

Yijin Liu

List of Publications by Year in descending order

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papers

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168
docs citations

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times ranked

9084
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural and chemical evolution in layered oxide cathodes of lithium-ion batteries revealed by synchrotron techniques. National Science Review, 2022, 9, nwab146.	4.6	27
2	Probing lattice defects in crystalline battery cathode using hard X-ray nanoprobe with data-driven modeling. Energy Storage Materials, 2022, 45, 647-655.	9.5	7
3	Value-creating upcycling of retired electric vehicle battery cathodes. Cell Reports Physical Science, 2022, 3, 100741.	2.8	24
4	Resolving Charge Distribution for Compositionally Heterogeneous Battery Cathode Materials. Nano Letters, 2022, 22, 1278-1286.	4.5	7
5	Investigating Particle Size-Dependent Redox Kinetics and Charge Distribution in Disordered Rocksalt Cathodes. Advanced Functional Materials, 2022, 32, .	7.8	10
6	Thermal-healing of lattice defects for high-energy single-crystalline battery cathodes. Nature Communications, 2022, 13, 704.	5.8	33
7	Anomalous Thermal Decomposition Behavior of Polycrystalline $\text{LiNi}_{0.8}\text{Mn}_{0.1}\text{Co}_{0.1}\text{O}_2$ in PEO-Based Solid Polymer Electrolyte. Advanced Functional Materials, 2022, 32, .	7.8	19
8	Characterization of photoinduced normal state through charge density wave in superconducting $\text{YBa}_2\text{Cu}_3\text{O}_{6.67}$. Science Advances, 2022, 8, eabk0832.	4.7	3
9	Structural, Dynamic, and Chemical Complexities in Zinc Anode of an Operating Aqueous $\text{Zn}^{\oplus}\text{on}$ Battery. Advanced Energy Materials, 2022, 12, .	10.2	32
10	Dynamics of particle network in composite battery cathodes. Science, 2022, 376, 517-521.	6.0	86
11	Additive engineering for robust interphases to stabilize high-Ni layered structures at ultra-high voltage of 4.8%V. Nature Energy, 2022, 7, 484-494.	19.8	138
12	In-Situ Visualization of the Transition Metal Dissolution in Layered Cathodes. Journal of Electrochemical Energy Conversion and Storage, 2022, 19, .	1.1	2
13	Deep-Learning-Enabled Crack Detection and Analysis in Commercial Lithium-Ion Battery Cathodes. Advanced Functional Materials, 2022, 32, .	7.8	9
14	(Invited) Dynamic Plating/Stripping Behavior of Zn Anode in an Operating Aqueous Zn-Ion Battery. ECS Meeting Abstracts, 2022, MA2022-01, 1192-1192.	0.0	0
15	Heterogeneous Damage and Network Evolution in Composite Electrodes of Li-Ion Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 1637-1637.	0.0	0
16	Chemomechanics of Rechargeable Batteries: Status, Theories, and Perspectives. Chemical Reviews, 2022, 122, 13043-13107.	23.0	59
17	(Invited) Mesoscale Reaction Kinetics Modulated By Structural and Compositional Heterogeneity in Battery Cathode Materials. ECS Meeting Abstracts, 2022, MA2022-01, 1635-1635.	0.0	0
18	In situ visualization of multicomponents coevolution in a battery pouch cell. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	6

