Lu You

List of Publications by Year
in descending order

93 papers	5,566 citations	87401 40 h-index	90395 73 g-index
96 all docs	96 docs citations	96 times ranked	7810 citing authors

#	Article	IF	Citations
1	Solid-Ionic Memory in a van der Waals Heterostructure. ACS Nano, 2022, 16, 221-231.	7.3	6
2	Low voltage control of magnetism in BaFe10.2Sc1.8O19/BaTiO3 bilayer epitaxial thin film at temperatures up to 390â€‰K. Applied Physics Letters, 2022, 120, 062401.	1.5	1
3	Crossover between Bulk and Interface Photovoltaic Mechanisms in a Ferroelectric Vertical Heterostructure. Physical Review Applied, 2022, 17, .	1.5	6
4	Selfâ€Regulated Chemical Substitution in a Highly Strained Perovskite Oxide. Advanced Functional Materials, 2022, 32, .	7.8	3
5	Electrostatic Coupling in MoS₂/CuInP₂S₆ Ferroelectric vdW Heterostructures. Advanced Functional Materials, 2022, 32, .	7.8	17
6	Size effect on optical and vibrational properties of van der Waals layered In4/3P2S6. APL Materials, 2022, 10, .	2.2	7
7	Van der Waals layered ferroelectric CuInP2S6: Physical properties and device applications. Frontiers of Physics, 2021, 16, 1.	2.4	70
8	Van der Waals engineering of ferroelectric heterostructures for long-retention memory. Nature Communications, 2021, 12, 1109.	5.8	98
9	Efficient hydrothermal growth of high-performance MoS2/pyramid-Si photocathodes by surface hydrophilicity engineering. Applied Physics Letters, 2021, 118, .	1.5	4
10	Copper-assisted catalyzed etching for nanotextured black silicon with enhanced photoelectric-conversion properties. Optics Express, 2021, 29, 20395.	1.7	0
11	Effect of polarization rotation on the optical and photovoltaic properties of BiFeO3 thin films. Journal of Physics Condensed Matter, 2021, 33, 354002.	0.7	2
12	Understanding improved photoelectrochemical performance in BaxSr1â^'xTiO3/TiO2 rodâ€“shell nanostructures. AIP Advances, 2021, 11, .	0.6	1
13	Ferroelastic-switching-driven large shear strain and piezoelectricity in a hybrid ferroelectric. Nature Materials, 2021, 20, 612-617.	13.3	87
14	Strong Optical, Electrical, and Raman in-Plane Anisotropy in Corrugated Two-Dimensional Perovskite. Journal of Physical Chemistry C, 2021, 125, 22630-22642.	1.5	4
15	Anomalous polarization switching and permanent retention in a ferroelectric ionic conductor. Materials Horizons, 2020, 7, 263-274.	6.4	88
16	Enhanced photoelectrochemical performance in BiFeO3/g-C3N4 pâ€“n heterojunction photocathodes with ferroelectric polarization. Journal of Applied Physics, 2020, 128, .	1.1	13
17	A universal method for rapid and largeâ€scale growth of layered crystals. SmartMat, 2020, 1, e1011.	6.4	33
18	Ferroelectric-field accelerated charge transfer in 2D CuInP2S6 heterostructure for enhanced photocatalytic H2 evolution. Nano Energy, 2020, 76, 104972.	8.2	84

