

Lijun Wu

List of Publications by Year in descending order

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papers

6,852
citations

57758

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145
docs citations

145
times ranked

11575
citing authors

#	ARTICLE	IF	CITATIONS
19	Tuning Irreversible Magnetoresistance in Pr _{0.67} Sr _{0.33} MnO ₃ Film via Octahedral Rotation. ACS Applied Materials & Interfaces, 2020, 12, 43222-43230.	8.0	4
20	The Effects of Vanadium Substitution on One-dimensional Tunnel Structures of Cryptomelane: Combined TEM and DFT Study. Microscopy and Microanalysis, 2020, 26, 3162-3164.	0.4	0
21	Photoinduced Dirac semimetal in ZrTe ₅ . Npj Quantum Materials, 2020, 5, .	5.2	21
22	Nonmonotonic crossover in electronic phase separated manganite superlattices driven by the superlattice period. Physical Review B, 2020, 102, .	3.2	6
23	Nonequilibrium Electron and Lattice Dynamics of Strongly Correlated Quantum Materials. Microscopy and Microanalysis, 2020, 26, 210-211.	0.4	1
24	Unraveling the Dissolution-Mediated Reaction Mechanism of Li^+ - MnO_2 Cathodes for Aqueous Zn-Ion Batteries. Small, 2020, 16, e2005406.	10.0	58
25	Concurrent probing of electron-lattice dephasing induced by photoexcitation in TaSeTe using ultrafast electron diffraction. Physical Review B, 2020, 101, .	0.2	0
26	Metastability and Reversibility of Anionic Redox-Based Cathode for High-Energy Rechargeable Batteries. Cell Reports Physical Science, 2020, 1, 100028.	5.6	37
27	Vanadium-Substituted Tunnel Structured Silver Hollandite ($\text{Ag}_{1.2}\text{V}_x\text{Mn}_{8-x}\text{O}_{16}$): Impact on Morphology and Electrochemistry. Inorganic Chemistry, 2020, 59, 3783-3793.	4.0	4
28	Direct Observation of Alternating Octahedral and Prismatic Sodium Layers in O ₃ -Type Transition Metal Oxides. Advanced Energy Materials, 2020, 10, 2001151.	19.5	39
29	Kinetic pathways of ionic transport in fast-charging lithium titanate. Science, 2020, 367, 1030-1034.	12.6	197
30	Water-induced formation of an alkali-ion dimer in cryptomelane nanorods. Chemical Science, 2020, 11, 4991-4998.	7.4	2
31	Quantitative Analysis of Topological, Chiral Spin Textures Stabilized by the Dzyaloshinskii-Moriya Interaction in Co/Pd Multilayers. Microscopy and Microanalysis, 2019, 25, 22-23.	0.4	0
32	Revealing Insights into Li^+ - FePO_4 Nanocrystals with Magnetic Order at Room Temperature Resulting in Trapping of Li Ions. Journal of Physical Chemistry Letters, 2019, 10, 4794-4799.	4.6	7
33	Emerging Microscopy for Quantum Information Sciences. Microscopy and Microanalysis, 2019, 25, 928-929.	0.4	0
34	Atomically imaged crystal structure and normal-state properties of superconducting $\text{Ca}_{10}\text{Pt}_4\text{As}_8((\text{Fe}_{1-x}\text{Pt}_x)_2\text{As}_2)_5$. Physical Review B, 2019, 100, .	3.2	3
35	Thickness-dependent polarization-induced intrinsic magnetoelectric effects in $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$. Physical Review B, 2019, 100, .	3.2	24
36	Thickness-dependent magnetic order in CrI ₃ single crystals. Scientific Reports, 2019, 9, 13599.	3.3	47

