

Biao-Bing Jin

List of Publications by Year in descending order

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122
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122
docs citations

122
times ranked

2934
citing authors

#	ARTICLE	IF	CITATIONS
1	Programmable Terahertz Metamaterials with Non-Volatile Memory. Laser and Photonics Reviews, 2022, 16, .	4.4	37
2	Design of a Sub-6 GHz Dielectric Resonator Antenna with Novel Temperature-Stabilized $(\text{Sm}_{1-x}\text{Bi}_x)\text{NbO}_4$ ($x = 0-0.15$) Microwave Dielectric Ceramics. ACS Applied Materials & Interfaces, 2022, 14, 7030-7038.	4.0	52
3	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
4	Programmable Terahertz Metamaterials with Non-Volatile Memory (Laser Photonics Rev. 16(4)/2022). Laser and Photonics Reviews, 2022, 16, 2270019.	4.4	0
5	Free-Standing Single-Layer Metasurface for Efficient and Broadband Tailoring of Terahertz Wavefront. Advanced Optical Materials, 2022, 10, .	3.6	13
6	NbN films on flexible and thickness controllable dielectric substrates. Scientific Reports, 2022, 12, .	1.6	2
7	Dual-color terahertz spatial light modulator for single-pixel imaging. Light: Science and Applications, 2022, 11, .	7.7	53
8	Ultrafast spin current generated from an antiferromagnet. Nature Physics, 2021, 17, 388-394.	6.5	81
9	Temperature stable $\text{Sm}(\text{Nb}_{1-x}\text{V}_x)\text{O}_4$ (0.0 $\leq x \leq$ 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
10	Temperature-Controlled Optical Activity and Negative Refractive Index. Advanced Functional Materials, 2021, 31, 2010249.	7.8	58
11	Spectral imaging of flexible terahertz coding metasurface. Applied Physics Letters, 2021, 118, .	1.5	11
12	Effects of Diffuse and Specular Reflections on Detecting Embedded Defects of Foams With a Bifocal Active Imaging System at 0.22 THz. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 150-158.	2.0	5
13	Reconfigurable terahertz rainbow deflector. Applied Physics Letters, 2021, 118, .	1.5	7
14	Temperature-controlled terahertz polarization conversion bandwidth. Optics Express, 2021, 29, 21738.	1.7	25
15	Electrically tunable electromagnetically induced transparency in superconducting terahertz metamaterials. Applied Physics Letters, 2021, 119, 052602.	1.5	11
16	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
17	Vertical Josephson field-effect transistors based on black phosphorus. Applied Physics Letters, 2021, 119, .	1.5	2
18	Flexible bilayer terahertz metasurface for the manipulation of orbital angular momentum states. Optics Express, 2021, 29, 33445.	1.7	8

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19	Manipulation of Molecular Qubits by Isotope Effect on Spin Dynamics. CCS Chemistry, 2021, 3, 2548-2556.	4.6	8
20	Josephson Plasmon Resonance in $Tl_2Ba_2CaCu_2O_{8-x}$ High-Temperature Superconductor Tunable Terahertz Metamaterials. Advanced Functional Materials, 2021, 31, 2106891.	7.8	8
21	Spintronic terahertz emitter. Journal of Applied Physics, 2021, 129, .	1.1	39
22	Real-time near-field terahertz spectroscopy imaging. , 2021, , .		5
23	Terahertz wave modulation utilizing superconductor-metal metamaterials. , 2021, , .		0
24	Local tunability in a multi-port SQUID by an injection current. Superconductor Science and Technology, 2021, 34, 125012.	1.8	3
25	Terahertz pulse-induced Néel vector switching in $\hat{\pm}$ -Fe ₂ O ₃ /Pt heterostructures. Applied Physics Letters, 2021, 119, 212401.	1.5	7
26	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
27	Vertical $NbTiO_x$ Josephson Junctions Controlled by In-Plane Hot-Electron Injection. Physical Review Applied, 2020, 14, .	1.3	3
28	Tuning Irreversible Magnetoresistance in $Pr_{0.67}Sr_{0.33}MnO_3$ Film via Octahedral Rotation. ACS Applied Materials & Interfaces, 2020, 12, 43222-43230.	4.0	4
29	Switchable Chiral Mirrors. Advanced Optical Materials, 2020, 8, 2000247.	3.6	45
30	Tunable and high quality factor Fano and toroidal dipole resonances in terahertz superconducting metamaterials. Materials Research Express, 2020, 7, 046001.	0.8	7
31	Liquid crystal programmable metasurface for terahertz beam steering. Applied Physics Letters, 2020, 116, .	1.5	169
32	3D porous graphene-assisted capsulized cholesteric liquid crystals for terahertz power visualization. Optics Letters, 2020, 45, 5892.	1.7	22
33	Hybrid Coupling Model for Terahertz Metamaterials: Design and Applications. , 2019, , .		0
34	Resonant Polysilicon Antenna for Terahertz Detection. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	5
35	High-quality in situ fabricated Nb Josephson junctions with black phosphorus barriers. Superconductor Science and Technology, 2019, 32, 115005.	1.8	4
36	Fano Resonance in Terahertz Superconducting $Tl_2Ba_2CaCu_2O_8$ Metamaterials. , 2019, , .		0

