Yin-Lian Zhu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2565186/publications.pdf

Version: 2024-02-01

102	2,104	279798	265206
papers	citations	23	42
		h-index	g-index

103	103	103	2088
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observation of a periodic array of flux-closure quadrants in strained ferroelectric PbTiO ₃ films. Science, 2015, 348, 547-551.	12.6	430
2	Polar meron lattice in strained oxide ferroelectrics. Nature Materials, 2020, 19, 881-886.	27.5	134
3	Giant linear strain gradient with extremely low elastic energy in a perovskite nanostructure array. Nature Communications, 2017, 8, 15994.	12.8	82
4	Rhombohedralâ€“Orthorhombic Ferroelectric Morphotropic Phase Boundary Associated with a Polar Vortex in BiFeO₃ Films. ACS Nano, 2018, 12, 11098-11105.	14.6	57
5	Atomic-scale mapping of dipole frustration at 90Â° charged domain walls in ferroelectric PbTiO3 films. Scientific Reports, 2014, 4, 4115.	3.3	56
6	Local Enhancement of Polarization at PbTiO₃/BiFeO₃ Interfaces Mediated by Charge Transfer. Nano Letters, 2017, 17, 3619-3628.	9.1	56
7	On the benefit of aberration-corrected HAADF-STEM for strain determination and its application to tailoring ferroelectric domain patterns. Ultramicroscopy, 2016, 160, 57-63.	1.9	55
8	Large Scale Two-Dimensional Flux-Closure Domain Arrays in Oxide Multilayers and Their Controlled Growth. Nano Letters, 2017, 17, 7258-7266.	9.1	52
9	Atomic mapping of Ruddlesden-Popper faults in transparent conducting BaSnO3-based thin films. Scientific Reports, 2015, 5, 16097.	3.3	42
10	Giant Polarization Sustainability in Ultrathin Ferroelectric Films Stabilized by Charge Transfer. Advanced Materials, 2017, 29, 1703543.	21.0	42
11	Structure and properties of epitaxial ferroelectric PbZr0.4Ti0.6O3â•PbZr0.6Ti0.4O3 superlattices grown on SrTiO3 (001) by pulsed laser deposition. Applied Physics Letters, 2007, 90, 072909.	3.3	37
12	The Wyckoff positional order and polyhedral intergrowth in the M3B2- and M5B3-type boride precipitated in the Ni-based superalloys. Scientific Reports, 2014, 4, 7367.	3.3	33
13	Periodic arrays of flux-closure domains in ferroelectric thin films with oxide electrodes. Applied Physics Letters, 2017, 111, .	3.3	33
14	Thickness-dependent a/a domain evolution in ferroelectric PbTiO3 films. Acta Materialia, 2017, 131, 123-130.	7.9	32
15	A Coherently Strained Monoclinic [111]PbTiO₃ Film Exhibiting Zero Poisson's Ratio State. Advanced Functional Materials, 2019, 29, 1901687.	14.9	30
16	Atomic Level 1D Structural Modulations at the Negatively Charged Domain Walls in BiFeO₃ Films. Advanced Materials Interfaces, 2015, 2, 1500024.	3.7	29
17	Coexistence of rhombohedral and orthorhombic phases in ultrathin BiFeO3 films driven by interfacial oxygen octahedral coupling. Acta Materialia, 2018, 145, 220-226.	7.9	29
18	Atomic mapping of periodic dipole waves in ferroelectric oxide. Science Advances, 2021, 7, .	10.3	27

