

Hongrui Zhang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10089641/publications.pdf>

Version: 2024-02-01

69
papers

1,410
citations

304743

22
h-index

361022

35
g-index

69
all docs

69
docs citations

69
times ranked

1894
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of inverse Edelstein effect in Rashba-split 2DEG between SrTiO ₃ and LaAlO ₃ at room temperature. <i>Science Advances</i> , 2017, 3, e1602312.	10.3	132
2	High-Mobility Spin-Polarized Two-Dimensional Electron Gases at EuO/KTaO ₃ Interfaces. <i>Physical Review Letters</i> , 2018, 121, 116803.	7.8	79
3	Itinerant ferromagnetism in van der Waals Fe ₅ Cr ₂ As ₂ crystals above room temperature. <i>Physical Review B</i> , 2020, 102, .	3.2	74
4	Highly Mobile Two-Dimensional Electron Gases with a Strong Gating Effect at the Amorphous LaAlO ₃ /KTaO ₃ Interface. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36456-36461.	8.0	69
5	Symmetry mismatch-driven perpendicular magnetic anisotropy for perovskite/brownmillerite heterostructures. <i>Nature Communications</i> , 2018, 9, 1923.	12.8	63
6	Room-temperature skyrmion lattice in a layered magnet (Fe _{0.5} Co _{0.5}) ₅ GeTe ₂ . <i>Science Advances</i> , 2022, 8, eabm7103.	10.3	55
7	Unusual Electric and Optical Tuning of KTaO ₃ -Based Two-Dimensional Electron Gases with 5d Orbitals. <i>ACS Nano</i> , 2019, 13, 609-615.	14.6	52
8	Interfacial oxygen-octahedral-tilting-driven electrically tunable topological Hall effect in ultrathin SrRuO ₃ films. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 404001.	2.8	51
9	Modulated Transport Behavior of Two-Dimensional Electron Gas at Ni-Doped LaAlO ₃ /SrTiO ₃ Heterointerfaces. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39011-39017.	8.0	36
10	Magnetic two-dimensional electron gas at the manganite-buffered LaAlO ₃ /SrTiO ₃ interface. <i>Physical Review B</i> , 2017, 96, .	2.2	35
11	Electric Control of the Hall effect in Pt/Bi _{0.9} La _{0.1} FeO ₃ bilayers. <i>Scientific Reports</i> , 2016, 6, 20330.	3.3	34
12	Anomalous magnetism in strained La _{1-x} Sr _x CoO ₃ epitaxial films (0 ≤ x ≤ 0.5). <i>Scientific Reports</i> , 2014, 4, 6206.	3.3	33
13	Oxygen vacancy formation, crystal structures, and magnetic properties of three SrMnO ₃ films. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	32
14	Novel Spin-Orbit Torque Generation at Room Temperature in an All-Oxide Epitaxial La _{0.7} Sr _{0.3} MnO ₃ /SrIrO ₃ System. <i>Advanced Materials</i> , 2021, 33, e2008269.	21.0	32
15	Abnormal percolative transport and colossal electroresistance induced by anisotropic strain in (011)-Pr _{0.7} (Ca _{0.6} Sr _{0.4}) _{0.3} MnO ₃ /PMN-PT heterostructure. <i>Scientific Reports</i> , 2014, 4, 7075.	3.3	31
16	The effect of Ni doping on the thermoelectric transport properties of CdO ceramics. <i>Journal of Alloys and Compounds</i> , 2016, 662, 213-219.	5.5	30
17	Thermal Spin Injection and Inverse Edelstein Effect of the Two-Dimensional Electron Gas at EuO/KTaO ₃ Interfaces. <i>Nano Letters</i> , 2019, 19, 1605-1612.	9.1	30
18	Oxygen-Valve Formed in Cobaltite-Based Heterostructures by Ionic Liquid and Ferroelectric Dual-Gating. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 19584-19595.	8.0	30