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37	Temperature-dependent terahertz vibrational spectra of tetracycline and its degradation products. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 222, 117179.	2.0	17
38	Active Control of Terahertz Waves Using Vanadium-Dioxide-Embedded Metamaterials. <i>Physical Review Applied</i> , 2019, 11, .	1.5	99
39	Terahertz Direct Detectors Based on Superconducting Hot Electron Bolometers With Different Biasing Methods. <i>IEEE Transactions on Applied Superconductivity</i> , 2019, 29, 1-4.	1.1	8
40	Density functional theory studies on the structures and vibrational spectroscopic characteristics of nickel, copper and zinc naphthalocyanines. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 217, 8-17.	2.0	13
41	Preparation and Characterization of Ultrathin WSi Films for Superconducting Nanowire Single-Photon Detectors. <i>IEEE Transactions on Applied Superconductivity</i> , 2019, , 1-1.	1.1	4
42	Experimental Demonstration of Superconducting Series Nanowire Photon-Number-Resolving Detector at 660 nm Wavelength. <i>IEEE Photonics Journal</i> , 2019, 11, 1-8.	1.0	0
43	A 400-GHz High-Gain Quartz-Based Single Layered Folded Reflectarray Antenna for Terahertz Applications. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2019, 9, 78-88.	2.0	59
44	Crystal structure, impedance and broadband dielectric spectra of ordered scheelite-structured Bi(Sc _{1/3} Mo _{2/3})O ₄ ceramic. <i>Journal of the European Ceramic Society</i> , 2018, 38, 1556-1561.	2.8	39
45	Growth of Black Phosphorus Nanobelts and Microbelts. <i>Small</i> , 2018, 14, 1702501.	5.2	18
46	Terahertz Sensing: High-Performance Terahertz Sensing at Exceptional Points in a Bilayer Structure (<i>Adv. Theory Simul.</i> 9/2018). <i>Advanced Theory and Simulations</i> , 2018, 1, 1870024.	1.3	1
47	Visible Measurement of Terahertz Power Based on Capsulized Cholesteric Liquid Crystal Film. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2580.	1.3	36
48	Bi-layer Metamaterial based Broadband Linear Polarization Converter under Two Coherent Beam Illumination. , 2018, , .		0
49	A study of thermal effects in superconducting terahertz modulator by low temperature scanning laser microscope. <i>AIP Advances</i> , 2018, 8, .	0.6	4
50	Demonstration of a superconducting nanowire single photon detector with an ultrahigh polarization extinction ratio over 400. <i>Optics Express</i> , 2018, 26, 3947.	1.7	6
51	High-Performance Terahertz Sensing at Exceptional Points in a Bilayer Structure. <i>Advanced Theory and Simulations</i> , 2018, 1, 1800070.	1.3	28
52	Compact High- T_c Superconducting Terahertz emitter operating up to 86 K. <i>Physical Review Applied</i> , 2018, 10, .	1.5	18
53	Superconductive PT-symmetry phase transition in metasurfaces. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	19
54	Polarization Effects on the Cellulose Dissolution in Ionic Liquids: Molecular Dynamics Simulations with Polarization Model and Integrated Tempering Enhanced Sampling Method. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4319-4332.	1.2	10