#	Article	IF	Citations
19	Interfacial Strain Gradients Control Nanoscale Domain Morphology in Epitaxial BiFeO₃ Multiferroic Films. Advanced Functional Materials, 2020, 30, 2000343.	14.9	26
20	Oxygen Vacancy Ordering Modulation of Magnetic Anisotropy in Strained LaCoO_{3â€“x} Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 38230-38238.	8.0	25
21	Spatial Coupling of Ferroelectric Domain Walls and Crystallographic Defects in the PbTiO₃ Films. Advanced Materials Interfaces, 2016, 3, 1600342.	3.7	24
22	Impact of interfacial effects on ferroelectric resistance switching of Au/BiFeO₃/Nb:SrTiO₃(100) Schottky junctions. RSC Advances, 2017, 7, 22715-22721.	3.6	24
23	Microstructural analyses of a highly conductive Nb-doped SrTiO film. Acta Materialia, 2005, 53, 1277-1284.	7.9	23
24	Polarization Rotation in Ultrathin Ferroelectrics Tailored by Interfacial Oxygen Octahedral Coupling. ACS Nano, 2018, 12, 3681-3688.	14.6	23
25	Evolution of flux-closure domain arrays in oxide multilayers with misfit strain. Acta Materialia, 2019, 171, 176-183.	7.9	23
26	Large scale arrays of four-state vortex domains in BiFeO3 thin film. Applied Physics Letters, 2016, 109, .	3.3	22
27	Shape and Surface Charge Modulation of Topological Domains in Oxide Multiferroics. Journal of Physical Chemistry C, 2019, 123, 2557-2564.	3.1	22
28	Unveiling the pinning behavior of charged domain walls in BiFeO3 thin films via vacancy defects. Acta Materialia, 2020, 186, 68-76.	7.9	22
29	Magnetic anisotropy and metal-insulator transition in SrRuO3 thin films at different growth temperatures. Journal of Applied Physics, 2010, 107, 113925.	2.5	21
30	Atomic imaging of the interface between M₂₃C₆-type carbide and matrix in a long-term ageing polycrystalline Ni-based superalloy. Philosophical Magazine Letters, 2015, 95, 237-244.	1.2	21
31	Thickness-Dependent Evolution of Piezoresponses and Stripe 90Â° Domains in (101)-Oriented Ferroelectric PbTiO₃ Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 24627-24637.	8.0	21
32	Mapping gradient-driven morphological phase transition at the conductive domain walls of strained multiferroic films. Physical Review B, 2019, 100, .	3.2	21
33	Structural and microstructural analyses of crystalline Er2O3 high-k films grown on Si (001) by laser molecular beam epitaxy. Acta Materialia, 2011, 59, 1644-1650.	7.9	20
34	Origin of the Bloch-type polarization components at the 180Â° domain walls in ferroelectric PbTiO3. Journal of Applied Physics, 2014, 116, .	2.5	20
35	Charged domain wall modulation of resistive switching with large ON/OFF ratios in high density BiFeO3 nano-islands. Acta Materialia, 2020, 187, 12-18.	7.9	20
36	Angular dependent magnetoresistance with twofold and fourfold symmetries in A-type antiferromagnetic Nd0.45Sr0.55MnO3 thin film. Applied Physics Letters, 2010, 97, .	3.3	19

#	Article	IF	Citations
37	Controlled Growth and Atomic-Scale Mapping of Charged Heterointerfaces in PbTiO₃/BiFeO₃ Bilayers. ACS Applied Materials & Interfaces, 2017, 9, 25578-25586.	8.0	18
38	Misfit Strain Relaxation of Ferroelectric PbTiO3/LaAlO3 (111) Thin Film System. Scientific Reports, 2016, 6, 35172.	3.3	16
39	Oxygen octahedral coupling mediated ferroelectric-antiferroelectric phase transition based on domain wall engineering. Acta Materialia, 2020, 198, 145-152.	7.9	16
40	Converse flexoelectricity around ferroelectric domain walls. Acta Materialia, 2020, 191, 158-165.	7.9	16
41	Phase-field modeling and electronic structural analysis of flexoelectric effect at 180Â° domain walls in ferroelectric PbTiO3. Journal of Applied Physics, 2017, 122, .	2.5	15
42	Anisotropic strain: A critical role in domain evolution in (111)- Oriented ferroelectric films. Acta Materialia, 2019, 166, 503-511.	7.9	15
43	Tuning ferroelectricity and ferromagnetism in BiFeO₃/BiMnO₃ superlattices. Nanoscale, 2020, 12, 9810-9816.	5.6	15
44	Periodic Polarization Waves in a Strained, Highly Polar Ultrathin SrTiO3. Nano Letters, 2021, 21, 6274-6281.	9.1	14
45	An effect of crystal tilt on the determination of ions displacements in perovskite oxides under BF/HAADF-STEM imaging mode. Journal of Materials Research, 2017, 32, 947-956.	2.6	13
46	3D polarization texture of a symmetric 4-fold flux closure domain in strained ferroelectric PbTiO₃ films. Journal of Materials Research, 2017, 32, 957-967.	2.6	13
47	Modulation of charged a₁/a₂ domains and piezoresponses of tensile strained PbTiO₃ films by the cooling rate. RSC Advances, 2019, 9, 13981-13990.	3.6	13
48	Real-time observation of phase coexistence and a/a to flux-closure domain transformation in ferroelectric films. Acta Materialia, 2020, 193, 311-317.	7.9	13
49	Designing of metallic nanocrystals embedded in non-stoichiometric perovskite nanomaterial and its surface-electronic characteristics. Scientific Reports, 2017, 7, 8343.	3.3	12
50	Misfit strain-temperature phase diagram of multi-domain structures in (111)-oriented ferroelectric PbTiO3 films. Acta Materialia, 2020, 196, 539-548.	7.9	12
51	Deterministic contribution of low symmetry phases to piezoresponse in oxide ferroelectrics. Acta Materialia, 2021, 205, 116534.	7.9	12
52	Effects of anisotropic misfit strains on equilibrium phases and domain structures in (111)-oriented ferroelectric PbTiO3 films. Acta Materialia, 2021, 206, 116639.	7.9	12
53	Impact of high interface density on ferroelectric and structural properties of PbZr_{0.2}Ti_{0.8}O₃/PbZr_{0.4}Ti_{0.6}O₃ epitaxial multilayers. Journal Physics D: Applied Physics, 2009, 42, 085305.	2.8	11
54	Thickness-dependent evolution of piezoresponses and a/c domains in [101]-oriented PbTiO3 ferroelectric films. Journal of Applied Physics, 2020, 128, .	2.5	11

