Lei Jin

List of Publications by Year
in descending order

85	2,519	218677	214800
papers	citations	26 h-index	47 g-index

88	88	88	4342
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Atomicâ€Scale Observation of Offâ€Centering Rattlers in Filled Skutterudites. Advanced Energy Materials, 2022, 12, .	19.5	8
2	Origin of the hump anomalies in the Hall resistance loops of ultrathin <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn></m multilayers. Physical Review Materials, 2021, 5, .	2.4	18
3	Atomic-Scale Characterization of Commensurate and Incommensurate Vacancy Superstructures in Natural Pyrrhotites. American Mineralogist, 2021, 106, 82-96.	1.9	4
4	Tuning electrochemically driven surface transformation in atomically flat LaNiO3 thin films for enhanced water electrolysis. Nature Materials, 2021, 20, 674-682.	27.5	105
5	Exsolution of Embedded Nanoparticles in Defect Engineered Perovskite Layers. ACS Nano, 2021, 15, 4546-4560.	14.6	18
6	Atomic Structure and Electron Magnetic Circular Dichroism of Individual Rock Salt Structure Antiphase Boundaries in Spinel Ferrites. Advanced Functional Materials, 2021, 31, 2008306.	14.9	15
7	Growth and characterization of pyrochlore-type (Ca,Ti)2(Nb,Ti)2O7 thin films. Thin Solid Films, 2021, 721, 138546.	1.8	0
8	Twin boundary defect engineering improves lithium-ion diffusion for fast-charging spinel cathode materials. Nature Communications, 2021, 12, 3085.	12.8	77
9	Realizing high thermoelectric performance in n-type SnSe polycrystals via (Pb, Br) co-doping and multi-nanoprecipitates synergy. Journal of Alloys and Compounds, 2021, 864, 158401.	5.5	19
10	Differentiation between strain and charge mediated magnetoelectric coupling in La_{0.7}Sr_{0.3}MnO₃/Pb(Mg_{1/3}Nb_{2/3})_{0.7}Ti_{0.3}O New Journal of Physics, 2021, 23, 063043.	2.9	9
11	Enhancing the ferromagnetic interlayer coupling between epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:m layers. Physical Review B, 2021, 104, .	3.2	8
12	A highly-stable layered Fe/Mn-based cathode with ultralow strain for advanced sodium-ion batteries. Nano Energy, 2021, 88, 106206.	16.0	32
13	Stoichiometry and Termination Control of LaAlO₃/SrTiO₃ Bilayer Interfaces. Advanced Materials Interfaces, 2021, 8, 2001477.	3.7	7
14	Atomic-scale understanding of enhanced polarization of highly strained nanoscale columnar PbTiO3. Physical Review B, 2021, 104, .	3.2	2
15	The grainâ€boundary resistance of CeO₂ ceramics: A combined microscopyâ€spectroscopyâ€simulation study of a dilute solution. Journal of the American Ceramic Society, 2020, 103, 1755-1764.	3.8	10
16	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
17	Electronic Inhomogeneity Influence on the Anomalous Hall Resistivity Loops of SrRuO₃ Epitaxially Interfaced with 5d Perovskites. ACS Omega, 2020, 5, 5824-5833.	3.5	16
18	Atomicâ€Scale Interface Structure in Domain Matching Epitaxial BaBiO 3 Thin Films Grown on SrTiO 3 Substrates. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000054.	2.4	7