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19	Singleâ€Crystal Hybrid Perovskite Platelets on Graphene: A Mixedâ€Dimensional Van Der Waals Heterostructure with Strong Interface Coupling. Advanced Functional Materials, 2020, 30, 1909672.	7.8	28
20	Enhanced Photoelectrochemical Performance by Interface Engineering in Ternary gâ€C₃N₄/TiO₂/PbTiO₃ Films. Advanced Materials Interfaces, 2020, 7, 2000185.	1.9	11
21	Continuously controllable photoconductance in freestanding BiFeO3 by the macroscopic flexoelectric effect. Nature Communications, 2020, 11, 2571.	5.8	93
22	Van der Waals negative capacitance transistors. Nature Communications, 2019, 10, 3037.	5.8	144
23	Mechanical-force-induced non-local collective ferroelastic switching in epitaxial lead-titanate thin films. Nature Communications, 2019, 10, 3951.	5.8	43
24	Origin of giant negative piezoelectricity in a layered van der Waals ferroelectric. Science Advances, 2019, 5, eaav3780.	4.7	157
25	Strain Effect on Oxygen Evolution Reaction Activity of Epitaxial NdNiO₃ Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 12941-12947.	4.0	67
26	Tuning Photovoltaic Performance of Perovskite Nickelates Heterostructures by Changing the A-Site Rare-Earth Element. ACS Applied Materials & Interfaces, 2019, 11, 16191-16197.	4.0	16
27	Ultrafast electron-phonon coupling and photo-induced strain in the morphotropic phase boundary of BixDy1â^'xFeO3 films. Scientific Reports, 2018, 8, 3258.	1.6	8
28	Inâ€Plane Ferroelectricity in Thin Flakes of Van der Waals Hybrid Perovskite. Advanced Materials, 2018, 30, e1803249.	11.1	76
29	The path to flexible ferroelectrics: Approaches and progress. Japanese Journal of Applied Physics, 2018, 57, 0902A3.	0.8	11
30	Tuning Bifunctional Oxygen Electrocatalysts by Changing the Aâ€Site Rareâ€Earth Element in Perovskite Nickelates. Advanced Functional Materials, 2018, 28, 1803712.	7.8	122
31	Enhancing ferroelectric photovoltaic effect by polar order engineering. Science Advances, 2018, 4, eaat3438.	4.7	152
32	Molecular Engineering toward Coexistence of Dielectric and Optical Switch Behavior in Hybrid Perovskite Phase Transition Material. Journal of Physical Chemistry A, 2018, 122, 6416-6423.	1.1	25
33	Self-powered sensitive and stable UV-visible photodetector based on GdNiO3/Nb-doped SrTiO3 heterojunctions. Applied Physics Letters, 2017, 110, .	1.5	35
34	Enhanced Photoelectrochemical Performance in Reduced Graphene Oxide/BiFeO₃ Heterostructures. Small, 2017, 13, 1603457.	5.2	46
35	Flexible PbZr_{0.52}Ti_{0.48}O₃ Capacitors with Giant Piezoelectric Response and Dielectric Tunability. Advanced Electronic Materials, 2017, 3, 1600542.	2.6	80
36	Localization-driven metalâ€“insulator transition in epitaxial hole-doped Nd_{1â^'x}Sr_xNiO₃ultrathin films. Journal of Physics Condensed Matter, 2017, 29, 025002.	0.7	8