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19	(Invited) A Macro-to-Nano Zoom through the Hierarchy of a Lithium Ion Battery. ECS Meeting Abstracts, 2022, MA2022-01, 1650-1650.	0.0	0
20	Data-Driven Lithium-Ion Battery Cathode Research with State-of-the-Art Synchrotron X-ray Techniques. Accounts of Materials Research, 2022, 3, 854-865.	5.9	6
21	Evidence for oxygenation of Fe-Mg oxides at mid-mantle conditions and the rise of deep oxygen. National Science Review, 2021, 8, nwaa096.	4.6	15
22	Operando Tailoring of Defects and Strains in Corrugated $\text{Ni}(\text{OH})_2$ Nanosheets for Stable and High-Rate Energy Storage. Advanced Materials, 2021, 33, e2006147.	11.1	44
23	Understanding the Mesoscale Degradation in Nickel-Rich Cathode Materials through Machine-Learning-Revealed Strain-Redox Decoupling. ACS Energy Letters, 2021, 6, 687-693.	8.8	42
24	Temperature-Swing Synthesis of Large-Size Single-Crystal $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ Cathode Materials. Journal of the Electrochemical Society, 2021, 168, 010534.	1.3	36
25	A Study of Model-Based Protective Fast-Charging and Associated Degradation in Commercial Smartphone Cells: Insights on Cathode Degradation as a Result of Lithium Depositions on the Anode. Advanced Energy Materials, 2021, 11, 2003019.	10.2	7
26	A Hierarchical-Structured Impeller with Engineered Pd Nanoparticles Catalyzing Suzuki Coupling Reactions for High-Purity Biphenyl. ACS Applied Materials & Interfaces, 2021, 13, 17429-17438.	4.0	16
27	(Invited) Hierarchical Defect Engineering for Electrochemical Energy Storage Materials. ECS Meeting Abstracts, 2021, MA2021-01, 1976-1976.	0.0	0
28	Selective dopant segregation modulates mesoscale reaction kinetics in layered transition metal oxide. Nano Energy, 2021, 84, 105926.	8.2	42
29	Reversible Mn/Cr dual redox in cation-disordered Li-excess cathode materials for stable lithium ion batteries. Acta Materialia, 2021, 212, 116935.	3.8	16
30	High-resolution multicontrast tomography with an X-ray microarray anode-structured target source. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
31	Fast Li Plating Behavior Probed by X-ray Computed Tomography. Nano Letters, 2021, 21, 5254-5261.	4.5	19
32	The interplay among compositional heterogeneity, lattice defects, micromorphology, and redox stratification in lithium-ion batteries. Microscopy and Microanalysis, 2021, 27, 1216-1217.	0.2	0
33	Multiphase, Multiscale Chemomechanics at Extreme Low Temperatures: Battery Electrodes for Operation in a Wide Temperature Range. Advanced Energy Materials, 2021, 11, 2102122.	10.2	27
34	Role of Fluorine in Chemomechanics of Cation-Disordered Rocksalt Cathodes. Chemistry of Materials, 2021, 33, 7028-7038.	3.2	8
35	The role of structural defects in commercial lithium-ion batteries. Cell Reports Physical Science, 2021, 2, 100554.	2.8	32
36	Deep-learning-based image registration for nano-resolution tomographic reconstruction. Journal of Synchrotron Radiation, 2021, 28, 1909-1915.	1.0	9

