

# Ingo Manke

## List of Publications by Year in descending order

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378  
papers

12,514  
citations

22132

59  
h-index

45285

90  
g-index

382  
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382  
docs citations

382  
times ranked

8090  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating the electrowetting of silver-based gas-diffusion electrodes during oxygen reduction reaction with electrochemical and optical methods. <i>Electrochemical Science Advances</i> , 2023, 3, .	1.2	10
2	Capturing 3D water layers and water-filled micropores in carbonate rock by high-resolution neutron tomography. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 633, 127838.	2.3	1
3	Dual-function engineering to construct ultra-stable anodes for potassium-ion hybrid capacitors: N, O-doped porous carbon spheres. <i>Nano Energy</i> , 2022, 93, 106903.	8.2	30
4	Intact, Commercial Lithium-Polymer Batteries: Spatially Resolved Grating-Based Interferometry Imaging, Bragg Edge Imaging, and Neutron Diffraction. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 1281.	1.3	3
5	Pyridine-grafted nitrogen-doped carbon nanotubes achieving efficient electroreduction of CO <sub>2</sub> to CO within a wide electrochemical window. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1852-1860.	5.2	12
6	Compact and versatile neutron imaging detector with sub-4 $\mu$ m spatial resolution based on a single-crystal thin-film scintillator. <i>Optics Express</i> , 2022, 30, 14461.	1.7	8
7	P-doped NiTe <sub>2</sub> with Te Vacancies in Lithium-Sulfur Batteries Prevents Shuttling and Promotes Polysulfide Conversion. <i>Advanced Materials</i> , 2022, 34, e2106370.	11.1	173
8	Scalable waste-plastic-derived carbon nanosheets with high contents of inbuilt nitrogen/sulfur sites for high performance potassium-ion hybrid capacitors. <i>Nano Energy</i> , 2022, 95, 107015.	8.2	18
9	Clarifying the Electro-Chemo-Mechanical Coupling in Li <sub>10</sub> SnP <sub>2</sub> S <sub>12</sub> based All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	33
10	Operando Radiography and Multimodal Analysis of Lithium-Sulfur Pouch Cells' Electrolyte Dependent Morphology Evolution at the Cathode. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	13
11	Development of a Modular Operando Cell for X-ray Imaging of Strongly Absorbing Silver-Based Gas Diffusion Electrodes. <i>Journal of the Electrochemical Society</i> , 2022, 169, 044508.	1.3	8
12	High-speed 4D neutron computed tomography for quantifying water dynamics in polymer electrolyte fuel cells. <i>Nature Communications</i> , 2022, 13, 1616.	5.8	10
13	Fabrication and characterization of porous mullite ceramics derived from fluoride-assisted Metakaolin-Al(OH) <sub>3</sub> annealing for filtration applications. <i>Open Ceramics</i> , 2022, 9, 100240.	1.0	9
14	Promoting Mechanistic Understanding of Lithium Deposition and Solid-Electrolyte Interphase (SEI) Formation Using Advanced Characterization and Simulation Methods: Recent Progress, Limitations, and Future Perspectives. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	47
15	Dynamic Intercalation Conversion Site Supported Ultrathin 2D Mesoporous SnO <sub>2</sub> /SnSe <sub>2</sub> Hybrid as Bifunctional Polysulfide Immobilizer and Lithium Regulator for Lithium-Sulfur Chemistry. <i>ACS Nano</i> , 2022, 16, 10783-10797.	7.3	63
16	3D microstructure characterization of polymer battery electrodes by statistical image analysis based on synchrotron X-ray tomography. <i>Journal of Power Sources</i> , 2022, 542, 231783.	4.0	3
17	Cautious interpretation of coulombic efficiency (CE) in lithium metal batteries. <i>Journal of Energy Chemistry</i> , 2021, 56, 34-36.	7.1	5
18	Carbon-coated ultrathin metallic V <sub>5</sub> Se <sub>8</sub> nanosheet for high-energy-density and robust potassium storage. <i>Energy Storage Materials</i> , 2021, 35, 1-11.	9.5	35

