

# Pu Yu

## List of Publications by Year in descending order

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132  
docs citations

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times ranked

14179  
citing authors

#	ARTICLE	IF	CITATIONS
1	All-solid-state proton-based tandem structures for fast-switching electrochromic devices. Nature Electronics, 2022, 5, 45-52.	13.1	111
2	Flexoelectric Domain Walls Originated from Structural Phase Transition in Epitaxial BiVO <sub>4</sub> Films. Small, 2022, 18, e2107540.	5.2	8
3	Stability of superconducting Nd <sub>0.8</sub> Sr <sub>0.2</sub> NiO <sub>2</sub> thin films. Science China: Physics, Mechanics and Astronomy, 2022, 65, .	2.0	14
4	A Generic Sacrificial Layer for Wide-Range Freestanding Oxides with Modulated Magnetic Anisotropy. Advanced Functional Materials, 2022, 32, .	7.8	24
5	Coexistence of extended flat band and Kekulé order in Li-intercalated graphene. Physical Review B, 2022, 105, .	1.1	18
6	Synthesis of a New Ferroelectric Relaxor Based on a Combination of Antiferroelectric and Paraelectric Systems. ACS Applied Materials & Interfaces, 2022, 14, 22278-22286.	4.0	2
7	Mosaic growth induced magnetic anisotropy in double perovskite PrBaCo <sub>2</sub> O <sub>5+δ</sub> thin films. Acta Materialia, 2022, 234, 118040.	3.8	3
8	Growth of large scale PtTe, PtTe <sub>2</sub> and PtSe <sub>2</sub> films on a wide range of substrates. Nano Research, 2021, 14, 1663-1667.	5.8	26
9	Ferroelastic Nanodomain-mediated Mechanical Switching of Ferroelectricity in Thick Epitaxial Films. Nano Letters, 2021, 21, 445-452.	4.5	10
10	Atomic-Scale Observation of Structure Transition from Brownmillerite to Infinite Layer in SrFeO <sub>2.5</sub> Thin Films. Chemistry of Materials, 2021, 33, 3113-3120.	3.2	10
11	Manipulating Berry curvature of SrRuO <sub>3</sub> thin films via epitaxial strain. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	41
12	Emergent Ferromagnetism with Fermi-Liquid Behavior in Proton Intercalated $\text{CaRuO}_3$ Physical Review X, 2021, 11, .	2.8	10
13	Manipulation of the Electronic State of Mott Iridate Superlattice through Protonation Induced Electron-Filling. Advanced Functional Materials, 2021, 31, 2100261.	7.8	7
14	Engineering of multiferroic BiFeO <sub>3</sub> grain boundaries with head-to-head polarization configurations. Science Bulletin, 2021, 66, 771-776.	4.3	6
15	Experimental Evidence of Chiral Symmetry Breaking in Kekulé-Ordered Graphene. Physical Review Letters, 2021, 126, 206804.	2.9	72
16	Analog memristive synapse based on topotactic phase transition for high-performance neuromorphic computing and neural network pruning. Science Advances, 2021, 7, .	4.7	63
17	Antiferroelectric Anisotropy of Epitaxial PbHfO <sub>3</sub> Films for Flexible Energy Storage. Advanced Functional Materials, 2021, 31, 2105060.	7.8	29
18	Controlling Strain Relaxation by Interface Design in Highly Lattice-Mismatched Heterostructure. Nano Letters, 2021, 21, 6867-6874.	4.5	6