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37	Photoinduced dynamics of nematic order parameter in FeSe. <i>Physical Review B</i> , 2019, 99, .	3.2	14
38	Low-temperature microstructural studies on superconducting CaFe ₂ As ₂ . <i>Scientific Reports</i> , 2019, 9, 6393.	3.3	4
39	Multi-electron transfer enabled by topotactic reaction in magnetite. <i>Nature Communications</i> , 2019, 10, 1972.	12.8	28
40	Charge-Lattice Coupling in Hole-Doped LuFe ₂ O ₄ + δ : The Origin of Second-Order Modulation. <i>Physical Review Letters</i> , 2019, 122, 126401.	7.8	13
41	A novel nondestructive diagnostic method for mega-electron-volt ultrafast electron diffraction. <i>Scientific Reports</i> , 2019, 9, 17223.	3.3	9
42	Size-dependent kinetics during non-equilibrium lithiation of nano-sized zinc ferrite. <i>Nature Communications</i> , 2019, 10, 93.	12.8	39
43	Smectic and nematic phase modulations and transitions under electron beam in Tb ₂ Cu _{0.83} Pd _{0.17} O ₄ . <i>Physical Review Materials</i> , 2019, 3, .	2.4	0
44	Beyond a phenomenological description of magnetostriction. <i>Nature Communications</i> , 2018, 9, 388.	12.8	48
45	Localized concentration reversal of lithium during intercalation into nanoparticles. <i>Science Advances</i> , 2018, 4, eaao2608.	10.3	50
46	Nonequilibrium electron and lattice dynamics of strongly correlated Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ single crystals. <i>Science Advances</i> , 2018, 4, eaap7427.	10.3	58
47	Control of Synaptic Plasticity Learning of Ferroelectric Tunnel Memristor by Nanoscale Interface Engineering. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 12862-12869.	8.0	109
48	Direct imaging of electron transfer and its influence on superconducting pairing at FeSe/SrTiO ₃ interface. <i>Science Advances</i> , 2018, 4, eaao2682.	10.3	82
49	Non-uniform Stress-free Strains in a Spherically Symmetrical Nano-sized Particle and Its Applications to Lithium-ion Batteries. <i>Scientific Reports</i> , 2018, 8, 4936.	3.3	6
50	Unveiling the Structural Evolution of Ag _{1.2} Mn ₈ O ₁₆ under Coulombically Controlled (De)Lithiation. <i>Chemistry of Materials</i> , 2018, 30, 366-375.	6.7	14
51	Revealing the Surface Effect at Atomic Scale in Silver Hollandite. <i>Microscopy and Microanalysis</i> , 2018, 24, 56-57.	0.4	0
52	Rate-dependent Reversal of Lithium Concentration During Intercalation into Li _x FePO ₄ Nanoparticles. <i>Microscopy and Microanalysis</i> , 2018, 24, 1482-1483.	0.4	0
53	In-situ Probe of Lithium-ion Transport and Phase Evolution Within and Between Silver Hollandite Nanorods. <i>Microscopy and Microanalysis</i> , 2018, 24, 1516-1517.	0.4	0
54	Atomic Scale Analyses of Planar Defects in Cross-section Nanorods of K ⁺ Stabilized α -MnO ₂ . <i>Microscopy and Microanalysis</i> , 2018, 24, 130-131.	0.4	0

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55	Revisiting Conversion Reaction Mechanisms in Lithium Batteries: Lithiation-Driven Topotactic Transformation in FeF_2 . <i>Journal of the American Chemical Society</i> , 2018, 140, 17915-17922.	13.7	41
56	Phonon localization in heat conduction. <i>Science Advances</i> , 2018, 4, eaat9460.	10.3	108
57	Direct Imaging of Electron Transfer and Its Influence on Superconducting Pairing at FeSe/SrTiO ₃ Interface. <i>Microscopy and Microanalysis</i> , 2018, 24, 82-83.	0.4	0
58	Observation of Anisotropic Charge Density Wave in Layered 1T-TiSe ₂ . <i>Microscopy and Microanalysis</i> , 2018, 24, 230-231.	0.4	0
59	Control of magnetic anisotropy by orbital hybridization with charge transfer in $(\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3)_n/(\text{SrTiO}_3)_n$ superlattice. <i>NPG Asia Materials</i> , 2018, 10, 931-942.	7.9	15
60	Atomic Scale Account of the Surface Effect on Ionic Transport in Silver Hollandite. <i>Chemistry of Materials</i> , 2018, 30, 6124-6133.	6.7	14
61	Retrieving the energy-loss function from valence electron energy-loss spectrum: Separation of bulk-, surface-losses and Cherenkov radiation. <i>Ultramicroscopy</i> , 2018, 194, 175-181.	1.9	8
62	The effect of scanning jitter on geometric phase analysis in STEM images. <i>Ultramicroscopy</i> , 2018, 194, 167-174.	1.9	8
63	Revealing and Rationalizing the Rich Polytypism of Todorokite MnO_2 . <i>Journal of the American Chemical Society</i> , 2018, 140, 6961-6968.	13.7	36
64	Reversible Structure Manipulation by Tuning Electron Dose Rate on Metastable Cu_2S . <i>Microscopy and Microanalysis</i> , 2018, 24, 94-95.	0.4	1
65	A Generalizable Multigram Synthesis and Mechanistic Investigation of YMnO_3 Nanoplates. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 5573-5585.	3.7	9
66	Sensitive Phonon-Based Probe for Structure Identification of 1T MoTe_2 . <i>Journal of the American Chemical Society</i> , 2017, 139, 8396-8399.	13.7	46
67	Visualization of lithium-ion transport and phase evolution within and between manganese oxide nanorods. <i>Nature Communications</i> , 2017, 8, 15400.	12.8	52
68	Janus structured Pt@FeNC nanoparticles as a catalyst for the oxygen reduction reaction. <i>Chemical Communications</i> , 2017, 53, 1660-1663.	4.1	46
69	Lithiation Mechanism of Tunnel-Structured MnO_2 Electrode Investigated by In Situ Transmission Electron Microscopy. <i>Advanced Materials</i> , 2017, 29, 1703186.	21.0	52
70	Multi-Stage Structural Transformations in Zero-Strain Lithium Titanate Unveiled by <i>in Situ</i> X-ray Absorption Fingerprints. <i>Journal of the American Chemical Society</i> , 2017, 139, 16591-16603.	13.7	57
71	Reversible structure manipulation by tuning carrier concentration in metastable Cu_2S . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9832-9837.	7.1	16
72	Synthesis of cryptomelane type $\text{MnO}_2(\text{K}_x\text{Mn}_8\text{O}_{16})$ cathode materials with tunable K^+ content: the role of tunnel cation concentration on electrochemistry. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16914-16928.	10.3	91