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19	Structure folding of RNA kissing complexes in salt solutions: predicting 3D structure, stability, and folding pathway. Rna, 2019, 25, 1532-1548.	3.5	24
20	Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification. Advanced Energy Materials, 2019, 9, 1901836.	19.5	64
21	Etching-Assisted Route to Heterophase Au Nanowires with Multiple Types of Active Surface Sites for Silane Oxidation. Nano Letters, 2019, 19, 6363-6369.	9.1	19
22	Photoelectrochemical Water Splitting: Boosting Photoelectrochemical Water Oxidation of Hematite in Acidic Electrolytes by Surface State Modification (Adv. Energy Mater. 34/2019). Advanced Energy Materials, 2019, 9, 1970131.	19.5	1
23	Carrier lifetime enhancement in halide perovskite via remote epitaxy. Nature Communications, 2019, 10, 4145.	12.8	93
24	Tuning Li-enrichment in high-Ni layered oxide cathodes to optimize electrochemical performance for Li-ion battery. Nano Energy, 2019, 62, 709-717.	16.0	33
25	Unconventional anomalous Hall effect driven by oxygen-octahedra-tailoring of the SrRuO₃ structure. JPhys Materials, 2019, 2, 034008.	4.2	21
26	What is the best reference state for building statistical potentials in RNA 3D structure evaluation?. Rna, 2019, 25, 793-812.	3.5	23
27	Electrolysis of Water at Atomically Tailored Epitaxial Cobaltite Surfaces. Chemistry of Materials, 2019, 31, 2337-2346.	6.7	22
28	Dislocation Evolution and Migration at Grain Boundaries in Thermoelectric SnTe. ACS Applied Energy Materials, 2019, 2, 2392-2397.	5.1	27
29	Nanoscale measurement of giant saturation magnetization in Î±â€³-Fe16N2 by electron energy-loss magnetic chiral dichroism. Ultramicroscopy, 2019, 203, 37-43.	1.9	9
30	Stable iridium dinuclear heterogeneous catalysts supported on metal-oxide substrate for solar water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2902-2907.	7.1	229
31	Topological Defects with Distinct Dipole Configurations in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>PbTiO</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub><mml:mo></mml:mo></mml:mrow></mml:math> Multilayer Films. Physical Review Letters, 2018, 120, 177601.	7.8	55
32	Domain matching epitaxy of BaBiO3 on SrTiO3 with structurally modified interface. Applied Physics Letters, 2018, 112, 141601.	3.3	17
33	Atomic scale imaging of magnetic circular dichroism by achromatic electron microscopy. Nature Materials, 2018, 17, 221-225.	27.5	60
34	Heteroepitaxial growth and interface structure of pyrochlore (Ca,Ti) 2 (Nb,Ti) 2 O 7 thin films on (1â€¯1â€¯0) NdGaO 3 substrates. Journal of Crystal Growth, 2018, 484, 64-69.	1.5	3
35	Spherical aberration correction in a scanning transmission electron microscope using a sculpted thin film. Ultramicroscopy, 2018, 189, 46-53.	1.9	21
36	Magnetic coupling of ferromagnetic SrRuO3 epitaxial layers separated by ultrathin non-magnetic SrZrO3/SrIrO3. Applied Physics Letters, 2018, 113, .	3.3	10