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19	Induced anisotropic superconductivity in ionic liquid cation intercalated $1T\text{-SnSe}_2$ . 2D Materials, 2021, 8, 015024.	2.0	6
20	Ionic Liquid Gating Control of Spin Wave Resonance in $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ Thin Film. Advanced Electronic Materials, 2020, 6, 1900859.	2.6	11
21	Enhancement of superconductivity in organic-inorganic hybrid topological materials. Science Bulletin, 2020, 65, 188-193.	4.3	39
22	Anomalous Kerr effect in $\text{SrRuO}_3$ thin films. Physical Review B, 2020, 102, .	1.1	10
23	Robust Ferromagnetism in Highly Strained $\text{SrCoO}_3$ Thin Films. Physical Review X, 2020, 10, .	2.8	15
24	Emergent electric field control of phase transformation in oxide superlattices. Nature Communications, 2020, 11, 902.	5.8	35
25	Reversible manipulation of the magnetic state in $\text{SrRuO}_3$ through electric-field controlled proton evolution. Nature Communications, 2020, 11, 184.	5.8	86
26	Imaging and quantification of charged domain walls in $\text{BiFeO}_3$ . Nanoscale, 2020, 12, 9186-9193.	2.8	25
27	A selective control of volatile and non-volatile superconductivity in an insulating copper oxide via ionic liquid gating. Science Bulletin, 2020, 65, 1607-1613.	4.3	10
28	High- $T_c$ Cooper-pair injection in a semiconductor-superconductor structure. Journal of Physics Condensed Matter, 2020, 32, 475502.	0.7	9
29	Thickness dependence of transport behaviors in $\text{SrRuO}_3/\text{SrTiO}_3/\text{SrRuO}_3$ superlattices. Physical Review Materials, 2020, 4, .	1.9	11
30	Enhancements of dielectric and energy storage performances in lead-free films with sandwich architecture. Journal of the American Ceramic Society, 2019, 102, 936-943.	1.9	37
31	Ultrahigh energy density lead-free dielectric films via polymorphic nanodomain design. Science, 2019, 365, 578-582.	6.0	662
32	Origin of the anomalous Hall effect in $\text{SrCoO}_3$ thin films. Physical Review B, 2019, 100, .	1.1	9
33	Electric Field-Controlled Multistep Proton Evolution in $\text{H}_x\text{SrCoO}_{2.5}$ with Formation of H Dimer. Advanced Science, 2019, 6, 1901432.	5.6	32
34	Nanoscale Topotactic Phase Transformation in $\text{SrFeO}_x$ Epitaxial Thin Films for High-Density Resistive Switching Memory. Advanced Materials, 2019, 31, e1903679.	11.1	58
35	Physical and chemical strains co-tuned magnetic properties of double perovskite $\text{PrBaMn}_2\text{O}_{5.5+\delta}$ epitaxial films. Applied Physics Letters, 2019, 115, .	1.5	4
36	Tailoring Magnetoelectric Coupling in $\text{BiFeO}_3/\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ Heterostructure through the Interface Engineering. Advanced Materials, 2019, 31, e1806335.	11.1	53

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37	Tuning the electronic properties of epitaxial strained CaFeO <sub>3</sub> thin films. Applied Physics Letters, 2019, 114, 221907.	1.5	6
38	Pulsed laser deposition of complex oxide heteroepitaxy. Chinese Journal of Physics, 2019, 60, 481-501.	2.0	21
39	Ionic-Liquid-Gating Induced Protonation and Superconductivity in FeSe <sub>0.93</sub> S <sub>0.07</sub> , ZrNCl, 1T-TaS <sub>2</sub> and Bi <sub>2</sub> Se <sub>3</sub> . Chinese Physics Letters, 2019, 36, 077401.	1.3	20
40	Experimental Realization of an Intrinsic Magnetic Topological Insulator. Chinese Physics Letters, 2019, 36, 076801.	1.3	457
41	Manipulate the Electronic and Magnetic States in NiCo <sub>2</sub> O <sub>4</sub> Films through Electric-Field-Induced Protonation at Elevated Temperature. Advanced Materials, 2019, 31, e1900458.	11.1	64
42	Evidence of charge density wave with anisotropic gap in a monolayer VTe <sub>2</sub> film. Physical Review B, 2019, 100, .	1.1	43
43	Nanoscale High-Tc YBCO/GaN Super-Schottky Diode. Scientific Reports, 2018, 8, 5597.	1.6	10
44	Atomically Resolved Electronic States and Correlated Magnetic Order at Termination Engineered Complex Oxide Heterointerfaces. ACS Nano, 2018, 12, 1089-1095.	7.3	13
45	Protonation induced high- T <sub>c</sub> phases in iron-based superconductors evidenced by NMR and magnetization measurements. Science Bulletin, 2018, 63, 11-16.	4.3	48
46	Ionic Liquid Gating Control of Spin Reorientation Transition and Switching of Perpendicular Magnetic Anisotropy. Advanced Materials, 2018, 30, e1801639.	11.1	47
47	Anomalous Hall effect and spin fluctuations in ionic liquid gated SrCoO <sub>3</sub> thin films. Physical Review B, 2018, 97, .	11.1	18
48	Ferromagnetism and matrix-dependent charge transfer in strained LaMnO <sub>3</sub> ∕LaCoO <sub>3</sub> superlattices. Materials Research Letters, 2018, 6, 501-507.	4.1	13
49	Atomic-Scale Measurement of Flexoelectric Polarization at SrTiO <sub>3</sub> Dislocations. Physical Review Letters, 2018, 120, 267601.	2.9	93
50	Controllable conductive readout in self-assembled, topologically confined ferroelectric domain walls. Nature Nanotechnology, 2018, 13, 947-952.	15.6	163
51	Magnetic Anisotropy: Ionic Liquid Gating Control of Spin Reorientation Transition and Switching of Perpendicular Magnetic Anisotropy (Adv. Mater. 30(2018)). Advanced Materials, 2018, 30, 1870223.	11.1	1
52	Electric Field Writing of Ferroelectric Nano-Domains Near 71° Domain Walls with Switchable Interfacial Conductivity. Annalen Der Physik, 2018, 530, 1800130.	0.9	6
53	Strain-induced ferroelectricity and spin-lattice coupling in SrMnO <sub>3</sub> thin films. Physical Review B, 2018, 97, .	1.1	51
54	Epitaxial growth of Y3Fe5O12 thin films with perpendicular magnetic anisotropy. Applied Physics Letters, 2017, 110, .	1.5	71