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73	Interfaces between hexagonal and cubic oxides and their structure alternatives. Nature Communications, 2017, 8, 1474.	12.8	31
74	Dirac-electron-mediated magnetic proximity effect in topological insulator/magnetic insulator heterostructures. Physical Review B, 2017, 96, .	3.2	29
75	In Situ Probing and Synthetic Control of Cationic Ordering in Ni-Rich Layered Oxide Cathodes. Advanced Energy Materials, 2017, 7, 1601266.	19.5	200
76	Enhancing Electrocatalytic Performance of Bifunctional Cobalt-Manganese Oxynitride Nanocatalysts on Graphene. ChemSusChem, 2017, 10, 68-73.	6.8	28
77	Silver-Containing MnO_2 Nanorods: Electrochemistry in Na-Based Battery Systems. ACS Applied Materials & Interfaces, 2017, 9, 4333-4342.	8.0	39
78	Interfacial Coupling and Polarization of Perovskite ABO ₃ Heterostructures. Microscopy and Microanalysis, 2017, 23, 1586-1587.	0.4	1
79	Anisotropic charge density wave in layered TaTe_2 . Physical Review Materials, 2017, 1, .	2.4	11
80	Parallel Stitching of 2D Materials. Advanced Materials, 2016, 28, 2322-2329.	21.0	195
81	Electron Transfer: Insights into Ionic Transport and Structural Changes in Magnetite during Multiple Electron Transfer Reactions (Adv. Energy Mater. 10/2016). Advanced Energy Materials, 2016, 6, .	19.5	7
82	Dichotomy in ultrafast atomic dynamics as direct evidence of polaron formation in manganites. Npj Quantum Materials, 2016, 1, .	5.2	31
83	Coupling of bias-induced crystallographic shear planes with charged domain walls in ferroelectric oxide thin films. Physical Review B, 2016, 94, .	3.2	9
84	Critical current density and vortex pinning in tetragonal FeS_2 ($x=0,0.06$). Physical Review B, 2016, 94, .	3.2	18
85	Quantification of Honeycomb Number-Type Stacking Faults: Application to $\text{Na}_3\text{Ni}_2\text{BiO}_6$ Cathodes for Na-Ion Batteries. Inorganic Chemistry, 2016, 55, 8478-8492.	4.0	51
86	Direct observation of electronic-liquid-crystal phase transitions and their microscopic origin in $\text{La}_{1/3}\text{Ca}_{2/3}\text{MnO}_3$. Scientific Reports, 2016, 6, 37624.	3.3	11
87	Interlayer electronic transport in CaMnBi_2 . Physical Review B, 2016, 94, .	3.2	11
88	Magnetotransport study of Dirac fermions in YbMnBi_2 . Physical Review B, 2016, 94, .	3.2	11
89	Large-Area Growth of Turbostratic Graphene on Ni(111) via Physical Vapor Deposition. Scientific Reports, 2016, 6, 19804.	3.3	103
90	Anomalously deep polarization in SrTiO_3 (001) interfaced with an epitaxial ultrathin manganite film. Physical Review B, 2016, 94, .	3.2	14