#	ARTICLE	IF	CITATIONS
19	Diluted Oxide Interfaces with Tunable Ground States. <i>Advanced Materials</i> , 2019, 31, e1805970.	21.0	28
20	Enabling ultra-low-voltage switching in BaTiO ₃ . <i>Nature Materials</i> , 2022, 21, 779-785.	27.5	28
21	Novel reduction of hysteresis loss controlled by strain memory effect in FeRh/PMN-PT heterostructures. <i>Nano Energy</i> , 2019, 59, 285-294.	16.0	26
22	The role of lattice dynamics in ferroelectric switching. <i>Nature Communications</i> , 2022, 13, 1110.	12.8	25
23	Magnetic two-dimensional electron gases with high Curie temperatures at LaAlO ₃ /SrTiO ₃ interfaces. <i>Physical Review B</i> , 2018, 97, .	12.2	21
24	A room temperature polar magnetic metal. <i>Physical Review Materials</i> , 2022, 6, .	2.4	21
25	Broken mirror symmetry tuned topological transport in PbTe/SnTe heterostructures. <i>Physical Review B</i> , 2018, 98, .	3.2	20
26	Magnetic Anisotropy Controlled by Distinct Interfacial Lattice Distortions at the La _{2/3} Sr _{1/3} CoO ₃ /La _{2/3} Sr _{1/3} MnO ₃ Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40951-40957.	3.2	20
27	Structural and Magnetic Properties of LaCoO ₃ /SrTiO ₃ Multilayers. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 18328-18333.	8.0	19
28	Epitaxial growth and thermoelectric properties of c-axis oriented Bi ₂ PbCuSeO single crystalline thin films. <i>CrystEngComm</i> , 2015, 17, 8697-8702.	2.6	18
29	Topotactic phase transformations by concerted dual-ion migration of B-site cation and oxygen in multivalent cobaltite La _{1-x} Sr _x CoO ₃ films. <i>Nano Energy</i> , 2020, 78, 105215.	16.0	17
30	Correlation between magnetism and dark stripes in strained La _{1-x} Sr _x CoO ₃ epitaxial films (0 ≤ x ≤ 0.1). <i>Applied Physics Letters</i> , 2015, 107, .	3.3	16
31	Tuning the Two-Dimensional Electron Gas at Oxide Interfaces with Ti ⁴⁺ O Configurations: Evidence from X-ray Photoelectron Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1434-1439.	8.0	15
32	Tuning the Magnetic Anisotropy of La _{2/3} Sr _{1/3} MnO ₃ by Controlling the Structure of SrCoO _x in the Corresponding Bilayers Using Ionic-Liquid Gating. <i>Physical Review Applied</i> , 2019, 12, .	3.8	15
33	Chromium-induced ferromagnetism with perpendicular anisotropy in topological crystalline insulator SnTe (111) thin films. <i>Physical Review B</i> , 2018, 97, .	3.2	14
34	Tuning the magnetism of epitaxial cobalt oxide thin films by electron beam irradiation. <i>Physical Review Materials</i> , 2017, 1, .	2.4	14
35	Controllable oxygen vacancies, orbital occupancy and magnetic ordering in SrCoO _{3-δ} films. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 454, 228-236.	2.3	13
36	A large magnetocaloric effect of GdCoO ₃ epitaxial thin films prepared by a polymer assisted spin-coating method. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14970-14976.	5.5	13

#	ARTICLE	IF	CITATIONS
37	Strong anisotropy and its electric tuning for brownmillerite $\text{SrCoO}_{2.5}$ films with different crystal orientations. <i>Physical Review Materials</i> , 2019, 3, .	2.4	13
38	Antiferromagnetic interlayer coupling and thus induced distinct spin texture for the $[\text{LaMnO}_3/\text{LaCoO}_3]_5$ superlattices. <i>Nanoscale</i> , 2017, 9, 3476-3484.	5.6	12
39	The enhancement of photo-thermo-electric conversion in tilted $\text{Bi}_2\text{Sr}_2\text{Co}_2\text{O}_y$ thin films through coating a layer of single-wall carbon nanotubes light absorber. <i>Optics Express</i> , 2013, 21, 18336.	3.4	11
40	Perpendicular magnetic anisotropy in $\text{La}_{1-x}\text{Sr}_x\text{CoO}_{2.5+\delta}/\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3/\text{La}_{1-x}\text{Sr}_x\text{CoO}_{2.5+\delta}$ trilayers ($x=0.05\text{--}0.5$). <i>Physical Review B</i> , 2019, 100, .	3.2	11
41	High mobility 2-dimensional electron gas at $\text{LaAlO}_3/\text{SrTiO}_3$ interface prepared by spin coating chemical methods. <i>Nanotechnology</i> , 2017, 28, 435701.	2.6	10
42	Oxygen defect engineering by the current effect assisted with temperature cycling in a perovskite-type $\text{La}_{0.7}\text{Sr}_{0.3}\text{CoO}_3$ film. <i>Nanoscale</i> , 2017, 9, 13214-13221.	5.6	8
43	Enhanced transparent conducting performance of c-axis oriented $\text{Ca}_3\text{Co}_4\text{O}_9$ thin films. <i>RSC Advances</i> , 2015, 5, 26383-26387.	3.6	7
44	Evidence for lattice-polarization-enhanced field effects at the SrTiO_3 -based heterointerface. <i>Scientific Reports</i> , 2016, 6, 22418.	3.3	7
45	Long-Range Magnetic Order in Oxide Quantum Wells Hosting Two-Dimensional Electron Gases. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 28775-28782.	8.0	7
46	Epitaxial $\text{Bi}_2\text{Sr}_2\text{Co}_2\text{O}_y$ thin films as a promising p-type transparent conducting oxides. <i>Optical Materials Express</i> , 2014, 4, 2209.	3.0	6
47	Single orthorhombic b axis orientation and antiferromagnetic ordering type in multiferroic CaMnO_3 thin film with $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3$ buffer layer. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	6
48	Joint effect of gate bias and light illumination on metallic $\text{LaAlO}_3/\text{SrTiO}_3$ interface. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	6
49	Negative thermal expansion and magnetocaloric effect in Mn-Co-Ge-In thin films. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	6
50	Metallic conduction and ferromagnetism in $\text{Al}_2\text{O}_3/\text{SrTiO}_3$ spinel/perovskite heterostructures (M = Fe, Co, Ni). <i>Applied Physics Letters</i> , 2018, 113, .	3.3	6
51	Temperature stability of coercivity in mischmetal-Fe-Co-B melt-spun ribbons. <i>Materials Research Express</i> , 2018, 5, 056101.	1.6	6
52	High-temperature interface superconductivity in bilayer copper oxide films by pulsed laser deposition. <i>Science China Materials</i> , 2020, 63, 128-135.	6.3	6
53	Resistance switching mechanism of $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3$ thin films. <i>Physica B: Condensed Matter</i> , 2016, 483, 99-102.	2.7	5
54	Preparation of thulium iron garnet ceramics and investigation of spin transport properties in thin films. <i>Ceramics International</i> , 2019, 45, 7649-7653.	4.8	5