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37	Modeling Structure, Stability, and Flexibility of Double-Stranded RNAs in Salt Solutions. Biophysical Journal, 2018, 115, 1403-1416.	0.5	28
38	Dislocation bending in GaN/step-graded (Al,Ga)N/AlN buffer layers on Si(111) investigated by STM and STEM. Philosophical Magazine, 2018, 98, 3072-3085.	1.6	1
39	Atomic-scale evidence for displacive disorder in bismuth zinc niobate pyrochlore. Ultramicroscopy, 2018, 192, 57-68.	1.9	10
40	Quantitative HRTEM and its application in the study of oxide materials. Chinese Physics B, 2018, 27, 056803.	1.4	3
41	Predicting 3D structure and stability of RNA pseudoknots in monovalent and divalent ion solutions. PLoS Computational Biology, 2018, 14, e1006222.	3.2	35
42	Effect of cation ratio and order on magnetic circular dichroism in the double perovskite Sr2Fe1+Re1-O6. Ultramicroscopy, 2018, 193, 137-142.	1.9	11
43	Structure and orbital ordering of ultrathin LaVO3probed by atomic resolution electron microscopy and Raman spectroscopy. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600350.	2.4	4
44	Surface modification of single crystal LiTaO3 by H and He implantation. Nuclear Instruments & Methods in Physics Research B, 2017, 392, 62-66.	1.4	3
45	Controlled Charging of Ferroelastic Domain Walls in Oxide Ferroelectrics. ACS Applied Materials & Interfaces, 2017, 9, 6539-6546.	8.0	27
46	Surface reconstructions and related local properties of a BiFeO3 thin film. Scientific Reports, 2017, 7, 39698.	3.3	13
47	Atomic resolution imaging of YAlO3: Ce in the chromatic and spherical aberration corrected PICO electron microscope. Ultramicroscopy, 2017, 176, 99-104.	1.9	15
48	Electron ptychographic phase imaging of light elements in crystalline materials using Wigner distribution deconvolution. Ultramicroscopy, 2017, 180, 173-179.	1.9	67
49	Ultrahigh Energy Storage Performance of Leadâ€Free Oxide Multilayer Film Capacitors via Interface Engineering. Advanced Materials, 2017, 29, 1604427.	21.0	247
50	Boosting the Thermoelectric Performance of (Na,K)-Codoped Polycrystalline SnSe by Synergistic Tailoring of the Band Structure and Atomic-Scale Defect Phonon Scattering. Journal of the American Chemical Society, 2017, 139, 9714-9720.	13.7	168
51	Mobility Modulation and Suppression of Defect Formation in Two-Dimensional Electron Systems by Charge-Transfer Management. ACS Applied Materials & Interfaces, 2017, 9, 10888-10896.	8.0	12
52	Solution Monolayer Epitaxy for Tunable Atomically Sharp Oxide Interfaces. Advanced Materials Interfaces, 2017, 4, 1700688.	3.7	3
53	Tunneling anisotropic magnetoresistance driven by magnetic phase transition. Nature Communications, 2017, 8, 449.	12.8	49
54	Ordering and Phase Control in Epitaxial Double-Perovskite Catalysts for the Oxygen Evolution Reaction. ACS Catalysis, 2017, 7, 7029-7037.	11.2	35

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55	Diffusional-displacive transformation enables formation of long-period stacking order in magnesium. Scientific Reports, 2017, 7, 4046.	3.3	22
56	Towards a holographic approach to spherical aberration correction in scanning transmission electron microscopy. Optics Express, 2017, 25, 21851.	3.4	14
57	Atomic Resolution Imaging of YAlO3:Ce in the Chromatic and Spherical Aberration Corrected PICO Transmission Electron Microscope. Microscopy and Microanalysis, 2017, 23, 422-423.	0.4	0
58	On the origin of 'iron-cross' twins of pyrite from Mt. Katarina, Slovenia. Mineralogical Magazine, 2016, 80, 937-948.	1.4	6
59	Direct Demonstration of a Magnetic Dead Layer Resulting from Aâ€Site Cation Inhomogeneity in a (La,Sr)MnO₃ Epitaxial Film System. Advanced Materials Interfaces, 2016, 3, 1600414.	3.7	22
60	Understanding Nanostructuring Processes in Thermoelectrics and Their Effects on Lattice Thermal Conductivity. Advanced Materials, 2016, 28, 2737-2743.	21.0	54
61	Predicting 3D Structure, Flexibility, and Stability of RNA Hairpins in Monovalent and Divalent Ion Solutions. Biophysical Journal, 2015, 109, 2654-2665.	0.5	51
62	Ultrathin homogeneous Ni(Al) germanosilicide layer formation on strained SiGe with Al/Ni multi-layers. Microelectronic Engineering, 2015, 137, 88-91.	2.4	4
63	Growth mechanism of titanium monoxide TiO_xon a reduced calcium titanate CaTi₂O₄surface. Journal of Applied Crystallography, 2015, 48, 1889-1895.	4.5	1
64	Nanodomains and nanometer-scale disorder in multiferroic bismuth ferrite single crystals. Acta Materialia, 2015, 82, 356-368.	7.9	32
65	Engineering 180Â° ferroelectric domains in epitaxial PbTiO3 thin films by varying the thickness of the underlying (La,Sr)MnO3 layer. Applied Physics Letters, 2014, 105, 132903.	3.3	7
66	Polarity continuation and frustration in ZnSe nanospirals. Scientific Reports, 2014, 4, 7447.	3.3	7
67	TEM study of ã€ˆ110ã€‰-type 35.26Â° dislocations specially induced by polishing of SrTiO3 single crystals. Ultramicroscopy, 2013, 134, 77-85.	1.9	31
68	Orientation domains in vacancy-ordered titanium monoxide. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2013, 69, 589-594.	1.1	7
69	Nonstoichiometry accommodation in SrTiO<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 studied by positron annihilation and electron microscopy. Physical Review B, 2013, 87, .	3.2	52
70	Ultrathin highly uniform Ni(Al) germanosilicide layer with modulated B8 type Ni5(SiGe)3 phase formed on strained Si1â^'xGex layers. Applied Physics Letters, 2013, 103, .	3.3	9
71	Polarizationâ€Induced Charge Distribution at Homogeneous Zincblende/Wurtzite Heterostructural Junctions in ZnSe Nanobelts. Advanced Materials, 2012, 24, 1328-1332.	21.0	30
72	Microstructure and Photoluminescence Studies of Sb-Doped SnO₂ Zigzag Nanobelts. Journal of Nanoscience and Nanotechnology, 2010, 10, 6629-6633.	0.9	4

