Biao-Bing Jin

List of Publications by Year
in descending order

121	3,676	136740	143772
papers	citations	32 h-index	57 g-index

122	122	122	2934
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Broadband diffusion of terahertz waves by multi-bit coding metasurfaces. Light: Science and Applications, 2015, 4, e324-e324.	7.7	461
2	High permittivity and low loss microwave dielectrics suitable for 5G resonators and low temperature co-fired ceramic architecture. Journal of Materials Chemistry C, 2017, 5, 10094-10098.	2.7	271
3	Anomalous Terahertz Reflection and Scattering by Flexible and Conformal Coding Metamaterials. Advanced Optical Materials, 2015, 3, 1374-1380.	3.6	175
4	Liquid crystal programmable metasurface for terahertz beam steering. Applied Physics Letters, 2020, 116, .	1.5	169
5	Broadband tunable liquid crystal terahertz waveplates driven with porous graphene electrodes. Light: Science and Applications, 2015, 4, e253-e253.	7.7	148
6	Low loss and magnetic field-tunable superconducting terahertz metamaterial. Optics Express, 2010, 18, 17504.	1.7	104
7	Large birefringence liquid crystal material in terahertz range. Optical Materials Express, 2012, 2, 1314.	1.6	104
8	Active Control of Terahertz Waves Using Vanadium-Dioxide-Embedded Metamaterials. Physical Review Applied, 2019, 11, .	1.5	99
9	Superconducting terahertz metamaterials mimicking electromagnetically induced transparency. Applied Physics Letters, 2011, 99, .	1.5	97
10	Broadband and high modulation-depth THz modulator using low bias controlled VO_2-integrated metasurface. Optics Express, 2017, 25, 17322.	1.7	96
11	Label-free measurements on cell apoptosis using a terahertz metamaterial-based biosensor. Applied Physics Letters, 2016, 108, .	1.5	85
12	Self-polarizing terahertz liquid crystal phase shifter. AIP Advances, 2011, 1, .	0.6	81
13	Ultrafast spin current generated from an antiferromagnet. Nature Physics, 2021, 17, 388-394.	6.5	81
14	Tuning of superconducting niobium nitride terahertz metamaterials. Optics Express, 2011, 19, 12021.	1.7	62
15	Temperature stable Sm(Nb_{1â”x}V_x)O₄ (0.0 â‰¤ x â‰¤ 0.9) microwave dielectric ceramics with ultra-low dielectric loss for dielectric resonator antenna applications. Journal of Materials Chemistry C, 2021, 9, 9962-9971.	2.7	60
16	A 400-GHz High-Gain Quartz-Based Single Layered Folded Reflectarray Antenna for Terahertz Applications. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 78-88.	2.0	59
17	Temperatureâ€Controlled Optical Activity and Negative Refractive Index. Advanced Functional Materials, 2021, 31, 2010249.	7.8	58
18	Broadband diffuse terahertz wave scattering by flexible metasurface with randomized phase distribution. Scientific Reports, 2016, 6, 26875.	1.6	57