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91	A route for a strong increase of critical current in nanostrained iron-based superconductors. Nature Communications, 2016, 7, 13036.	12.8	65
92	Gasâ€‘solid interfacial modification of oxygen activity in layered oxide cathodes for lithium-ion batteries. Nature Communications, 2016, 7, 12108.	12.8	531
93	Interfacial Coupling-Induced Ferromagnetic Insulator Phase in Manganite Film. Nano Letters, 2016, 16, 4174-4180.	9.1	24
94	Two-Dimensional Layered Oxide Structures Tailored by Self-Assembled Layer Stacking via Interfacial Strain. ACS Applied Materials & Interfaces, 2016, 8, 16845-16851.	8.0	26
95	Insights into Ionic Transport and Structural Changes in Magnetite during Multipleâ€‘Electron Transfer Reactions. Advanced Energy Materials, 2016, 6, 1502471.	19.5	72
96	Effective recycling of manganese oxide cathodes for lithium based batteries. Green Chemistry, 2016, 18, 3414-3421.	9.0	55
97	Proximity-Driven Enhanced Magnetic Order at Ferromagnetic-Insulatorâ€‘Magnetic-Topological-Insulator Interface. Physical Review Letters, 2015, 115, 087201.	7.8	81
98	Band Structure Engineering and Thermoelectric Properties of Charge-Compensated Filled Skutterudites. Scientific Reports, 2015, 5, 14641.	3.3	41
99	Superconducting thin films of (100) and (111) oriented indium doped topological crystalline insulator SnTe. Applied Physics Letters, 2015, 107, .	3.3	14
100	Grapheneâ€‘Silicon Layered Structures on Singleâ€‘Crystalline Ir(111) Thin Films. Advanced Materials Interfaces, 2015, 2, 1400543.	3.7	12
101	Lowâ€‘Dimensional Conduction Mechanisms in Highly Conductive and Transparent Conjugated Polymers. Advanced Materials, 2015, 27, 4604-4610.	21.0	103
102	Mapping Valence Electron Distribution of Iron-Based Superconductors using Quantitative CBED and Precession Electron Diffraction. Microscopy and Microanalysis, 2015, 21, 1099-1100.	0.4	0
103	In Situ Electron Holography of Ferroelectric Thin Films. Microscopy and Microanalysis, 2015, 21, 1401-1402.	0.4	0
104	Superior thermoelectric performance in PbTeâ€‘PbS pseudo-binary: extremely low thermal conductivity and modulated carrier concentration. Energy and Environmental Science, 2015, 8, 2056-2068.	30.8	185
105	Conjugated Polymers: Low-Dimensional Conduction Mechanisms in Highly Conductive and Transparent Conjugated Polymers (Adv. Mater. 31/2015). Advanced Materials, 2015, 27, 4664-4664.	21.0	1
106	Experimental Verification of the Van Vleck Nature of Long-Range Ferromagnetic Order in the Vanadium-Doped Three-Dimensional Topological Insulator $Sb_2Mn_2O_7$. Physical Review Letters, 2015, 114, 146802.	7.8	79
107	Structural Defects of Silver Hollandite, $Ag_xMn_8O_{10}y$ Nanorods: Dramatic Impact on Electrochemistry. ACS Nano, 2015, 9, 8430-8439.	14.6	81
108	Femtosecond time-resolved MeV electron diffraction. New Journal of Physics, 2015, 17, 063004.	2.9	96