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37	Automatic 3D image registration for nano-resolution chemical mapping using synchrotron spectro-tomography. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 278-282.	1.0	11
38	Understanding multi-scale battery degradation with a macro-to-nano zoom through its hierarchy. <i>Journal of Materials Chemistry A</i> , 2021, 9, 19886-19893.	5.2	14
39	Heterogeneous Reaction Activities and Statistical Characteristics of Particle Cracking in Battery Electrodes. <i>ACS Energy Letters</i> , 2021, 6, 4065-4070.	8.8	26
40	Machine-and-data intelligence for synchrotron science. <i>Nature Reviews Physics</i> , 2021, 3, 766-768.	11.9	14
41	In Situ Visualization of Li-Whisker with Grating-Interferometry-Based Tricontrast X-ray Microtomography. , 2021, 3, 1786-1792.		8
42	Charge distribution guided by grain crystallographic orientations in polycrystalline battery materials. <i>Nature Communications</i> , 2020, 11, 83.	5.8	129
43	Thermal stress-induced charge and structure heterogeneity in emerging cathode materials. <i>Materials Today</i> , 2020, 35, 87-98.	8.3	45
44	Hierarchical Defect Engineering for LiCoO ₂ through Low-Solubility Trace Element Doping. <i>CheM</i> , 2020, 6, 2759-2769.	5.8	74
45	Quantifying redox heterogeneity in single-crystalline LiCoO ₂ cathode particles. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 713-719.	1.0	12
46	Uncovering phase transformation, morphological evolution, and nanoscale color heterogeneity in tungsten oxide electrochromic materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20000-20010.	5.2	21
47	Mutual modulation between surface chemistry and bulk microstructure within secondary particles of nickel-rich layered oxides. <i>Nature Communications</i> , 2020, 11, 4433.	5.8	78
48	Ultrafast Construction of Oxygen-Containing Scaffold over Graphite for Trapping Ni ²⁺ into Single Atom Catalysts. <i>ACS Nano</i> , 2020, 14, 11662-11669.	7.3	20
49	Depth-dependent valence stratification driven by oxygen redox in lithium-rich layered oxide. <i>Nature Communications</i> , 2020, 11, 6342.	5.8	34
50	Applications of Full-field Transmission X-ray Nanotomography and X-ray Nanospectroscopy at Stanford Synchrotron Radiation Lightsource. <i>Microscopy and Microanalysis</i> , 2020, 26, 778-780.	0.2	1
51	Machine-learning-revealed statistics of the particle-carbon/binder detachment in lithium-ion battery cathodes. <i>Nature Communications</i> , 2020, 11, 2310.	5.8	143
52	Computational Modeling of Heterogeneity of Stress, Charge, and Cyclic Damage in Composite Electrodes of Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 040527.	1.3	36
53	Quantitative probing of the fast particle motion during the solidification of battery electrodes. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	6
54	Operando Revealing Dynamic Reconstruction of NiCo Carbonate Hydroxide for High-Rate Energy Storage. <i>Joule</i> , 2020, 4, 673-687.	11.7	88

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55	Distinct Surface and Bulk Thermal Behaviors of $\text{LiNi}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ Cathode Materials as a Function of State of Charge. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11643-11656.	4.0	19
56	Enabling Stable Cycling of 4.2 V High-Voltage All-Solid-State Batteries with PEO-Based Solid Electrolyte. <i>Advanced Functional Materials</i> , 2020, 30, 1909392.	7.8	204
57	High-dimensional and high-resolution x-ray tomography for energy materials science. <i>MRS Bulletin</i> , 2020, 45, 283-289.	1.7	13
58	Surface-to-Bulk Redox Coupling through Thermally Driven Li Redistribution in Li- and Mn-Rich Layered Cathode Materials. <i>Journal of the American Chemical Society</i> , 2019, 141, 12079-12086.	6.6	47
59	Trace doping of multiple elements enables stable battery cycling of LiCoO_2 at 4.6%V. <i>Nature Energy</i> , 2019, 4, 594-603.	19.8	572
60	Quantification of Heterogeneous Degradation in Li-Ion Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900674.	10.2	176
61	Heterogeneous damage in Li-ion batteries: Experimental analysis and theoretical modeling. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 129, 160-183.	2.3	164
62	Thermally-driven mesopore formation and oxygen release in delithiated NCA cathode particles. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12593-12603.	5.2	41
63	Solar-driven, highly sustained splitting of seawater into hydrogen and oxygen fuels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6624-6629.	3.3	524
64	High-Voltage Charging-Induced Strain, Heterogeneity, and Micro-Cracks in Secondary Particles of a Nickel-Rich Layered Cathode Material. <i>Advanced Functional Materials</i> , 2019, 29, 1900247.	7.8	219
65	Evolution of Local Structural Ordering and Chemical Distribution upon Delithiation of a Rock Salt-Structured $\text{Li}_{1.3}\text{Ta}_{0.3}\text{Mn}_{0.4}\text{O}_2$ Cathode. <i>Advanced Functional Materials</i> , 2019, 29, 1808294.	7.8	41
66	Applications for Nanoscale X-ray Imaging at High Pressure. <i>Engineering</i> , 2019, 5, 479-489.	3.2	11
67	Surface Characterization of Li-Substituted Compositionally Heterogeneous $\text{NaLi}_{0.045}\text{Cu}_{0.185}\text{Fe}_{0.265}\text{Mn}_{0.505}\text{O}_2$ Sodium-Ion Cathode Material. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11428-11435.	1.5	13
68	Tracer-Guided Characterization of Dominant Pore Networks and Implications for Permeability and Wettability in Shale. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 1459-1479.	1.4	10
69	Simultaneous three-dimensional elemental mapping of Hollandite and Pyrochlore material phases in ceramic waste form materials. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5620-5631.	1.9	0
70	Highly active oxygen evolution integrated with efficient CO_2 to CO electroreduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 23915-23922.	3.3	58
71	Mesoscale Chemomechanical Interplay of the $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ Cathode in Solid-State Polymer Batteries. <i>Chemistry of Materials</i> , 2019, 31, 491-501.	3.2	89
72	Three-dimensional localization of nanoscale battery reactions using soft X-ray tomography. <i>Nature Communications</i> , 2018, 9, 921.	5.8	107