#	Article	IF	Citations
19	Terahertz nonlinear superconducting metamaterials. Applied Physics Letters, 2013, 102, .	1.5	53
20	Electrical dynamic modulation of THz radiation based on superconducting metamaterials. Applied Physics Letters, 2017, 111, .	1.5	53
21	Dual-color terahertz spatial light modulator for single-pixel imaging. Light: Science and Applications, 2022, 11, .	7.7	53
22	Design of a Sub-6 GHz Dielectric Resonator Antenna with Novel Temperature-Stabilized (Sm_{1â€“x}Bi_x)NbO₄ (x = 0â€“0.15) Microwave Dielectric Ceramics. ACS Applied Materials & Interfaces, 2022, 14, 7030-7038.	4.0	52
23	Switchable Chiral Mirrors. Advanced Optical Materials, 2020, 8, 2000247.	3.6	45
24	Design of transmission-type coding metasurface and its application of beam forming. Applied Physics Letters, 2016, 109, .	1.5	42
25	High-frequency resonance in acoustic superlattice of periodically poledLiTaO3. Applied Physics Letters, 1997, 70, 592-594.	1.5	41
26	Designing perfect linear polarization converters using perfect electric and magnetic conducting surfaces. Scientific Reports, 2016, 6, 38925.	1.6	41
27	Crystal structure, impedance and broadband dielectric spectra of ordered scheelite-structured Bi(Sc1/3Mo2/3)O4 ceramic. Journal of the European Ceramic Society, 2018, 38, 1556-1561.	2.8	39
28	Spintronic terahertz emitter. Journal of Applied Physics, 2021, 129, .	1.1	39
29	Programmable Terahertz Metamaterials with Nonâ€Volatile Memory. Laser and Photonics Reviews, 2022, 16, .	4.4	37
30	A flexible wideband bandpass terahertz filter using multi-layer metamaterials. Applied Physics B: Lasers and Optics, 2013, 113, 285-290.	1.1	36
31	Tunable electromagnetically induced transparency from a superconducting terahertz metamaterial. Applied Physics Letters, 2017, 110, .	1.5	36
32	Visible Measurement of Terahertz Power Based on Capsulized Cholesteric Liquid Crystal Film. Applied Sciences (Switzerland), 2018, 8, 2580.	1.3	36
33	Low-Profile 2-D THz Airy Beam Generator Using the Phase-Only Reflective Metasurface. IEEE Transactions on Antennas and Propagation, 2020, 68, 1503-1513.	3.1	29
34	Highâ€Performance Terahertz Sensing at Exceptional Points in a Bilayer Structure. Advanced Theory and Simulations, 2018, 1, 1800070.	1.3	28
35	Nonlinear response of superconducting NbN thin film and NbN metamaterial induced by intense terahertz pulses. New Journal of Physics, 2013, 15, 055017.	1.2	27
36	Extraordinary terahertz transmission in superconducting subwavelength hole array. Optics Express, 2011, 19, 1101.	1.7	26

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37	Design of a polarization-insensitive superconducting nanowire single photon detector with high detection efficiency. Scientific Reports, 2016, 6, 22710.	1.6	26
38	Terahertz Spectroscopy of Dilute Gases Using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:msub><mml:mrow><mml:mi>Bi</mml:mi></mml:mrow><mml:mrow><mml:mn>2</m Physical Review Applied, 2017, 8, .	1.5	26
39	Temperature-controlled terahertz polarization conversion bandwidth. Optics Express, 2021, 29, 21738.	1.7	25
40	3D porous graphene-assisted capsulized cholesteric liquid crystals for terahertz power visualization. Optics Letters, 2020, 45, 5892.	1.7	22
41	Correlation between vibrational modes and dielectric properties in (Ca 1â^'3x Bi 2x Î¦ x)MoO 4 ceramics. Journal of the European Ceramic Society, 2015, 35, 4459-4464.	2.8	21
42	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays. Scientific Reports, 2016, 6, 23486.	1.6	21
43	Superconductive PT-symmetry phase transition in metasurfaces. Applied Physics Letters, 2017, 110, .	1.5	19
44	Vortex ratchet effects in a superconducting asymmetric ring-shaped device. Applied Physics Letters, 2016, 109, .	1.5	18
45	Selective coherent perfect absorption of subradiant mode in ultrathin bi-layer metamaterials via antisymmetric excitation. Applied Physics Letters, 2017, 110, 181111.	1.5	18
46	Growth of Black Phosphorus Nanobelts and Microbelts. Small, 2018, 14, 1702501.	5.2	18
47	Compact High- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:math> Superconducting Terahertz emitter operating up to 86 K. Physical Review Applied, 2018, 10, .	1.5	18
48	Experimental study on the transition of plasmonic resonance modes in double-ring dimers by conductive junctions in the terahertz regime. Optics Express, 2016, 24, 27415.	1.7	17
49	Temperature-dependent terahertz vibrational spectra of tetracycline and its degradation products. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 222, 117179.	2.0	17
50	A Terahertz Controlledâ€NOT Gate Based on Asymmetric Rotation of Polarization in Chiral Metamaterials. Advanced Optical Materials, 2017, 5, 1700108.	3.6	15
51	Pair-breaking in superconducting NbN films induced by intense THz field. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 1071-1075.	1.2	14
52	Terahertz detectors based on superconducting hot electron bolometers. Science China Information Sciences, 2012, 55, 64-71.	2.7	14
53	Heterodyne detection at 216, 432, and 648ÂGHz based on bilayer graphene field-effect transistor with quasi-optical coupling. Carbon, 2017, 121, 235-241.	5.4	14
54	Excitation of terahertz plasmon-polariton in a grating coupled two-dimensional electron gas with a Fabry-PÃ©rot cavity. Applied Physics Letters, 2013, 102, .	1.5	13