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55	Selective coherent perfect absorption of subradiant mode in ultrathin bi-layer metamaterials via antisymmetric excitation. Applied Physics Letters, 2017, 110, 181111.	1.5	18
56	Tunable electromagnetically induced transparency from a superconducting terahertz metamaterial. Applied Physics Letters, 2017, 110, .	1.5	36
57	Mode transition in cooperative metamaterials at terahertz frequencies. Journal of Applied Physics, 2017, 121, 193101.	1.1	5
58	Heterodyne detection at 216, 432, and 648 GHz based on bilayer graphene field-effect transistor with quasi-optical coupling. Carbon, 2017, 121, 235-241.	5.4	14
59	Ratchet effects in superconducting ring-shaped devices. Superconductor Science and Technology, 2017, 30, 105003.	1.8	5
60	Electrical dynamic modulation of THz radiation based on superconducting metamaterials. Applied Physics Letters, 2017, 111, .	1.5	53
61	A broadband reflective-type half-wave plate employing optical feedbacks. Scientific Reports, 2017, 7, 9103.	1.6	8
62	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
63	Chiral Metamaterials: A Terahertz Controlled NOT Gate Based on Asymmetric Rotation of Polarization in Chiral Metamaterials (Advanced Optical Materials 18/2017). Advanced Optical Materials, 2017, 5, .	3.6	0
64	An easy approach to reveal the metallic nature of graphene by Breit-Wigner Fano lineshapes using Raman spectroscopy. Journal of Raman Spectroscopy, 2017, 48, 1318-1322.	1.2	3
65	A Terahertz Controlled NOT Gate Based on Asymmetric Rotation of Polarization in Chiral Metamaterials. Advanced Optical Materials, 2017, 5, 1700108.	3.6	15
66	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
67	Terahertz Direct Detectors Based on Superconducting Hot Electron Bolometers with Microwave Biasing. Chinese Physics Letters, 2017, 34, 090701.	1.3	3
68	Self-Mixing Spectra of Terahertz Emitters Based on Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ Intrinsic Josephson-Junction Stacks. Physical Review Applied, 2017, 8, .	1.5	8
69	Terahertz Spectroscopy of Dilute Gases Using $\langle \mathbf{m} \cdot \mathbf{m} \rangle$ Physical Review Applied, 2017, 8, .	1.5	26
70	Demonstration of Polarization-Insensitive Superconducting Nanowire Single-Photon Detector With Si Compensation Layer. Journal of Lightwave Technology, 2017, 35, 4707-4713.	2.7	13
71	Broadband and high modulation-depth THz modulator using low bias controlled VO ₂ -integrated metasurface. Optics Express, 2017, 25, 17322.	1.7	96
72	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

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73	Comparison of ZnTe bulk crystals grown by the temperature gradient solvent method using elemental and compound materials. <i>Optical Materials Express</i> , 2016, 6, 3309.	1.6	8
74	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays. <i>Scientific Reports</i> , 2016, 6, 23486.	1.6	21
75	Vortex ratchet effects in a superconducting asymmetric ring-shaped device. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	18
76	Design of transmission-type coding metasurface and its application of beam forming. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	42
77	Label-free measurements on cell apoptosis using a terahertz metamaterial-based biosensor. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	85
78	Designing perfect linear polarization converters using perfect electric and magnetic conducting surfaces. <i>Scientific Reports</i> , 2016, 6, 38925.	1.6	41
79	An Efficient and Polarization-Sensitive Superconducting-Nanowire Single-Photon Detector With Coupled Asymmetric Split-Ring Resonator-Loaded Cavity. <i>IEEE Transactions on Applied Superconductivity</i> , 2016, 26, 1-4.	1.1	0
80	Design of a polarization-insensitive superconducting nanowire single photon detector with high detection efficiency. <i>Scientific Reports</i> , 2016, 6, 22710.	1.6	26
81	Broadband diffuse terahertz wave scattering by flexible metasurface with randomized phase distribution. <i>Scientific Reports</i> , 2016, 6, 26875.	1.6	57
82	Tailoring electromagnetically induced transparency effect of terahertz metamaterials on ultrathin substrate. <i>Science China Information Sciences</i> , 2016, 59, 1.	2.7	7
83	Metamaterials: Anomalous Terahertz Reflection and Scattering by Flexible and Conformal Coding Metamaterials (<i>Advanced Optical Materials</i> 10/2015). <i>Advanced Optical Materials</i> , 2015, 3, 1373-1373.	3.6	11
84	An efficient and polarization sensitive SNSPD with coupled asymmetric SRR-loaded cavity. , 2015, , .		0
85	Anomalous Terahertz Reflection and Scattering by Flexible and Conformal Coding Metamaterials. <i>Advanced Optical Materials</i> , 2015, 3, 1374-1380.	3.6	175
86	Broadband tunable liquid crystal terahertz waveplates driven with porous graphene electrodes. <i>Light: Science and Applications</i> , 2015, 4, e253-e253.	7.7	148
87	Correlation between vibrational modes and dielectric properties in $(\text{Ca}_{1-x}\text{Bi}_x)\text{MoO}_4$ ceramics. <i>Journal of the European Ceramic Society</i> , 2015, 35, 4459-4464.	2.8	21
88	Broadband diffusion of terahertz waves by multi-bit coding metasurfaces. <i>Light: Science and Applications</i> , 2015, 4, e324-e324.	7.7	461
89	Simulation and experiment of vortex transport properties in a Type II superconductor with grain boundary. <i>Science China Technological Sciences</i> , 2015, 58, 493-498.	2.0	6
90	Effect of loss and coupling on the resonance of metamaterial: An equivalent circuit approach. <i>Science China Information Sciences</i> , 2014, 57, 1-8.	2.7	3

