Wei Peng

List of Publications by Year
in descending order

53 papers	6,608 citations	236925 25 h-index	197818 49 g-index
53 all docs	53 docs citations	53 times ranked	9389 citing authors

#	Article	IF	Citations
1	High-quality bulk hybrid perovskite single crystals within minutes by inverse temperature crystallization. Nature Communications, 2015, 6, 7586.	12.8	1,478
2	Highly Efficient Perovskiteâ€Quantumâ€Dot Lightâ€Emitting Diodes by Surface Engineering. Advanced Materials, 2016, 28, 8718-8725.	21.0	917
3	Bidentate Ligand-Passivated CsPbI₃ Perovskite Nanocrystals for Stable Near-Unity Photoluminescence Quantum Yield and Efficient Red Light-Emitting Diodes. Journal of the American Chemical Society, 2018, 140, 562-565.	13.7	745
4	Planar-integrated single-crystalline perovskite photodetectors. Nature Communications, 2015, 6, 8724.	12.8	617
5	Air-Stable Surface-Passivated Perovskite Quantum Dots for Ultra-Robust, Single- and Two-Photon-Induced Amplified Spontaneous Emission. Journal of Physical Chemistry Letters, 2015, 6, 5027-5033.	4.6	466
6	Solutionâ€Grown Monocrystalline Hybrid Perovskite Films for Holeâ€Transporterâ€Free Solar Cells. Advanced Materials, 2016, 28, 3383-3390.	21.0	298
7	Ferroelectrically tunable magnetic skyrmions in ultrathin oxide heterostructures. Nature Materials, 2018, 17, 1087-1094.	27.5	265
8	Ultralow Self-Doping in Two-dimensional Hybrid Perovskite Single Crystals. Nano Letters, 2017, 17, 4759-4767.	9.1	251
9	Inversion symmetry and bulk Rashba effect in methylammonium lead iodide perovskite single crystals. Nature Communications, 2018, 9, 1829.	12.8	189
10	Engineering of CH₃NH₃PbI₃ Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. Angewandte Chemie - International Edition, 2016, 55, 10686-10690.	13.8	152
11	The Electrical and Optical Properties of Organometal Halide Perovskites Relevant to Optoelectronic Performance. Advanced Materials, 2018, 30, 1700764.	21.0	141
12	Surface Restructuring of Hybrid Perovskite Crystals. ACS Energy Letters, 2016, 1, 1119-1126.	17.4	140
13	Thermochromic Perovskite Inks for Reversible Smart Window Applications. Chemistry of Materials, 2017, 29, 3367-3370.	6.7	130
14	Quantification of Ionic Diffusion in Lead Halide Perovskite Single Crystals. ACS Energy Letters, 2018, 3, 1477-1481.	17.4	123
15	The Surface of Hybrid Perovskite Crystals: A Boon or Bane. ACS Energy Letters, 2017, 2, 846-856.	17.4	91
16	Double peak emission in lead halide perovskites by self-absorption. Journal of Materials Chemistry C, 2020, 8, 2289-2300.	5.5	72
17	Robust and air-stable sandwiched organo-lead halide perovskites for photodetector applications. Journal of Materials Chemistry C, 2016, 4, 2545-2552.	5.5	53
18	Shape-Tunable Charge Carrier Dynamics at the Interfaces between Perovskite Nanocrystals and Molecular Acceptors. Journal of Physical Chemistry Letters, 2016, 7, 3913-3919.	4.6	43

