonon polaritons in graphene-boron nitride heterostructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 6717-6721	11.5	107
37	Realizing type-II Weyl points in an optical lattice. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	10
36	Experimental demonstration of Fabry-Perot open resonators in a surface-wave bandgap crystal. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 121102	3.4	2
35	Strain-Induced Gauge Field and Landau Levels in Acoustic Structures. <i>Physical Review Letters</i> , <b>2017</b> , 118, 194301	7.4	24
34	Valley surface-wave photonic crystal and its bulk/edge transport. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	79
33	Acoustic Type-II Weyl Nodes from Stacking Dimerized Chains. <i>Physical Review Letters</i> , <b>2016</b> , 117, 224301	7.4	89
32	Deep-subwavelength magnetic-coupling-dominant interaction among magnetic localized surface plasmons. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	12
31	Optical bistability in a nonlinear-shell-coated metallic nanoparticle. <i>Scientific Reports</i> , <b>2016</b> , 6, 21741	4.9	19
30	Probing topological protection using a designer surface plasmon structure. <i>Nature Communications</i> , <b>2016</b> , 7, 11619	17.4	150
29	Resolution criteria in double-slit microscopic imaging experiments. <i>Scientific Reports</i> , <b>2016</b> , 6, 33764	4.9	1
28	Translation and Rotation of Transformation Media under Electromagnetic Pulse. <i>Scientific Reports</i> , <b>2016</b> , 6, 28346	4.9	
27	Frequency-selective propagation of localized spoof surface plasmons in a graded plasmonic resonator chain. <i>Scientific Reports</i> , <b>2016</b> , 6, 25576	4.9	13
26	High-order spoof localized surface plasmons supported on a complementary metallic spiral structure. <i>Scientific Reports</i> , <b>2016</b> , 6, 24447	4.9	11

25	Experimental demonstration of broadband reflectionless diffraction-free electromagnetic wave routing. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	2
24	Guiding, bending, and splitting of coupled defect surface modes in a surface-wave photonic crystal. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 041105	3.4	24
23	Multi-directional plasmonic surface-wave splitters with full bandwidth isolation. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 111107	3.4	16
22	Topological water wave states in a one-dimensional structure. <i>Scientific Reports</i> , <b>2016</b> , 6, 29202	4.9	32
21	Localized spoof surface plasmons in textured open metal surfaces. <i>Optics Letters</i> , <b>2016</b> , 41, 2181-4	3	31
20	Invisibility Dips of Near-Field Energy Transport in a Spoof Plasmonic Metadimer. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8307-8312	15.6	31
19	Design, implementation, and extension of thermal invisibility cloaks. <i>AIP Advances</i> , <b>2015</b> , 5, 053402	1.5	23
18	Topological acoustics. <i>Physical Review Letters</i> , <b>2015</b> , 114, 114301	7.4	668
17	Dispersion-tunable designer-plasmonic resonator with enhanced high-order resonances. <i>Optics Express</i> , <b>2015</b> , 23, 6896-902	3.3	36
16	Caustic graphene plasmons with Kelvin angle. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	21
15	Complementary structure for designer localized surface plasmons. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 191103	3.4	25
14	Phase-preserved macroscopic visible-light carpet cloaking beyond two dimensions. <i>Laser and Photonics Reviews</i> , <b>2015</b> , 9, 399-404	8.3	3
13	Vertical transport of subwavelength localized surface electromagnetic modes. <i>Laser and Photonics Reviews</i> , <b>2015</b> , 9, 571-576	8.3	33
12	Electromagnetic detection of a perfect carpet cloak. <i>Scientific Reports</i> , <b>2015</b> , 5, 10401	4.9	8
11	Broadband surface-wave transformation cloak. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 7635-8	11.5	47
10	Transformation cloaks for surface electromagnetic waves <b>2015</b> ,		1
9	Realization of deep subwavelength resolution with singular media. <i>Scientific Reports</i> , <b>2014</b> , 4, 5212	4.9	13
8	Ultrathin three-dimensional thermal cloak. <i>Physical Review Letters</i> , <b>2014</b> , 112, 054301	7.4	272

7	Atomically thin nonreciprocal optical isolation. <i>Scientific Reports</i> , <b>2014</b> , 4, 4190	4.9	32
6	Ab initio study of electronic and optical behavior of two-dimensional silicon carbide. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 2131	7.1	111
5	Invisibility cloaks from forward design to inverse design. <i>Science China Information Sciences</i> , <b>2013</b> , 56, 1-11	3.4	7
4	Waveguide design and application with transformation optics. <i>Science China Information Sciences</i> , <b>2013</b> , 56, 1-11	3.4	2
3	Ab initio optical study of graphene on hexagonal boron nitride and fluorographene substrates. <i>Journal of Materials Chemistry C</i> , <b>2013</b> , 1, 1618	7.1	35
2	Electrodynamics of transformation-based invisibility cloaking. <i>Light: Science and Applications</i> , <b>2012</b> , 1, e32-e32	16.7	36
1	Deterministic and Scalable Generation of Exciton Emitters in 2D Semiconductor Nanodisks. <i>Advanced Optical Materials</i> , 2102702	8.1	0