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55	Electric-field control of tri-state phase transformation with a selective dual-ion switch. <i>Nature</i> , 2017, 546, 124-128.	13.7	551
56	Electric-field-controlled Phase Transformation in $\text{WO}_3$ Thin Films through Hydrogen Evolution. <i>Advanced Materials</i> , 2017, 29, 1703628.	11.1	79
57	Manipulating Ferroelectrics through Changes in Surface and Interface Properties. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 39736-39746.	4.0	14
58	High quality atomically thin $\text{PtSe}_2$ films grown by molecular beam epitaxy. <i>2D Materials</i> , 2017, 4, 045015.	2.0	142
59	Epitaxial $\text{Bi}_9\text{Ti}_3\text{Fe}_5\text{O}_{27}$ thin films: a new type of layer-structure room-temperature multiferroic. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7720-7725.	2.7	8
60	Atomic-resolution imaging of electrically induced oxygen vacancy migration and phase transformation in $\text{SrCoO}_{2.5}$ . <i>Nature Communications</i> , 2017, 8, 104.	5.8	66
61	Electric-field control of ferromagnetism through oxygen ion gating. <i>Nature Communications</i> , 2017, 8, 2156.	5.8	85
62	Engineering magnetism at functional oxides interfaces: manganites and beyond. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 443004.	0.7	21
63	Strain-mediated Inverse Photoresistivity in $\text{SrRuO}_3/\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ Superlattices. <i>Advanced Functional Materials</i> , 2016, 26, 729-737.	7.8	14
64	Anomalous Electronic Anisotropy Triggered by Ferroelastic Coupling in Multiferroic Heterostructures. <i>Advanced Materials</i> , 2016, 28, 876-883.	11.1	19
65	Quantification of surface displacements and electromechanical phenomena via dynamic atomic force microscopy. <i>Nanotechnology</i> , 2016, 27, 425707.	1.3	92
66	Microwave a.c. conductivity of domain walls in ferroelectric thin films. <i>Nature Communications</i> , 2016, 7, 11630.	5.8	81
67	Strain-driven oxygen deficiency in multiferroic $\text{SrMnO}_3$ films. <i>Physical Review B</i> , 2016, 94, .	11.1	16
68	Exploring Polarization Rotation Instabilities in Super-tetragonal $\text{BiFeO}_3$ Epitaxial Thin Films and Their Technological Implications. <i>Advanced Electronic Materials</i> , 2016, 2, 1600307.	2.6	9
69	Heteroepitaxy of $\text{Fe}_3\text{O}_4/\text{Muscovite}$ : A New Perspective for Flexible Spintronics. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 33794-33801.	4.0	99
70	Manipulating the metal-to-insulator transition of $\text{NdNiO}_3$ films by orbital polarization. <i>Physical Review B</i> , 2016, 93, .	1.1	16
71	Monolayer charge-neutral graphene on platinum with extremely weak electron-phonon coupling. <i>Physical Review B</i> , 2015, 92, .	1.1	12
72	Differentiating Ferroelectric and Nonferroelectric Electromechanical Effects with Scanning Probe Microscopy. <i>ACS Nano</i> , 2015, 9, 6484-6492.	7.3	231

