

Xuecou Tu

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

1,850
citations

567281

15
h-index

265206

42
g-index

62
all docs

62
docs citations

62
times ranked

1755
citing authors

#	ARTICLE	IF	CITATIONS
1	Broadband diffusion of terahertz waves by multi-bit coding metasurfaces. Light: Science and Applications, 2015, 4, e324-e324.	16.6	461
2	Epitaxial growth of wafer-scale molybdenum disulfide semiconductor single crystals on sapphire. Nature Nanotechnology, 2021, 16, 1201-1207.	31.5	339
3	Uniform nucleation and epitaxy of bilayer molybdenum disulfide on sapphire. Nature, 2022, 605, 69-75.	27.8	174
4	Broadband tunable liquid crystal terahertz waveplates driven with porous graphene electrodes. Light: Science and Applications, 2015, 4, e253-e253.	16.6	148
5	Three-dimensional monolithic micro-LED display driven by atomically thin transistor matrix. Nature Nanotechnology, 2021, 16, 1231-1236.	31.5	120
6	Sub-thermionic, ultra-high-gain organic transistors and circuits. Nature Communications, 2021, 12, 1928.	12.8	83
7	A Gd@C82 single-molecule electret. Nature Nanotechnology, 2020, 15, 1019-1024.	31.5	70
8	Observation of chiral and slow plasmons in twisted bilayer graphene. Nature, 2022, 605, 63-68.	27.8	45
9	Nematic superconducting state in iron pnictide superconductors. Nature Communications, 2017, 8, 1880.	12.8	33
10	Single-Detector Spectrometer Using a Superconducting Nanowire. Nano Letters, 2021, 21, 9625-9632.	9.1	33
11	Terahertz Spectroscopy of Dilute Gases Using Bi_2O_3 . Physical Review Applied, 2017, 8, .	3.8	26
12	Mid-infrared single photon detector with superconductor Mo _{0.8} Si _{0.2} nanowire. Science Bulletin, 2021, 66, 965-968.	9.0	23
13	Local destruction of superconductivity by non-magnetic impurities in mesoscopic iron-based superconductors. Nature Communications, 2015, 6, 7614.	12.8	19
14	Growth of Black Phosphorus Nanobelts and Microbelts. Small, 2018, 14, 1702501.	10.0	18
15	A Superconducting Binary Encoder with Multigate Nanowire Cryotrons. Nano Letters, 2020, 20, 3553-3559.	9.1	16
16	Enhanced photon communication through Bayesian estimation with an SNSPD array. Photonics Research, 2020, 8, 637.	7.0	14
17	Demonstration of Polarization-Insensitive Superconducting Nanowire Single-Photon Detector With Si Compensation Layer. Journal of Lightwave Technology, 2017, 35, 4707-4713.	4.6	13
18	Thickness-Dependent Asymmetric Potential Landscape and Polarization Relaxation in Ferroelectric Hf _x Zr _{1-x} O ₂ Thin Films through Interfacial Bound Charges. Advanced Electronic Materials, 2019, 5, 1900554.	5.1	13

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19	A high speed and high efficiency superconducting photon number resolving detector. Superconductor Science and Technology, 2019, 32, 064002.	3.5	13
20	High-Performance CVD MoS ₂ Transistors with Self-Aligned Top-Gate and Bi Contact. , 2021, , .		13
21	Extreme absorption enhancement in ZnTe:O/ZnO intermediate band core-shell nanowires by interplay of dielectric resonance and plasmonic bowtie nanoantennas. Scientific Reports, 2017, 7, 7503.	3.3	12
22	Sixteen-Pixel NbN Nanowire Single Photon Detector Coupled With 300- μ m Fiber. IEEE Photonics Journal, 2020, 12, 1-12.	2.0	10
23	Impurity effects on the normal-state transport properties of $\text{Ba}_{0.5}\text{K}_{0.5}\text{FeAs}$. Physical Review B, 2014, 90, .		
24	Bifocal dual reflector system for active terahertz imaging. Applied Optics, 2018, 57, 3224.	1.8	9
25	Characterization of Hindered Amine Light Stabilizers in Polymer Matrix Using Terahertz Time-Domain Spectroscopy. Macromolecular Chemistry and Physics, 2012, 213, 1441-1447.	2.2	8
26	Low-Noise Readout Integrated Circuit for Terahertz Array Detector. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 350-356.	3.1	8
27	Reflective grating-coupled structure improves the detection efficiency of THz array detectors. Scientific Reports, 2018, 8, 8032.	3.3	8
28	Tailored Emission Properties of ZnTe/ZnTe:O/ZnO Core-Shell Nanowires Coupled with an Al Plasmonic Bowtie Antenna Array. ACS Nano, 2018, 12, 7327-7334.	14.6	8
29	Terahertz Direct Detectors Based on Superconducting Hot Electron Bolometers With Different Biasing Methods. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-4.	1.7	8
30	Fabrication of superconducting niobium nitride nanowire with high aspect ratio for X-ray photon detection. Scientific Reports, 2020, 10, 9057.	3.3	8
31	Characterization of Superconducting Nbn, WSi and MoSi Ultra-Thin Films in Magnetic Field. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-4.	1.7	8
32	Characterize the Speed of a Photon-Number-Resolving Superconducting Nanowire Detector. IEEE Photonics Journal, 2020, 12, 1-8.	2.0	7
33	Improved pulse discrimination for a superconducting series nanowire detector by applying a digital matched filter. Applied Physics Letters, 2021, 119, .	3.3	7
34	Sharply Increased Current in Asymmetrically Aligned Polycrystalline Polymer Transistors With Sub-Domain-Size Channels. IEEE Electron Device Letters, 2020, 41, 589-592.	3.9	6
35	Suppression of superconductivity dominated by proximity effect in amorphous MoSi nanobelts. Physical Review B, 2022, 105, .	3.2	6
36	Terahertz narrow bandstop, broad bandpass filter using double-layer S-shaped metamaterials. Science China Information Sciences, 2013, 56, 1-7.	4.3	5