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109	Surface modified CF _x cathode material for ultrafast discharge and high energy density. Journal of Materials Chemistry A, 2014, 2, 20896-20901.	10.3	83
110	Gold-promoted structurally ordered intermetallic palladium cobalt nanoparticles for the oxygen reduction reaction. Nature Communications, 2014, 5, 5185.	12.8	134
111	Strong Coupling of the Iron-Quadrupole and Anion-Dipole Polarizations in Kondo scattering in Ba _{1-x} Fe _x interfaces.	7.8	23
112	$\hat{\Gamma}$ -doped LaTiO ₃ interfaces: Renormalization by spin-orbit interactions. Physical Review B, 2014, 90, .	3.2	27
113	Interface-induced nonswitchable domains in ferroelectric thin films. Nature Communications, 2014, 5, 4693.	12.8	120
114	Tunable THz surface plasmon polariton based on a topological insulator/layered superconductor hybrid structure. Physical Review B, 2014, 89, .	3.2	3
115	Quantitative Structural Analysis of Nanoparticles Using Electron Pair Distribution Function (ePDF). Microscopy and Microanalysis, 2014, 20, 630-631.	0.4	1
116	Highly efficient solid state catalysis by reconstructed (001) Ceria surface. Scientific Reports, 2014, 4, 4627.	3.3	24
117	Combining In Situ Synchrotron X-ray Diffraction and Absorption Techniques with Transmission Electron Microscopy to Study the Origin of Thermal Instability in Overcharged Cathode Materials for Lithium-ion Batteries. Advanced Functional Materials, 2013, 23, 1047-1063.	14.9	458
118	Excess lithium storage and charge compensation in nanoscale Li _{4+x} Ti ₅ O ₁₂ . Nanotechnology, 2013, 24, 424006.	2.6	37
119	Origin of Phonon Glass-like Electron Crystal Behavior in Thermoelectric Layered Cobaltate. Advanced Functional Materials, 2013, 23, 5728-5736.	14.9	47
120	Pt monolayer shell on hollow Pd core electrocatalysts: Scale up synthesis, structure, and activity for the oxygen reduction reaction. Journal of the Serbian Chemical Society, 2013, 78, 1983-1992.	0.8	3
121	Cathode Materials: Combining In Situ Synchrotron X-ray Diffraction and Absorption Techniques with Transmission Electron Microscopy to Study the Origin of Thermal Instability in Overcharged Cathode Materials for Lithium-ion Batteries (Adv. Funct. Mater. 8/2013). Advanced Functional Materials, 2013, 23, 1046-1046.	14.9	7
122	STEM imaging of trimerization-polarization domain walls in hexagonal ErMnO ₃ . Microscopy and Microanalysis, 2012, 18, 1358-1359.	0.4	1
123	Image simulation for atomic resolution secondary electron image. Ultramicroscopy, 2012, 123, 66-73.	1.9	13
124	Anomalous photoluminescence Stokes shift in CdSe nanoparticle and carbon nanotube hybrids. Physical Review B, 2012, 85, .	3.2	10
125	Tracking lithium transport and electrochemical reactions in nanoparticles. Nature Communications, 2012, 3, 1201.	12.8	254
126	Chemical Distribution and Bonding of Lithium in Intercalated Graphite: Identification with Optimized Electron Energy Loss Spectroscopy. ACS Nano, 2011, 5, 1190-1197.	14.6	203

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127	Nanostructures and defects in nonequilibrium-synthesized filled skutterudite $\text{CeFe}_4\text{Sb}_{12}$. Journal of Materials Research, 2011, 26, 1842-1847.	2.6	9
128	Conversion Reaction Mechanisms in Lithium Ion Batteries: Study of the Binary Metal Fluoride Electrodes. Journal of the American Chemical Society, 2011, 133, 18828-18836.	13.7	492
129	Wurtzite ZnO (001) films grown on cubic MgO (001) with bulk-like opto-electronic properties. Applied Physics Letters, 2011, 99, 141917.	3.3	15
130	Microstructure and electronic behavior of PtPd@Pt core-shell nanowires. Journal of Materials Research, 2010, 25, 711-717.	2.6	7
131	Nanoscale disorder and local electronic properties of CaCu_2 . An integrated study of electron, neutron, and x-ray diffraction, x-ray absorption fine structure. Physical Review B, 2010, 81, .	3.2	58
132	Microstructure and a Nucleation Mechanism for Nanoprecipitates in $\text{PbTe}/\text{AgSbTe}_2$. Physical Review Letters, 2009, 103, 145502.	7.8	54
133	Nanostructures and defects in thermoelectric $\text{AgPb}_{18}\text{SbTe}_{20}$ single crystal. Journal of Applied Physics, 2009, 105, .	2.5	34
134	Structure of chemically derived mono- and few-atomic-layer boron nitride sheets. Applied Physics Letters, 2008, 93, .	3.3	481
135	Electric pulse induced resistance change effect in manganites due to polaron localization at the metal-oxide interfacial region. Physical Review B, 2008, 77, .	3.2	49
136	Experimental confirmation of Zener-polaron-type charge and orbital ordering in Pr_2O_7 . Physical Review B, 2007, 76, .	3.2	71
137	Mechanisms for hetero-epitaxial nucleation of $\text{YBa}_2\text{Cu}_3\text{O}_{6.1}$ at the buried precursor/ SrTiO_3 interface in the postdeposition reaction process. Applied Physics Letters, 2002, 80, 419-421.	3.3	29
138	Electron Microscopy Analysis of the Intermediate Phases Formed During the Nucleation of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Film. Microscopy and Microanalysis, 2001, 7, 424-425.	0.4	2
139	Nucleation and growth of $\text{YBa}_2\text{Cu}_3\text{O}_x$ on SrTiO_3 and CeO_2 by a BaF_2 postdeposition reaction process. Journal of Materials Research, 2001, 16, 2869-2884.	2.6	51
140	Transformation twinning in carbon-doped PrCo_2 magnetic crystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 76, 481-492.	0.6	8