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73	Synergistically Enhancing the Therapeutic Effect of Radiation Therapy with Radiation Activatable and Reactive Oxygen Species-Releasing Nanostructures. ACS Nano, 2018, 12, 4946-4958.	7.3	101
74	Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. Nano Letters, 2018, 18, 3241-3249.	4.5	237
75	Charge Heterogeneity and Surface Chemistry in Polycrystalline Cathode Materials. Joule, 2018, 2, 464-477.	11.7	145
76	Depth-Dependent Redox Behavior of $\text{Li}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$. Journal of the Electrochemical Society, 2018, 165, A696-A704.	1.3	123
77	Structure-Induced Reversible Anionic Redox Activity in Na Layered Oxide Cathode. Joule, 2018, 2, 125-140.	11.7	311
78	Synchrotron Radiation Nanoscale X-ray Imaging Technology And Scientific Big Data Mining Assist Energy Materials Research. Microscopy and Microanalysis, 2018, 24, 542-543.	0.2	0
79	Automatic projection image registration for nanoscale X-ray tomographic reconstruction. Journal of Synchrotron Radiation, 2018, 25, 1819-1826.	1.0	23
80	Chemomechanical behaviors of layered cathode materials in alkali metal ion batteries. Journal of Materials Chemistry A, 2018, 6, 21859-21884.	5.2	139
81	Thermally driven mesoscale chemomechanical interplay in $\text{Li}_{0.5}\text{Ni}_{0.6}\text{Mn}_{0.2}\text{Co}_{0.2}\text{O}_2$ cathode materials. Journal of Materials Chemistry A, 2018, 6, 23055-23061.	5.2	38
82	Chemomechanical interplay of layered cathode materials undergoing fast charging in lithium batteries. Nano Energy, 2018, 53, 753-762.	8.2	173
83	Empowering multicomponent cathode materials for sodium ion batteries by exploring three-dimensional compositional heterogeneities. Energy and Environmental Science, 2018, 11, 2496-2508.	15.6	45
84	Direct observation of the kinetics of gas-solid reactions using <i>in situ</i> kinetic and spectroscopic techniques. Reaction Chemistry and Engineering, 2018, 3, 668-675.	1.9	8
85	Evolution of the nanoporous microstructure of sintered Ag at high temperature using in-situ X-ray nanotomography. Acta Materialia, 2018, 156, 310-317.	3.8	22
86	Propagation topography of redox phase transformations in heterogeneous layered oxide cathode materials. Nature Communications, 2018, 9, 2810.	5.8	59
87	Understanding spin configuration in the geometrically frustrated magnet TbB ₄ : A resonant soft X-ray scattering study. Current Applied Physics, 2018, 18, 1205-1211.	1.1	2
88	Sodium Ion Batteries: Stable Carbon-Selenium Bonds for Enhanced Performance in Tremella-Like 2D Chalcogenide Battery Anode (Adv. Energy Mater. 23/2018). Advanced Energy Materials, 2018, 8, 1870106.	10.2	19
89	Mesoscale Battery Science: The Behavior of Electrode Particles Caught on a Multispectral X-ray Camera. Accounts of Chemical Research, 2018, 51, 2484-2492.	7.6	58
90	Stable Carbon-Selenium Bonds for Enhanced Performance in Tremella-Like 2D Chalcogenide Battery Anode. Advanced Energy Materials, 2018, 8, 1800927.	10.2	68