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55	Demonstration of Polarization-Insensitive Superconducting Nanowire Single-Photon Detector With Si Compensation Layer. Journal of Lightwave Technology, 2017, 35, 4707-4713.	2.7	13
56	Density functional theory studies on the structures and vibrational spectroscopic characteristics of nickel, copper and zinc naphthalocyanines. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 217, 8-17.	2.0	13
57	Freeâ€Standing Singleâ€Layer Metasurface for Efficient and Broadband Tailoring of Terahertz Wavefront. Advanced Optical Materials, 2022, 10, .	3.6	13
58	Nonlinear terahertz superconducting plasmonics. Applied Physics Letters, 2014, 105, 162602.	1.5	12
59	Metamaterials: Anomalous Terahertz Reflection and Scattering by Flexible and Conformal Coding Metamaterials (Advanced Optical Materials 10/2015). Advanced Optical Materials, 2015, 3, 1373-1373.	3.6	11
60	Spectral imaging of flexible terahertz coding metasurface. Applied Physics Letters, 2021, 118, .	1.5	11
61	Electrically tunable electromagnetically induced transparency in superconducting terahertz metamaterials. Applied Physics Letters, 2021, 119, 052602.	1.5	11
62	Nb5N6 thin film on silicon and silicon oxide: A good material for terahertz detection. Science Bulletin, 2009, 54, 3344-3346.	1.7	10
63	Noncontact evaluation of nondoped InP wafers by terahertz time-domain spectroscopy. Journal of the Optical Society of America B: Optical Physics, 2009, 26, A1.	0.9	10
64	Polarization Effects on the Cellulose Dissolution in Ionic Liquids: Molecular Dynamics Simulations with Polarization Model and Integrated Tempering Enhanced Sampling Method. Journal of Physical Chemistry B, 2017, 121, 4319-4332.	1.2	10
65	A simple Fourier transform spectrometer for terahertz applications. Science Bulletin, 2012, 57, 573-578.	1.7	9
66	Ferroelectric Transition in the Inorganic Supramolecular Complex (Hg₆P₄)(CuCl₃)₂. Chemistry - an Asian Journal, 2013, 8, 2925-2931.	1.7	9
67	Characterization of Hindered Amine Light Stabilizers in Polymer Matrix Using Terahertz Timeâ€Domain Spectroscopy. Macromolecular Chemistry and Physics, 2012, 213, 1441-1447.	1.1	8
68	Temperature dependence of niobium superconducting nanowire single-photon detectors in He-3 cryocooler. Science Bulletin, 2014, 59, 3549-3553.	1.7	8
69	Comparison of ZnTe bulk crystals grown by the temperature gradient solvent method using elemental and compound materials. Optical Materials Express, 2016, 6, 3309.	1.6	8
70	A broadband reflective-type half-wave plate employing optical feedbacks. Scientific Reports, 2017, 7, 9103.	1.6	8
71	Design of a Superconducting Nanowire Single-Photon Detector With Dual-Broadband and High Detection Efficiency. IEEE Photonics Journal, 2017, 9, 1-8.	1.0	8
72	Self-Mixing Spectra of Terahertz Emitters Based on Bi2Sr2CaCu2O8+Î´ Intrinsic Josephson-Junction Stacks. Physical Review Applied, 2017, 8, .	1.5	8