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73	Probing Local Bias-Induced Transitions Using Photothermal Excitation Contact Resonance Atomic Force Microscopy and Voltage Spectroscopy. ACS Nano, 2015, 9, 1848-1857.	7.3	37
74	BiFeO <sub>3</sub> Thin Films: A Playground for Exploring Electric-Field Control of Multifunctionalities. Annual Review of Materials Research, 2015, 45, 249-275.	4.3	76
75	Giant elastic tunability in strained BiFeO <sub>3</sub> near an electrically induced phase transition. Nature Communications, 2015, 6, 8985.	5.8	43
76	The effects of strain relaxation on the dielectric properties of epitaxial ferroelectric Pb(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )TiO <sub>3</sub> thin films. Applied Physics Letters, 2014, 105, .	1.5	11
77	Induced Magnetization in $\text{La}_{0.7}\text{Mn}_{0.3}\text{O}_2$ . Physical Review Letters, 2014, 113, 047204.	10.7	59
78	Functional ferroic heterostructures with tunable integral symmetry. Nature Communications, 2014, 5, 4295.	5.8	15
79	A nanoscale shape memory oxide. Nature Communications, 2013, 4, 2768.	5.8	95
80	Tuning the Competition between Ferromagnetism and Antiferromagnetism in a Half-Doped Manganite through Magnetoelectric Coupling. Physical Review Letters, 2013, 111, 127601.	2.9	93
81	Ultrathin Limit of Exchange Bias Coupling at Oxide Multiferroic/Ferromagnetic Interfaces. Advanced Materials, 2013, 25, 4739-4745.	11.1	59
82	Exchange bias effects in epitaxial Fe <sub>3</sub> O <sub>4</sub> /BiFeO <sub>3</sub> heterostructures. Applied Physics Letters, 2012, 100, .	1.5	57
83	Role of measurement voltage on hysteresis loop shape in Piezoresponse Force Microscopy. Applied Physics Letters, 2012, 101, .	1.5	55
84	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
85	Untangling Coupled Order Parameters at Complex Oxide Interfaces with Aberration-Corrected STEM and EELS. Microscopy and Microanalysis, 2012, 18, 318-319.	0.2	1
86	Emergent phenomena at multiferroic heterointerfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4856-4871.	1.6	43
87	Tunable Metallic Conductance in Ferroelectric Nanodomains. Nano Letters, 2012, 12, 209-213.	4.5	153
88	Interface dipole between two metallic oxides caused by localized oxygen vacancies. Physical Review B, 2012, 86, .	1.1	56
89	Oxide interfaces: pathways to novel phenomena. Materials Today, 2012, 15, 320-327.	8.3	130
90	Direct spectroscopic evidence of charge reversal at the Pb(Zr <sub>0.2</sub> Ti <sub>0.8</sub> )O <sub>3</sub> /La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> heterointerface. Physical Review B, 2011, 83, .	1.1	18