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91	Understanding the Effect of Local Short-Range Ordering on Lithium Diffusion in Li _{1.3} Nb _{0.3} Mn _{0.4} O ₂ Single-Crystal Cathode. <i>CheM</i> , 2018, 4, 2108-2123.	5.8	80
92	Phase transformation mechanism in lithium manganese nickel oxide revealed by single-crystal hard X-ray microscopy. <i>Nature Communications</i> , 2017, 8, 14309.	5.8	124
93	In situ Visualization of State-of-Charge Heterogeneity within a LiCoO ₂ Particle that Evolves upon Cycling at Different Rates. <i>ACS Energy Letters</i> , 2017, 2, 1240-1245.	8.8	159
94	Cu ₂ ZnSnSe ₄ Photovoltaic Absorber Layers Evaluated by Transmission X-Ray Microscopy Tomography: Composition Fluctuations on the Length Scale of Grains. <i>Solar Rrl</i> , 2017, 1, 1600024.	3.1	0
95	Nanoporous Tin with a Granular Hierarchical Ligament Morphology as a Highly Stable Li-Ion Battery Anode. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 293-303.	4.0	60
96	Synchrotron X-ray Analytical Techniques for Studying Materials Electrochemistry in Rechargeable Batteries. <i>Chemical Reviews</i> , 2017, 117, 13123-13186.	23.0	390
97	Three-dimensional mapping of crystalline ceramic waste form materials. <i>Journal of the American Ceramic Society</i> , 2017, 100, 3722-3735.	1.9	6
98	Elemental and Chemical Mapping of High Capacity Intermetallic Li-ion Anodes with Transmission X-ray Microscopy. <i>Jom</i> , 2017, 69, 1478-1483.	0.9	7
99	Finding a Needle in the Haystack: Identification of Functionally Important Minority Phases in an Operating Battery. <i>Nano Letters</i> , 2017, 17, 7782-7788.	4.5	42
100	Monitoring Deformation in Graphene Through Hyperspectral Synchrotron Spectroscopy to Inform Fabrication. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15653-15664.	1.5	3
101	Transformations and Decomposition of MnCO ₃ at Earth's Lower Mantle Conditions. <i>Frontiers in Earth Science</i> , 2016, 4, .	0.8	7
102	Ideal charge-density-wave order in the high-field state of superconducting YBCO. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14645-14650.	3.3	83
103	Characterization of heterogeneity in the Heletz sandstone from core to pore scale and quantification of its impact on multi-phase flow. <i>International Journal of Greenhouse Gas Control</i> , 2016, 48, 69-83.	2.3	31
104	Structural integrity—Searching the key factor to suppress the voltage fade of Li-rich layered cathode materials through 3D X-ray imaging and spectroscopy techniques. <i>Nano Energy</i> , 2016, 28, 164-171.	8.2	44
105	Relating structure and composition with accessibility of a single catalyst particle using correlative 3-dimensional micro-spectroscopy. <i>Nature Communications</i> , 2016, 7, 12634.	5.8	74
106	Metal segregation in hierarchically structured cathode materials for high-energy lithium batteries. <i>Nature Energy</i> , 2016, 1, .	19.8	209
107	Unsupervised Data Mining in nanoscale X-ray Spectro-Microscopic Study of NdFeB Magnet. <i>Scientific Reports</i> , 2016, 6, 34406.	1.6	23
108	Persistent State-of-Charge Heterogeneity in Relaxed, Partially Charged Li _{1-x} Ni _{1/3} Co _{1/3} Mn _{1/3} O ₂ Secondary Particles. <i>Advanced Materials</i> , 2016, 28, 6631-6638.	11.1	142