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73	Terahertz Direct Detectors Based on Superconducting Hot Electron Bolometers With Different Biasing Methods. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.1	8
74	Characterization of Superconducting Nbn, WSi and MoSi Ultra-Thin Films in Magnetic Field. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-4.	1.1	8
75	Flexible bilayer terahertz metasurface for the manipulation of orbital angular momentum states. Optics Express, 2021, 29, 33445.	1.7	8
76	Manipulation of Molecular Qubits by Isotope Effect on Spin Dynamics. CCS Chemistry, 2021, 3, 2548-2556.	4.6	8
77	Josephson Plasmon Resonance in Tl₂Ba₂CaCu₂O₈ Highâ€Temperature Superconductor Tunable Terahertz Metamaterials. Advanced Functional Materials, 2021, 31, 2106891.	7.8	8
78	Extraction of material parameters of a bi-layer structure using Terahertz time-domain spectroscopy. Science China Information Sciences, 2014, 57, 1-10.	2.7	7
79	Tailoring electromagnetically induced transparency effect of terahertz metamaterials on ultrathin substrate. Science China Information Sciences, 2016, 59, 1.	2.7	7
80	Tunable and high quality factor Fano and toroidal dipole resonances in terahertz superconducting metamaterials. Materials Research Express, 2020, 7, 046001.	0.8	7
81	Reconfigurable terahertz rainbow deflector. Applied Physics Letters, 2021, 118, .	1.5	7
82	Low Noise Receivers Based on Superconducting Niobium Nitride Hot Electron Bolometer Mixers from 0.65 to 3.1 Terahertz. IEICE Transactions on Electronics, 2010, E93-C, 473-479.	0.3	7
83	Terahertz pulse-induced NÃ©el vector switching in Î±-Fe2O3/Pt heterostructures. Applied Physics Letters, 2021, 119, 212401.	1.5	7
84	Simulation and experiment of vortex transport properties in a Type II superconductor with grain boundary. Science China Technological Sciences, 2015, 58, 493-498.	2.0	6
85	Demonstration of a superconducting nanowire single photon detector with an ultrahigh polarization extinction ratio over 400. Optics Express, 2018, 26, 3947.	1.7	6
86	Temperature dependence of the point defect properties of GaN thin films studied by terahertz time-domain spectroscopy. Science China: Physics, Mechanics and Astronomy, 2013, 56, 2059-2064.	2.0	5
87	Terahertz narrow bandstop, broad bandpass filter using double-layer S-shaped metamaterials. Science China Information Sciences, 2013, 56, 1-7.	2.7	5
88	Mode transition in cooperative metamaterials at terahertz frequencies. Journal of Applied Physics, 2017, 121, 193101.	1.1	5
89	Ratchet effects in superconducting ring-shaped devices. Superconductor Science and Technology, 2017, 30, 105003.	1.8	5
90	Resonant Polysilicon Antenna for Terahertz Detection. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	5