#	ARTICLE	IF	CITATIONS
55	One dimensional electron gas at the LaAlO ₃ /SrTiO ₃ interface and its transport properties. Applied Physics Letters, 2016, 109, .	3.3	4
56	Fabrication and high temperature thermoelectric properties of c-axis oriented Na _{0.68} CoO:Ag nanocomposite thin films. Materials Research Bulletin, 2014, 50, 161-164.	5.2	3
57	A conductive scanning study of La _{0.67} Sr _{0.33} MnO ₃ /Nb:SrTiO ₃ hetero-junction. Applied Physics Letters, 2016, 108, .	3.3	3
58	Enhanced transparent conducting performance of Bi ₂ Sr ₂ Co ₂ O ₈ thin films by adding gold nanoparticles. Journal of Materials Science, 2016, 51, 1302-1307.	3.7	3
59	Spin Seebeck effect and spin Hall magnetoresistance in the Pt/Y ₃ Fe ₅ O ₁₂ heterostructure under laser-heating. Chinese Physics B, 2018, 27, 117201.	1.4	3
60	Two-dimensional electron gas at manganite buffered LaAlO ₃ /SrTiO ₃ (001) interface by spin coating chemical methods. Applied Physics Letters, 2018, 113, 071601.	3.3	3
61	Spin reorientation at (110)-La _{2/3} Sr _{1/3} MnO ₃ /LaCoO ₃ interfaces by orbital/charge reconstruction. APL Materials, 2020, 8, .	5.1	3
62	Anisotropic transport properties in the phase-separated La _{0.67} Ca _{0.33} MnO ₃ /NdGaO ₃ (001) films. Chinese Physics B, 2016, 25, 077306.	1.4	2
63	Orientation-modulated exchange coupling in La _{0.67} Ca _{0.33} MnO ₃ /CaMnO ₃ bilayer films. Journal of Magnetism and Magnetic Materials, 2017, 428, 372-376.	2.3	2
64	Anatase TiO ₂ -based two-dimensional electron gases generated by low-energy argon-ion irradiation. Applied Physics Letters, 2018, 112, 241601.	3.3	2
65	Enhanced photovoltaic effect of La _{0.8} Sr _{0.2} MnO ₃ thin films based on electric field training. Materials Letters, 2016, 166, 5-8.	2.6	1
66	Electric gating of the multichannel conduction in LaAlO ₃ /SrTiO ₃ superlattices. Chinese Physics B, 2021, 30, 017301.	1.4	1
67	Light-induced transverse thermoelectric effect in miscut GaAs single crystals by far-infrared laser illumination. Journal Physics D: Applied Physics, 2014, 47, 345101.	2.8	0
68	Anomalous Hall effect based on Pt/Bi _{0.9} La _{0.1} FeO ₃ bilayers. Japanese Journal of Applied Physics, 2016, 55, 045801.	1.5	0
69	Growth and Thermoelectric Properties of Epitaxial Na _{0.5} CoO ₂ Thin Films Dispersed with Au Nanoparticles. Nanoscience and Nanotechnology Letters, 2014, 6, 918-921.	0.4	0