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37	Electrochemically Driven Giant Resistive Switching in Perovskite Nickelates Heterostructures. Advanced Electronic Materials, 2017, 3, 1700321.	2.6	32
38	Competition between strain and dimensionality effects on the electronic phase transitions in NdNiO3 films. Scientific Reports, 2016, 5, 18707.	1.6	38
39	Enhanced ferroelectric photoelectrochemical properties of polycrystalline BiFeO3 film by decorating with Ag nanoparticles. Applied Physics Letters, 2016, 108, .	1.5	64
40	Magnetic fingerprint of interfacial coupling between CoFe and nanoscale ferroelectric domain walls. Applied Physics Letters, 2016, 109, 082906.	1.5	1
41	Oxygen Vacancy Induced Room-Temperature Metalâ€“Insulator Transition in Nickelate Films and Its Potential Application in Photovoltaics. ACS Applied Materials & Interfaces, 2016, 8, 9769-9776.	4.0	103
42	2D Black Phosphorus/SrTiO₃â€Based Programmable Photoconductive Switch. Advanced Materials, 2016, 28, 7768-7773.	11.1	57
43	Band gap tuning of nickelates for photovoltaic applications. Journal Physics D: Applied Physics, 2016, 49, 44LT02.	1.3	22
44	Giant photostriction in organicâ€“inorganic lead halide perovskites. Nature Communications, 2016, 7, 11193.	5.8	164
45	Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. Nature Communications, 2016, 7, 12357.	5.8	637
46	Anisotropic optical properties of rhombohedral and tetragonal thin film<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></m Physical Review B, 2015, 92, .	1.1	27
47	Nanoscale phase mixture in uniaxial strained BiFeO3 (110) thin films. Journal of Applied Physics, 2015, 118, .	1.1	6
48	Polarizationâ€Mediated Thermal Stability of Metal/Oxide Heterointerface. Advanced Materials, 2015, 27, 6934-6938.	11.1	19
49	Influence of epitaxial BiFeO3 on superparamagnetic behavior of CoFeB thin film. Journal of Applied Physics, 2015, 117, 143904.	1.1	1
50	Spin Hall Magnetoresistance in CoFe₂O₄/Pt Films. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	8
51	Large magnetoresistance at high bias voltage in double-layer organic spin valves. Organic Electronics, 2015, 26, 314-318.	1.4	9
52	Unraveling how electronic and spin structures control macroscopic properties of manganite ultra-thin films. NPG Asia Materials, 2015, 7, e196-e196.	3.8	20
53	Flexible organic ferroelectric films with a large piezoelectric response. NPG Asia Materials, 2015, 7, e189-e189.	3.8	47
54	Photovoltaic property of domain engineered epitaxial BiFeO3 films. Applied Physics Letters, 2014, 105, .	1.5	31

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55	Switchable photovoltaic response from polarization modulated interfaces in BiFeO3 thin films. Applied Physics Letters, 2014, 104, .	1.5	76
56	Mechanism of polarization fatigue in BiFeO₃: The role of Schottky barrier. Applied Physics Letters, 2014, 104, 012903.	1.5	23
57	Effect of lanthanum doping on tetragonal-like<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BiFe</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>with mixed-phase domain structures. Physical Review B, 2014, 90, .	1.1	28
58	Universal Ferroelectric Switching Dynamics of Vinylidene Fluoride-trifluoroethylene Copolymer Films. Scientific Reports, 2014, 4, 4772.	1.6	149
59	CdS sensitized 3D hierarchical TiO2/ZnO heterostructure for efficient solar energy conversion. Scientific Reports, 2014, 4, 5721.	1.6	64
60	Orientation dependence of electrocaloric effects in Pb(Zn1/3Nb2/3)-PbTiO3 single crystals. AIP Advances, 2013, 3, 072118.	0.6	12
61	Large [illegible] monoclinic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>M</mml:mi><mml:mi>B</mml:mi></mml:msub></mml:math>phase in BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" [illegible]<mml:mn></mml:msub></mml:math>epitaxial [illegible]	1.1	40
62	Origin of the uniaxial magnetic anisotropy in La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.7</mml:mn></mml:mrow></mml:msub></mml:math>Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.3</mml:mn></mml:mrow></mml:msub></mml:math>MnO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi	1.1	37
63	Oxygen-driven anisotropic transport in ultra-thin manganite films. Nature Communications, 2013, 4, 2778.	5.8	68
64	Non-volatile memory based on the ferroelectric photovoltaic effect. Nature Communications, 2013, 4, 1990.	5.8	394
65	General Route to ZnO Nanorod Arrays on Conducting Substrates via Galvanic-cell-based approach. Scientific Reports, 2013, 3, 2434.	1.6	57
66	Temperature-dependent tunneling electroresistance in Pt/BaTiO3/SrRuO3 ferroelectric tunnel junctions. Applied Physics Letters, 2013, 103, .	1.5	31
67	Temperature controlled c axis elongated low symmetry phase BiFeO3 thin film on STO substrate. AIP Advances, 2013, 3, 012110.	0.6	3
68	Multiferroicity in manganite/titanate superlattices determined by oxygen pressure-mediated cation defects. Journal of Applied Physics, 2013, 113, 164302.	1.1	2
69	Quantifying thickness-dependent charge mediated magnetoelectric coupling in magnetic/dielectric thin film heterostructures. Applied Physics Letters, 2013, 103, .	1.5	35
70	Unusual 90Â° domain structure in (2/3)Bi(Zn1/2Ti1/2)O3-(1/3)BiFeO3 epitaxial films with giant 22% tetragonal distortion. Applied Physics Letters, 2013, 103, .	1.5	8
71	Charge trapping-detrapping induced resistive switching in Ba0.7Sr0.3TiO3. AIP Advances, 2012, 2, .	0.6	50
72	Domain tuning in mixed-phase BiFeO3 thin films using vicinal substrates. Applied Physics Letters, 2012, 100, 202901.	1.5	11