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73	Formation of aligned ZnO nanotube arrays by chemical etching and coupling with CdSe for photovoltaic application. Thin Solid Films, 2010, 518, 5146-5152.	1.8	39
74	ZnSe Heterocrystalline Junctions Based on Zinc Blendeâ^'Wurtzite Polytypism. Journal of Physical Chemistry C, 2010, 114, 1411-1415.	3.1	12
75	Versatile Route to the Controlled Synthesis of Multilevel Branched Silicon Submicrometer/Nanostructures. Journal of Physical Chemistry C, 2010, 114, 134-138.	3.1	5
76	Twinning mediated growth of ZnSe tri- and bi-crystal nanobelts with single crystalline wurtzite nanobelts as building blocks. CrystEngComm, 2010, 12, 150-158.	2.6	9
77	Template-free synthesis of BiVO₄nanostructures: II. Relationship between various microstructures for monoclinic BiVO₄and their photocatalytic activity for the degradation of rhodamine B under visible light. Nanotechnology, 2009, 20, 405602.	2.6	64
78	Template-free synthesis of BiVO₄nanostructures: I. Nanotubes with hexagonal cross sections by oriented attachment and their photocatalytic property for water splitting under visible light. Nanotechnology, 2009, 20, 115603.	2.6	103
79	Fabrication and characterization of amorphous silica nanostructures. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4622-4626.	2.1	12
80	{113} Twinned ZnSe Bicrystal Nanobelts Filled with <111> Twinnings. Journal of Physical Chemistry C, 2008, 112, 4903-4907.	3.1	18
81	Growth of ZnSe Nanospirals with Bending Mediated by Lomerâ^'Cottrell Sessile Dislocations through Varying Pressure. Crystal Growth and Design, 2008, 8, 3829-3833.	3.0	13
82	Synthesis and analysis of abnormal wurtzite ZnSe nanowheels. Journal of Applied Physics, 2007, 102, 044302.	2.5	31
83	Triple-Crystal Zinc Selenide Nanobelts. Journal of Physical Chemistry C, 2007, 111, 9055-9059.	3.1	28
84	Enhanced room-temperature magnetoresistance in high-temperature sintered La2/3Sr1/3MnO3 doped with ZrO2. Physica B: Condensed Matter, 2007, 391, 206-211.	2.7	12
85	Boosting Photoelectrochemical Water Oxidation of Hematite by Surface States Modification. SSRN Electronic Journal, 0, , .	0.4	1