#	Article	IF	Citations
55	Flexoelectricity-induced retention failure in ferroelectric films. Acta Materialia, 2020, 196, 61-68.	7.9	11
56	Misfit dislocations of anisotropic magnetoresistant Nd0.45Sr0.55MnO3 thin films grown on SrTiO3 (110) substrates. Acta Materialia, 2012, 60, 5975-5983.	7.9	10
57	Thickness Dependence of Oxygen Vacancy Ordering in Strained LaCoO_{3â€“x} Thin Films. Journal of Physical Chemistry C, 2020, 124, 12492-12501.	3.1	10
58	Chiral phase transition at 180Â° domain walls in ferroelectric PbTiO3 driven by epitaxial compressive strains. Journal of Applied Physics, 2017, 122, .	2.5	9
59	First-principles study of charged steps on 180Â° domain walls in ferroelectric PbTiO3. Journal of Applied Physics, 2017, 122, .	2.5	9
60	Topological polar structures in ferroelectric oxide films. Journal of Applied Physics, 2021, 129, .	2.5	9
61	Atomic mapping of structural distortions in 109Â° domain patterned BiFeO₃ thin films. Journal of Materials Research, 2017, 32, 2423-2430.	2.6	8
62	Periodic vortex-antivortex pairs in tensile strained PbTiO3 films. Applied Physics Letters, 2020, 117, 192901.	3.3	8
63	Strain phase diagram and physical properties of (110)-oriented PbTiO3 thin films by phase-field simulations. Acta Materialia, 2022, 228, 117761.	7.9	8
64	Morphology and orientation of iron oxide precipitates in epitaxial BiFeO3thin films grown under two non-optimized oxygen pressures. Philosophical Magazine, 2010, 90, 4551-4567.	1.6	7
65	Misfit strain relaxations of (101)-oriented ferroelectric PbTiO₃/(La, Sr)(Al,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.6	7
66	Boundary conditions control of topological polar nanodomains in epitaxial BiFeO3 (110) multilayered films. Journal of Applied Physics, 2020, 128, 184103.	2.5	7
67	Atomic-Scale Tunable Flexoelectric Couplings in Oxide Multiferroics. Nano Letters, 2021, 21, 9601-9608.	9.1	7
68	Influence of flexoelectric effects on domain switching in ferroelectric films. Journal of Applied Physics, 2021, 129, .	2.5	6
69	Misfit dislocation arrays at the interface between La0.9Sr0.1MnO3films and vicinal SrTiO3(001) substrates. Philosophical Magazine Letters, 2006, 86, 469-478.	1.2	5
70	Microstructural characteristics in the BaTiO2.52 thin films showing metallic behavior. Materials Letters, 2007, 61, 1971-1973.	2.6	5
71	Dislocations in charge-ordered Pr_{0.5}Ca_{0.5}MnO₃epitaxial thin films prepared by a two-step growth technique. Philosophical Magazine Letters, 2010, 90, 323-336.	1.2	5
72	Microstructural evolution of [PbZrxTi1â€“xO3/PbZryTi1â€“yO3]nepitaxial multilayers (x/y= 0.2/0.4,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	5