#	Article	IF	Citations
19	Asymmetric Contactâ€Induced Selfâ€Driven Perovskiteâ€Microwireâ€Array Photodetectors. Advanced Electronic Materials, 2019, 5, 1900135.	5.1	40
20	Temperature-Induced Lattice Relaxation of Perovskite Crystal Enhances Optoelectronic Properties and Solar Cell Performance. Journal of Physical Chemistry Letters, 2017, 8, 137-143.	4.6	39
21	Development of Multi-Layer Fabrication Process for SFQ Large Scale Integrated Digital Circuits. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-4.	1.7	38
22	Gram-scale fractionation of nanodiamonds by density gradient ultracentrifugation. Nanoscale, 2013, 5, 5017.	5.6	33
23	Epitaxial growth and characterization of high quality Bi₂O₂Se thin films on SrTiO₃ substrates by pulsed laser deposition. Nanotechnology, 2020, 31, 165704.	2.6	29
24	Constructing Polymorphic Nanodomains in BaTiO₃ Films via Epitaxial Symmetry Engineering. Advanced Functional Materials, 2020, 30, 1910569.	14.9	28
25	Direct Functionalization of Nanodiamonds with Maleimide. Chemistry of Materials, 2014, 26, 2766-2769.	6.7	25
26	Oxygen vacancy-induced topological nanodomains in ultrathin ferroelectric films. Npj Quantum Materials, 2021, 6, .	5.2	23
27	Size-controlled fluorescent nanodiamonds: a facile method of fabrication and color-center counting. Nanoscale, 2013, 5, 11776.	5.6	22
28	Unraveling the Elastic Properties of (Quasi)Two-Dimensional Hybrid Perovskites: A Joint Experimental and Theoretical Study. ACS Applied Materials & Interfaces, 2020, 12, 17881-17892.	8.0	21
29	Enhanced Photovoltaic Performance and Thermal Stability of CH₃NH₃PbI₃ Perovskite through Lattice Symmetrization. ACS Applied Materials & Interfaces, 2019, 11, 740-746.	8.0	20
30	Engineering of CH₃NH₃PbI₃ Perovskite Crystals by Alloying Large Organic Cations for Enhanced Thermal Stability and Transport Properties. Angewandte Chemie, 2016, 128, 10844-10848.	2.0	18
31	Film Stress Influence on Nb/Al-AlO x /Nb Josephson Junctions. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	16
32	Josephson Tunneling Behaviors in NbN/AlN/NbN Junctions with an Ultrathin NbN Film. IEEE Transactions on Applied Superconductivity, 2018, 28, 1-4.	1.7	8
33	Hotspot relaxation time in disordered niobium nitride films. Applied Physics Letters, 2019, 115, .	3.3	8
34	Superconductivity Dependence on Epitaxial NbN Film Thickness. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	8
35	Thickness-Dependent Resistive Switching Behavior of KCu₇S₄/Cu_xO/Au Device. Journal of Nanoscience and Nanotechnology, 2019, 19, 2844-2850.	0.9	8
36	Observation of two-dimensional superconductivity in an ultrathin ironâ€“arsenic superconductor. 2D Materials, 2021, 8, 025024.	4.4	7

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37	Growth and Atomically Resolved Polarization Mapping of Ferroelectric Bi₂WO₆ Thin Films. ACS Applied Electronic Materials, 2021, 3, 1023-1030.	4.3	6
38	Ferromagnetic Josephson junctions based on epitaxial NbN/Ni60Cu40/NbN trilayer. AIP Advances, 2018, 8, .	1.3	5
39	Fresh insights into detonation nanodiamond aggregation: An Xâ€ray photoelectron spectroscopy, thermogravimetric analysis, and nuclear magnetic resonance study. Engineering Reports, 2021, 3, e12375.	1.7	5
40	In Situ Cryogenic HAADF-STEM Observation of Spontaneous Transition of Ferroelectric Polarization Domain Structures at Low Temperatures. Nano Letters, 2021, 21, 8679-8686.	9.1	5
41	Visible-light-mediated carrier type modulation at the LaAlO3/SrTiO3 interface. Applied Physics Letters, 2019, 115, .	3.3	4
42	Fano-resonance collapse induced terahertz magnetic dipole oscillation in complementary meta-atoms via local symmetry breaking. Journal of Applied Physics, 2019, 125, .	2.5	4
43	Intrinsically shunted Josephson junctions with high characteristic voltage based on epitaxial NbN/TaN/NbN trilayer. Applied Physics Letters, 2021, 119, .	3.3	4
44	Measurement of Inductance in Niobium Nitride Films for Single Flux Quantum Circuits. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	3
45	Electrical properties of NbN/NbN _x /NbN Josephson junctions. Superconductor Science and Technology, 2022, 35, 025001.	3.5	3
46	Fabrication and Characteristics of All-NbN SQUID Series Array. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-3.	1.7	2
47	A new LFSR based high-frequency test method for RSFQ circuit. , 2022, 2, 100011.		2
48	Fabrication and Characteristics of SQIF Based on NbN/AlN/NbN Josephson Junctions. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-3.	1.7	1
49	Superconducting NbN thin films on various (X/Y/Z-cut) lithium niobate substrates. Superconductor Science and Technology, 2022, 35, 025012.	3.5	1
50	Intrinsically shunted NbN/TaN/NbN Josephson junctions on Si substrates for large-scale integrated circuits applications. Superconductor Science and Technology, 2022, 35, 065004.	3.5	1
51	Investigation for Low-Rate Fenceless Al Etching Applied in Fabrication of Superconducting Circuits. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-5.	1.7	0
52	Corrections to â€œFilm Stress Influence on Nb/Al-AlOx/Nb Josephson Junctionsâ€• IEEE Transactions on Applied Superconductivity, 2021, 31, 1-1.	1.7	0
53	Evolution of the upper critical field and superconducting vortex phase with thickness in PLD-grown Ta films. Superconductor Science and Technology, 2022, 35, 055010.	3.5	0