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109	Utilizing Environmental Friendly Iron as a Substitution Element in Spinel Structured Cathode Materials for Safer High Energy Lithium-ion Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1501662.	10.2	35
110	To get the most out of high resolution X-ray tomography: A review of the post-reconstruction analysis. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 117, 29-41.	1.5	37
111	General 2.5 power law of metallic glasses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1714-1718.	3.3	50
112	Extraction of pore-morphology and capillary pressure curves of porous media from synchrotron-based tomography data. <i>Scientific Reports</i> , 2015, 5, 10635.	1.6	20
113	Life and death of a single catalytic cracking particle. <i>Science Advances</i> , 2015, 1, e1400199.	4.7	124
114	Synchrotron-based transmission x-ray microscopy for improved extraction in shale during hydraulic fracturing. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
115	Sub-100 nm resolution 3-D tomography of CZTSe using transmission X-ray Microscopy. , 2015, , .		0
116	Nonequilibrium Pathways during Electrochemical Phase Transformations in Single Crystals Revealed by Dynamic Chemical Imaging at Nanoscale Resolution. <i>Advanced Energy Materials</i> , 2015, 5, 1402040.	10.2	42
117	Mapping Metals Incorporation of a Whole Single Catalyst Particle Using Element Specific X-ray Nanotomography. <i>Journal of the American Chemical Society</i> , 2015, 137, 102-105.	6.6	97
118	Registration of the rotation axis in X-ray tomography. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 452-457.	1.0	19
119	Five-dimensional visualization of phase transition in BiNiO ₃ under high pressure. <i>Applied Physics Letters</i> , 2014, 104, 043108.	1.5	18
120	SSRL/LCLS Users' Meeting and Workshops Draw Hundreds to SLAC. <i>Synchrotron Radiation News</i> , 2014, 27, 49-55.	0.2	0
121	Nanoscale Morphological and Chemical Changes of High Voltage Lithium-ion Manganese Rich NMC Composite Cathodes with Cycling. <i>Nano Letters</i> , 2014, 14, 4334-4341.	4.5	163
122	Study on the synthesis and microstructure-performance relationship of layered Li-excess nickel-manganese oxide as a Li-ion battery cathode prepared by high-temperature calcination. <i>Journal of Materials Chemistry A</i> , 2013, 1, 10847.	5.2	29
123	Three-dimensional microstructural mapping of poisoning phases in the Neodymium Nickelate solid oxide fuel cell cathode. <i>Solid State Ionics</i> , 2013, 237, 16-21.	1.3	12
124	X-ray nanoscopy of cobalt Fischer-Tropsch catalysts at work. <i>Chemical Communications</i> , 2013, 49, 4622.	2.2	71
125	Full-field XANES analysis of Roman ceramics to estimate firing conditions: A novel probe to study hierarchical heterogeneous materials. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 1870.	1.6	63
126	Nanoscale Visualization of Gas Shale Pore and Textural Features. , 2013, , .		10