#	Article	IF	Citations
73	Self-assembled three-dimensional framework of PbTiO3:Îµ-Fe2O3 nanostructures with room temperature multiferroism. Applied Surface Science, 2021, 544, 148945.	6.1	5
74	Direct Observation of Large-Scale Screw Dislocation Grids in Oxide Heteroepitaxies. Nano Letters, 2022, 22, 2085-2093.	9.1	5
75	Strain coupling of ferroelastic domains and misfit dislocations in [101]-oriented ferroelectric PbTiO₃ films. RSC Advances, 2022, 12, 20423-20431.	3.6	5
76	Cu₂S nanowires and MnS/Cu₂S nanojunctions derived from Î³â€²MnS nanowires via selective cationâ€exchange reaction. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 123-128.	1.8	4
77	Nanostructured Nd0.45Sr0.55MnO3 films grown on SrTiO3(110). Journal of Materials Research, 2013, 28, 1692-1698.	2.6	4
78	Coexisting morphotropic phase boundary and giant strain gradient in BiFeO3 films. Journal of Applied Physics, 2021, 129, 184101.	2.5	4
79	Thickness-Dependent Polar Domain Evolution in Strained, Ultrathin PbTiO₃ Films. ACS Applied Materials & Interfaces, 2022, 14, 9724-9733.	8.0	4
80	Meronâ€“antimeron annihilation induced by the electric field in a polar meron lattice. Journal of Applied Physics, 2022, 131, .	2.5	4
81	Control of magnetic and transport properties in Nd0.45Sr0.55MnO3 films through epitaxial strain. Journal of Applied Physics, 2012, 111, 07D706.	2.5	3
82	Atomically resolved precipitates/matrix interfaces in KTaO₃crystals. Philosophical Magazine, 2016, 96, 486-497.	1.6	3
83	Effect of transition metal (TM) doping on structural and magnetic properties in hexagonal YMn0.917TM0.083O3 systems. Heliyon, 2018, 4, e00993.	3.2	3
84	Crystallographic Orientation and Surface Charge-Tailored Continuous Polarization Rotation State in Epitaxially Ferroelectric Nanostructures. Journal of Physical Chemistry C, 2019, 123, 19602-19609.	3.1	3
85	Atomic scale study of the oxygen annealing effect on piezoelectricity enhancement of (K,Na)NbO₃ nanorods. Journal of Materials Chemistry C, 2020, 8, 15830-15838.	5.5	3
86	Spinodal Decomposition-Driven Endurable Resistive Switching in Perovskite Oxides. ACS Applied Materials & Interfaces, 2021, 13, 31001-31009.	8.0	3
87	Microstructure of new colossal magnetoresistance La1â€“xTexMnO3 (x= 0.1, 0.2) thin films. Physica Status Solidi A, 2003, 199, 233-237.	1.7	2
88	Comparative studies on transport and magnetotransport behaviour of asâ€deposited and ex situ annealed Aâ€type antiferromagnetic Nd_{0.45}Sr_{0.55}MnO₃ films. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2558-2563.	1.8	2
89	The evolution of polarization inside ultrathin PbTiO₃films: a theoretical study. Philosophical Magazine, 2015, 95, 2067-2077.	1.6	2
90	The effect of oxygen vacancy plate on the domain structure in BiFeO3 thin films by phase field simulations. Journal of Applied Physics, 2020, 127, .	2.5	2

#	ARTICLE	IF	CITATIONS
91	Oriented domains in a thin film of La0.8Sr0.2MnO3prepared by laser molecular-beam epitaxy. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 1331-1343.	0.6	1
92	Microstructural and magnetic properties of bulk La1â^'xPrxMnO3+Î´(xâ€‰=â€‰0.2,â€‰0.3,â€‰0.5). Philosophical Magazine Letters, 2007, 87, 75-83.	1.2	1
93	Microstructure of the potentially multiferroic Fe/BaTiO₃epitaxial interface. Philosophical Magazine, 2012, 92, 1733-1747.	1.6	1
94	Tunability of vortex-like patterns on 180^o domain walls in ferroelectric PbTiO₃. Philosophical Magazine Letters, 2018, 98, 266-271.	1.2	1
95	Multiple strains and polar states in PbZr0.52Ti0.48O3/PbTiO3 superlattices revealed by aberration-corrected HAADF-STEM imaging. Ultramicroscopy, 2018, 193, 84-89.	1.9	1
96	Self-Recovery of Defective PbTiO3 Film with Enhanced Piezoelectricity by Homogenizing Annealing. Crystal Growth and Design, 2020, 20, 5967-5973.	3.0	1
97	1D Modulation: Atomic Level 1D Structural Modulations at the Negatively Charged Domain Walls in BiFeO₃ Films (Adv. Mater. Interfaces 9/2015). Advanced Materials Interfaces, 2015, 2, .	3.7	0
98	B23-O-02Atomic Level One-dimensional Structural Modulations at the Negatively Charged Domain Walls in BiFeO3 Films. Microscopy (Oxford, England), 2015, 64, i53.2-i53.	1.5	0
99	Ferroelectric Films: Spatial Coupling of Ferroelectric Domain Walls and Crystallographic Defects in the PbTiO₃ Films (Adv. Mater. Interfaces 15/2016). Advanced Materials Interfaces, 2016, 3, .	3.7	0
100	Atomic Mapping of Domain Configurations in Ferroelectric Thin Films. Microscopy and Microanalysis, 2017, 23, 1614-1615.	0.4	0
101	The Interactions of Ferroelectric Domain Walls and Crystallographic Defects in the PbTiO3 Films. Microscopy and Microanalysis, 2017, 23, 1664-1665.	0.4	0
102	Atomic Level Structural Modulations at the Negatively Charged Domain Walls in BiFeO3 Films. Microscopy and Microanalysis, 2017, 23, 1666-1667.	0.4	0