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91	Scaling and disorder analysis of local $V$ curves from ferroelectric thin films of lead zirconate titanate. <i>Nanotechnology</i> , 2011, 22, 254031.	1.3	24
92	Near-field examination of perovskite-based superlenses and superlens-enhanced probe-object coupling. <i>Nature Communications</i> , 2011, 2, 249.	5.8	95
93	Experimental evidence of ferroelectric negative capacitance in nanoscale heterostructures. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	256
94	Microspectroscopy on perovskite-based superlenses [Invited]. <i>Optical Materials Express</i> , 2011, 1, 1051.	1.6	14
95	Electrically controllable spontaneous magnetism in nanoscale mixed phase multiferroics. <i>Nature Communications</i> , 2011, 2, 225.	5.8	155
96	Large field-induced strains in a lead-free piezoelectric material. <i>Nature Nanotechnology</i> , 2011, 6, 98-102.	15.6	292
97	Microscopic Origin of the Giant Ferroelectric Polarization in Tetragonal-like $\text{BiFeO}_3$ . <i>Physical Review Letters</i> , 2011, 107, 147602.	2.9	290
98	Atomically Resolved Mapping of Polarization and Electric Fields Across Ferroelectric/Oxide Interfaces by $Z\text{-contrast}$ Imaging. <i>Advanced Materials</i> , 2011, 23, 2474-2479.	11.1	79
99	Correlation between nanoscale and nanosecond resolved ferroelectric domain dynamics and local mechanical compliance. <i>Journal of Applied Physics</i> , 2011, 109, 091607.	1.1	4
100	Ferromagnetic Enhancement of CE-Type Spin Ordering in $\text{Pr}_2\text{Ti}_2\text{O}_7$ . <i>Physical Review Letters</i> , 2011, 106, 186404.	2.9	100
101	Watching domains grow: <i>in-situ</i> studies of polarization switching by combined scanning probe and scanning transmission electron microscopy. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	57
102	Screening study of spray solution parameters for depositing cerium-based conversion coatings on Al alloy 2024-T3. <i>Journal of Applied Electrochemistry</i> , 2010, 40, 551-559.	1.5	13
103	Reversible electric control of exchange bias in a multiferroic field-effect device. <i>Nature Materials</i> , 2010, 9, 756-761.	13.3	633
104	Above-bandgap voltages from ferroelectric photovoltaic devices. <i>Nature Nanotechnology</i> , 2010, 5, 143-147.	15.6	1,496
105	Native $\text{SrTiO}_3(001)$ surface layer from resonant $\text{TiL}_{2,3}$ reflectance spectroscopy. <i>Physical Review B</i> , 2010, 82, .	1.1	19
106	Hidden Magnetic Configuration in Epitaxial $\text{LaMnO}_3$ . <i>Physical Review Letters</i> , 2010, 105, 257204.	2.9	100
107	Effective thermal boundary resistance from thermal decoupling of magnons and phonons in $\text{SrRuO}_3$ films. <i>Physical Review B</i> , 2010, 82, .	1.1	7
108	Probing the evolution of antiferromagnetism in multiferroics. <i>Physical Review B</i> , 2010, 81, .	1.1	70

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109	Suppression of Octahedral Tilts and Associated Changes in Electronic Properties at Epitaxial Oxide Heterostructure Interfaces. <i>Physical Review Letters</i> , 2010, 105, 087204.	2.9	308
110	Interface Ferromagnetism and Orbital Reconstruction in $\text{BiFeO}_3$ . <i>Physical Review Letters</i> , 2010, 105, 027201.	2.9	335
111	Probing ferroelectricity in $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ polarized soft x rays. <i>Physical Review B</i> , 2010, 82, .	2.9	335
112	Mapping Octahedral Tilts and Polarization Across a Domain Wall in $\text{BiFeO}_3$ from Z-Contrast Scanning Transmission Electron Microscopy Image Atomic Column Shape Analysis. <i>ACS Nano</i> , 2010, 4, 6071-6079.	7.3	150
113	Instability of two-dimensional graphene: Breaking with soft x rays. <i>Physical Review B</i> , 2009, 80, .	1.1	44
114	Observation of Ferromagnetic Resonance in $\text{SrRuO}_3$ by the Time-Resolved Magneto-Optical Kerr Effect. <i>Physical Review Letters</i> , 2009, 102, 177601.	2.9	48
115	Conduction at domain walls in oxide multiferroics. <i>Nature Materials</i> , 2009, 8, 229-234.	13.3	1,212
116	Electric modulation of conduction in multiferroic Ca-doped $\text{BiFeO}_3$ films. <i>Nature Materials</i> , 2009, 8, 485-493.	13.3	481
117	Nanoscale Control of Domain Architectures in $\text{BiFeO}_3$ Thin Films. <i>Nano Letters</i> , 2009, 9, 1726-1730.	4.5	210
118	Polarization Control of Electron Tunneling into Ferroelectric Surfaces. <i>Science</i> , 2009, 324, 1421-1425.	6.0	441
119	Nanoscale Control of Exchange Bias with $\text{BiFeO}_3$ Thin Films. <i>Nano Letters</i> , 2008, 8, 2050-2055.	4.5	270
120	Critical thickness and orbital ordering in ultrathin $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ . <i>Physical Review B</i> , 2008, 78, .	1.1	379
121	Low voltage performance of epitaxial $\text{BiFeO}_3$ films on Si substrates through lanthanum substitution. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	103
122	CH003: Stability of nanodots in ferroelectric thin films. , 2008, , .		0
123	Enhanced quantum confined Pockels effect in graded SiGe superlattices. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
124	Domain Control in Multiferroic $\text{BiFeO}_3$ through Substrate Vicinality. <i>Advanced Materials</i> , 2007, 19, 2662-2666.	11.1	245
125	Enhanced quantum-confined Pockels effect in SiGe superlattices. <i>Physical Review B</i> , 2006, 73, .	1.1	6