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37	High efficiency, large-active-area superconducting nanowire single-photon detectors. Chinese Physics B, 2015, 24, 068501.	1.4	5
38	Characterize the switching performance of a superconducting nanowire cryotron for reading superconducting nanowire single photon detectors. Scientific Reports, 2019, 9, 16345.	3.3	5
39	A controllable superconducting electromechanical oscillator with a suspended membrane. AIP Advances, 2019, 9, .	1.3	5
40	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.	3.1	5
41	Photon-assisted Phase Slips in Superconducting Nanowires. Physical Review Applied, 2022, 17, .	3.8	5
42	Probabilistic Energy-to-Amplitude Mapping in a Tapered Superconducting Nanowire Single-Photon Detector. Nano Letters, 2022, 22, 1587-1594.	9.1	5
43	Preparation and Characterization of Ultrathin WSi Films for Superconducting Nanowire Single-Photon Detectors. IEEE Transactions on Applied Superconductivity, 2019, , 1-1.	1.7	4
44	Photonics-inspired terahertz whispering gallery mode resonator waveguide on silicon platform. Applied Physics Letters, 2021, 119, .	3.3	4
45	Simultaneous resolution of photon numbers and positions with series-connected superconducting nanowires. Applied Physics Letters, 2022, 120, 124001.	3.3	4
46	Fabrication of Al/AlOx/Al Josephson junctions on silicon and sapphire substrates using a cold-development technique. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	5.1	2
47	Monolithic 3D μ -LED displays through BEOL integration of large-area MoS ₂ TFT matrix. , 2021, , .		2
48	Nb5N6 Buffered Superconducting NbN Nanowire Single-Photon Detector on Si Substrate. , 2019, , .		1
49	Influence of periodic structure and pixel area on the performance of antenna-coupled Nb 5 N 6 array detector. Microwave and Optical Technology Letters, 2020, 62, 2747-2753.	1.4	1
50	Cavity-induced coherence phenomena in a Josephson parametric amplifier. AIP Advances, 2020, 10, 025135.	1.3	1
51	Characteristics of the Surface-Intrinsic Josephson Junction. Frontiers of Physics in China, 2006, 1, 122-124.	1.0	0
52	An investigation on diffractive micro-lens array used in THz imaging. , 2015, , .		0
53	The Impact of Flip-chip Process on Nb _s /N ₆ Microbolometer Arrays for Terahertz Detection. , 2018, , .		0
54	Superconducting Nanowire Single-Photon Detectors at a Wavelength of 2000 nm. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
55	A cavity-coupled microbolometer terahertz detector with a metamaterial reflector. , 2019, , .		0
56	Experimental Demonstration of Superconducting Series Nanowire Photon-Number-Resolving Detector at 660 nm Wavelength. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	0
57	An Nb5N6 microbolometer THz camera. , 2021, , .		0
58	The Performance of Superconducting NbN Hot Electron Bolometer with Nb5N6 Buffer Layer. , 2021, , .		0
59	Corrections to “Sharply Increased Current in Asymmetrically Aligned Polycrystalline Polymer Transistors With Sub-Domain-Size Channels” [Apr 20 589-592]. IEEE Electron Device Letters, 2020, 41, 1265-1265.	3.9	0
60	Planar Slot Antennas Designed for THz Detectors Array in Flip Chip Packaging. , 2020, , .		0
61	Wideband cryogenic amplifier for a superconducting nanowire single-photon detector. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 1666-1676.	2.6	0