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91	Effects of Diffuse and Specular Reflections on Detecting Embedded Defects of Foams With a Bifocal Active Imaging System at 0.22ÂTHz. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 150-158.	2.0	5
92	Real-time near-field terahertz spectroscopy imaging. , 2021, , .		5
93	THz generation by optical rectification of femtosecond laser pulses in a liquid crystal. Journal of the Optical Society of America B: Optical Physics, 2022, 39, A89.	0.9	5
94	A study of thermal effects in superconducting terahertz modulator by low temperature scanning laser microscope. AIP Advances, 2018, 8, .	0.6	4
95	High-quality in situ fabricated Nb Josephson junctions with black phosphorus barriers. Superconductor Science and Technology, 2019, 32, 115005.	1.8	4
96	Preparation and Characterization of Ultrathin WSi Films for Superconducting Nanowire Single-Photon Detectors. IEEE Transactions on Applied Superconductivity, 2019, , 1-1.	1.1	4
97	Tuning Irreversible Magnetoresistance in Pr_{0.67}Sr_{0.33}MnO₃ Film via Octahedral Rotation. ACS Applied Materials & Interfaces, 2020, 12, 43222-43230.	4.0	4
98	Transmission Properties of a Qubit-Coupled-Two-Resonator System. IEEE Transactions on Applied Superconductivity, 2013, 23, 1701705-1701705.	1.1	3
99	Effect of loss and coupling on the resonance of metamaterial: An equivalent circuit approach. Science China Information Sciences, 2014, 57, 1-8.	2.7	3
100	Doped niobium superconducting nanowire single-photon detectors. Applied Physics B: Lasers and Optics, 2014, 116, 991-995.	1.1	3
101	An easy approach to reveal the metallic nature of graphene by <scp>Breitâ€“Wignerâ€“Fano</scp> lineshapes using <scp>Raman</scp> spectroscopy. Journal of Raman Spectroscopy, 2017, 48, 1318-1322.	1.2	3
102	Terahertz Direct Detectors Based on Superconducting Hot Electron Bolometers with Microwave Biasing. Chinese Physics Letters, 2017, 34, 090701.	1.3	3
103	Vertical <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Nb</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mi>Ti</mml:mi><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mi>x</mml:mi></mml:msub><mml:mo>/</mml:mo><mml:mi>Nb</mml:mi><m Josephson Junctions Controlled by In-Plane Hot-Electron Injection. Physical Review Applied, 2020, 14, .	1.5	3
104	Local tunability in a multi-port SQUID by an injection current. Superconductor Science and Technology, 2021, 34, 125012.	1.8	3
105	Transmission of THz wave by liquid dielectric waveguide. Science China Technological Sciences, 2010, 53, 1594-1597.	2.0	2
106	Vertical Josephson field-effect transistors based on black phosphorus. Applied Physics Letters, 2021, 119, .	1.5	2
107	NbN films on flexible and thickness controllable dielectric substrates. Scientific Reports, 2022, 12, .	1.6	2
108	Research on terahertz time-domain spectroscopy methodology of liquid samples. Science China Technological Sciences, 2010, 53, 1012-1015.	2.0	1

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109	Terahertz Sensing: Highâ€Performance Terahertz Sensing at Exceptional Points in a Bilayer Structure (Adv. Theory Simul. 9/2018). Advanced Theory and Simulations, 2018, 1, 1870024.	1.3	1
110	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays. , 0, .		1
111	High-T c superconducting thin film/GaAs MESFET hybrid microwave oscillator. Science in China Series A: Mathematics, 1997, 40, 219-224.	0.5	0
112	The use of liquid-core optical fiber transmission terahertz. , 2009, , .		0
113	An efficient and polarization sensitive SNSPD with coupled asymmetric SRR-loaded cavity. , 2015, , .		0
114	An Efficient and Polarization-Sensitive Superconducting-Nanowire Single-Photon Detector With Coupled Asymmetric Split-Ring Resonator-Loaded Cavity. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.1	0
115	Chiral Metamaterials: A Terahertz Controlledâ€NOT Gate Based on Asymmetric Rotation of Polarization in Chiral Metamaterials (Advanced Optical Materials 18/2017). Advanced Optical Materials, 2017, 5, .	3.6	0
116	Bi-layer Metamaterial based Broadband Linear Polarization Converter under Two Coherent Beam Illumination. , 2018, , .		0
117	Hybrid Coupling Model for Terahertz Metamaterials: Design and Applications. , 2019, , .		0
118	Fano Resonance in Terahertz Superconducting Tl2Ba2CaCu2O8 Metamaterials. , 2019, , .		0
119	Experimental Demonstration of Superconducting Series Nanowire Photon-Number-Resolving Detector at 660 nm Wavelength. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	0
120	Terahertz wave modulation utilizing superconductor-metal metamaterials. , 2021, , .		0
121	Programmable Terahertz Metamaterials with Nonâ€Volatile Memory (Laser Photonics Rev. 16(4)/2022). Laser and Photonics Reviews, 2022, 16, 2270019.	4.4	0