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127	Mesoscale Phase Distribution in Single Particles of LiFePO_4 following Lithium Deintercalation. <i>Chemistry of Materials</i> , 2013, 25, 1664-1672.	3.2	120
128	Formation of an interconnected network of iron melt at Earth's lower mantle conditions. <i>Nature Geoscience</i> , 2013, 6, 971-975.	5.4	106
129	Data-processing strategies for nano-tomography with elemental specification. <i>Proceedings of SPIE</i> , 2013, , .	0.8	1
130	3D Nanoscale Chemical Imaging of the Distribution of Aluminum Coordination Environments in Zeolites with Soft X-ray Microscopy. <i>ChemPhysChem</i> , 2013, 14, 496-499.	1.0	33
131	Nanoscale elemental sensitivity study of $\text{Nd}_2\text{Fe}_{14}\text{B}$ using absorption correlation tomography. <i>Microscopy Research and Technique</i> , 2013, 76, 1112-1117.	1.2	22
132	Recent advances in synchrotron-based hard x-ray phase contrast imaging. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 494001.	1.3	54
133	Extended depth of focus for transmission x-ray microscope. <i>Optics Letters</i> , 2012, 37, 3708.	1.7	33
134	High pressure nano-tomography using an iterative method. <i>Journal of Applied Physics</i> , 2012, 111, 112626.	1.1	22
135	Hard X-ray Nanotomography of Catalytic Solids at Work. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11986-11990.	7.2	96
136	In Operando X-ray Diffraction and Transmission X-ray Microscopy of Lithium Sulfur Batteries. <i>Journal of the American Chemical Society</i> , 2012, 134, 6337-6343.	6.6	475
137	Imaging translocation and transformation of bioavailable selenium by <i>Stanleya pinnata</i> with X-ray microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 1277-1285.	1.9	7
138	3D elemental sensitive imaging using transmission X-ray microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 1297-1301.	1.9	63
139	<i>TXM-Wizard</i> : a program for advanced data collection and evaluation in full-field transmission X-ray microscopy. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 281-287.	1.0	217
140	Phase retrieval using polychromatic illumination for transmission X-ray microscopy. <i>Optics Express</i> , 2011, 19, 540.	1.7	40
141	Applications of Hard X-ray Full-field Transmission X-ray Microscopy at SSRL. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	29
142	Three-dimensional imaging of chemical phase transformations at the nanoscale with full-field transmission X-ray microscopy. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 773-781.	1.0	228
143	Transmission X-ray microscopy for full-field nano imaging of biomaterials. <i>Microscopy Research and Technique</i> , 2011, 74, 671-681.	1.2	80
144	Comparison of SOFC cathode microstructure quantified using X-ray nanotomography and focused ion beam scanning electron microscopy. <i>Electrochemistry Communications</i> , 2011, 13, 586-589.	2.3	72

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145	Three-dimensional mapping of nickel oxidation states using full field x-ray absorption near edge structure nanotomography. Applied Physics Letters, 2011, 98, .	1.5	60
146	Comparison of X-ray Nanotomography and FIB-SEM in Quantifying the Composite LSM/YSZ SOFC Cathode Microstructure. ECS Transactions, 2011, 35, 2417-2421.	0.3	6
147	Full Field Imaging of Nickel Oxidation States in Solid Oxide Fuel Cell Anode Materials by Xanes Nanotomography. , 2011, , .		1
148	Analysis of Solid Oxide Fuel Cell LSM-YSZ Composite Cathodes With Varying Starting Powder Sizes. , 2011, , .		0
149	3D Imaging of Nickel Oxidation States using Full Field X-ray Absorption Near Edge Structure Nanotomography. ECS Transactions, 2011, 35, 1315-1321.	0.3	1
150	Nanoscale X-Ray Microscopic Imaging of Mammalian Mineralized Tissue. Microscopy and Microanalysis, 2010, 16, 327-336.	0.2	79
151	Analysis of partial coherence in grating-based phase-contrast X-ray imaging. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 619, 319-322.	0.7	7
152	Low-dose, simple, and fast grating-based X-ray phase-contrast imaging. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13576-13581.	3.3	208
153	Comparative analysis of phase extraction methods based on phase-stepping and shifting curve in grating interferometry. Chinese Physics B, 2010, 19, 040701.	0.7	6
154	Full-field transmission x-ray microscopy for bio-imaging. Journal of Physics: Conference Series, 2009, 186, 012081.	0.3	18
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