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73	Interface control of bulk ferroelectric polarization. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9710-9715.	3.3	212
74	Characterization and Manipulation of Mixed Phase Nanodomains in Highly Strained BiFeO₃ Thin Films. ACS Nano, 2012, 6, 5388-5394.	7.3	72
75	Influence of target composition and deposition temperature on the domain structure of BiFeO3 thin films. AIP Advances, 2012, 2, .	0.6	13
76	Study of strain effect on in-plane polarization in epitaxial BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>thin films using planar electrodes. Physical Review B, 2012, 86, .	1.1	49
77	Mechanism of Polarization Fatigue in BiFeO₃. ACS Nano, 2012, 6, 8997-9004.	7.3	71
78	Dielectric dynamics of epitaxial BiFeO3 thin films. AIP Advances, 2012, 2, .	0.6	4
79	Coexistence of ferroelectric triclinic phases in highly strained BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>films. Physical Review B, 2011, 84, .	1.1	99
80	Microscopic Origin of the Giant Ferroelectric Polarization in Tetragonal-like<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2011, 107, 147602.	2.9	290
81	Lowâ€Symmetry Monoclinic Phases and Polarization Rotation Path Mediated by Epitaxial Strain in Multiferroic BiFeO₃ Thin Films. Advanced Functional Materials, 2011, 21, 133-138.	7.8	229
82	Multiferroic properties of (Bi1â^'xPrx)(Fe0.95Mn0.05)O3 thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 990-995.	1.7	30
83	Thickness-dependent magnetism and spin-glass behaviors in compressively strained BiFeO3 thin films. Applied Physics Letters, 2011, 98, .	1.5	73
84	Photovoltaic property of BiFeO3 thin films with 109Â° domains. Applied Physics Letters, 2011, 99, .	1.5	56
85	Domain structure and in-plane switching in a highly strained Bi_{0.9}Sm_{0.1}FeO₃ film. Applied Physics Letters, 2011, 99, 222904.	1.5	22
86	Enhanced low field magnetoresistance in nanocrystalline La0.7Sr0.3MnO3 synthesized on MgO nanowires. Applied Physics Letters, 2010, 96, 222501.	1.5	24
87	Uniaxial Magnetic Anisotropy in La_{0.7}Sr_{0.3}MnO₃ Thin Films Induced by Multiferroic BiFeO₃ with Striped Ferroelectric Domains. Advanced Materials, 2010, 22, 4964-4968.	11.1	52
88	Nanoscale polarization relaxation of epitaxial BiFeO3 thin film. Thin Solid Films, 2010, 518, e169-e173.	0.8	5
89	Properties of (K,Na)NbO3-based lead-free piezoelectric films prepared by pulsed laser deposition. Thin Solid Films, 2010, 518, 6777-6780.	0.8	10
90	Nanoscale domains in strained epitaxial BiFeO3 thin Films on LaSrAlO4 substrate. Applied Physics Letters, 2010, 96, 252903.	1.5	75

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91	Polarization switching in quasiplanar BiFeO3 capacitors. Applied Physics Letters, 2010, 97, .	1.5	26
92	Superconducting gap induced barrier enhancement in a BiFeO3-based heterostructure. Applied Physics Letters, 2010, 97, .	1.5	24
93	Influence of oxygen pressure on the ferroelectric properties of epitaxial<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BiFeO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:m films by pulsed laser deposition. Physical Review B, 2009, 80, .	1.1	101