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91	Doped niobium superconducting nanowire single-photon detectors. Applied Physics B: Lasers and Optics, 2014, 116, 991-995.	1.1	3
92	Nonlinear terahertz superconducting plasmonics. Applied Physics Letters, 2014, 105, 162602.	1.5	12
93	Temperature dependence of niobium superconducting nanowire single-photon detectors in He-3 cryocooler. Science Bulletin, 2014, 59, 3549-3553.	1.7	8
94	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
95	A flexible wideband bandpass terahertz filter using multi-layer metamaterials. Applied Physics B: Lasers and Optics, 2013, 113, 285-290.	1.1	36
96	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
97	Terahertz narrow bandstop, broad bandpass filter using double-layer S-shaped metamaterials. Science China Information Sciences, 2013, 56, 1-7.	2.7	5
98	Transmission Properties of a Qubit-Coupled-Two-Resonator System. IEEE Transactions on Applied Superconductivity, 2013, 23, 1701705-1701705.	1.1	3
99	Terahertz nonlinear superconducting metamaterials. Applied Physics Letters, 2013, 102, .	1.5	53
100	Excitation of terahertz plasmon-polariton in a grating coupled two-dimensional electron gas with a Fabry-Pérot cavity. Applied Physics Letters, 2013, 102, .	1.5	13
101	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
102	Ferroelectric Transition in the Inorganic Supramolecular Complex $(\text{Hg}_6\text{P}_4)(\text{CuCl}_3)_2$. Chemistry - an Asian Journal, 2013, 8, 2925-2931.	1.7	9
103	Large birefringence liquid crystal material in terahertz range. Optical Materials Express, 2012, 2, 1314.	1.6	104
104	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
105	Characterization of Hindered Amine Light Stabilizers in Polymer Matrix Using Terahertz Time-Domain Spectroscopy. Macromolecular Chemistry and Physics, 2012, 213, 1441-1447.	1.1	8
106	Terahertz detectors based on superconducting hot electron bolometers. Science China Information Sciences, 2012, 55, 64-71.	2.7	14
107	A simple Fourier transform spectrometer for terahertz applications. Science Bulletin, 2012, 57, 573-578.	1.7	9
108	Extraordinary terahertz transmission in superconducting subwavelength hole array. Optics Express, 2011, 19, 1101.	1.7	26

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109	Tuning of superconducting niobium nitride terahertz metamaterials. Optics Express, 2011, 19, 12021.	1.7	62
110	Self-polarizing terahertz liquid crystal phase shifter. AIP Advances, 2011, 1, .	0.6	81
111	Superconducting terahertz metamaterials mimicking electromagnetically induced transparency. Applied Physics Letters, 2011, 99, .	1.5	97
112	Research on terahertz time-domain spectroscopy methodology of liquid samples. Science China Technological Sciences, 2010, 53, 1012-1015.	2.0	1
113	Transmission of THz wave by liquid dielectric waveguide. Science China Technological Sciences, 2010, 53, 1594-1597.	2.0	2
114	Low loss and magnetic field-tunable superconducting terahertz metamaterial. Optics Express, 2010, 18, 17504.	1.7	104
115	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
116	The use of liquid-core optical fiber transmission terahertz. , 2009, , .		0
117	Nb5N6 thin film on silicon and silicon oxide: A good material for terahertz detection. Science Bulletin, 2009, 54, 3344-3346.	1.7	10
118	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
119	High-frequency resonance in acoustic superlattice of periodically poledLiTaO3. Applied Physics Letters, 1997, 70, 592-594.	1.5	41
120	High-T c superconducting thin film/GaAs MESFET hybrid microwave oscillator. Science in China Series A: Mathematics, 1997, 40, 219-224.	0.5	0
121	Electrically tunable terahertz metamaterials with embedded large-area transparent thin-film transistor arrays. , 0, .		1