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19	Impact of catalyst layer morphology on the operation of high temperature PEM fuel cells. <i>Journal of Power Sources Advances</i> , 2021, 7, 100042.	2.6	29
20	Multi-length scale characterization of compression on metal foam flow-field based fuel cells using X-ray computed tomography and neutron radiography. <i>Energy Conversion and Management</i> , 2021, 230, 113785.	4.4	19
21	Spectral neutron tomography. <i>Materials Today Advances</i> , 2021, 9, 100132.	2.5	11
22	Bone metabolism and evolutionary origin of osteocytes: Novel application of FIB-SEM tomography. <i>Science Advances</i> , 2021, 7, .	4.7	26
23	Unravelling the Mechanism of Lithium Nucleation and Growth and the Interaction with the Solid Electrolyte Interface. <i>ACS Energy Letters</i> , 2021, 6, 1719-1728.	8.8	61
24	Interfacial Chemistry Enables Stable Cycling of All-Solid-State Li Metal Batteries at High Current Densities. <i>Journal of the American Chemical Society</i> , 2021, 143, 6542-6550.	6.6	200
25	Na electrodeposits: a new decaying mechanism for all-solid-state Na batteries revealed by synchrotron X-ray tomography. <i>Nano Energy</i> , 2021, 82, 105762.	8.2	23
26	Spatially resolved model of oxygen reduction reaction in silver-based porous gas-diffusion electrodes based on operando measurements. <i>Electrochimica Acta</i> , 2021, 375, 137976.	2.6	11
27	Stochastic 3D microstructure modeling of anodes in lithium-ion batteries with a particular focus on local heterogeneity. <i>Computational Materials Science</i> , 2021, 192, 110354.	1.4	10
28	In situ visualizing the interplay between the separator and potassium dendrite growth by synchrotron X-ray tomography. <i>Nano Energy</i> , 2021, 83, 105841.	8.2	13
29	Three-dimensional in vivo analysis of water uptake and translocation in maize roots by fast neutron tomography. <i>Scientific Reports</i> , 2021, 11, 10578.	1.6	11
30	Rarity of congenital malformation and deformity in the fossil record of vertebrates – A non-human perspective. <i>International Journal of Paleopathology</i> , 2021, 33, 30-42.	0.8	4
31	Insight on electrolyte infiltration of lithium ion battery electrodes by means of a new three-dimensional-resolved lattice Boltzmann model. <i>Energy Storage Materials</i> , 2021, 38, 80-92.	9.5	61
32	Operando Synchrotron Imaging of Electrolyte Distribution in Silver-Based Gas Diffusion Electrodes During Oxygen Reduction Reaction in Highly Alkaline Media. <i>ACS Applied Energy Materials</i> , 2021, 4, 7497-7503.	2.5	11
33	Lithium deposition in single-ion conducting polymer electrolytes. <i>Cell Reports Physical Science</i> , 2021, 2, 100496.	2.8	10
34	Neutron darkfield imaging of fiber composites. <i>Materialprüfung/Materials Testing</i> , 2021, 63, 623-629.	0.8	0
35	Synchrotron X-ray Tomography for Rechargeable Battery Research: Fundamentals, Setups and Applications. <i>Small Methods</i> , 2021, 5, e2100557.	4.6	38
36	A Highly Conductive COF@CNT Electrocatalyst Boosting Polysulfide Conversion for Li-S Chemistry. <i>ACS Energy Letters</i> , 2021, 6, 3053-3062.	8.8	97

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37	Capturing Centimeter-Scale Local Variations in Paper Pore Space via $\mu$ -CT: A Benchmark Study Using Calendered Paper. <i>Microscopy and Microanalysis</i> , 2021, 27, 1305-1315.	0.2	10
38	Sodiophilic and conductive carbon cloth guides sodium dendrite-free Na metal electrodeposition. <i>Journal of Energy Chemistry</i> , 2021, 61, 61-70.	7.1	24
39	The Neutron Imaging Instrument CONRAD Post-Operational Review. <i>Journal of Imaging</i> , 2021, 7, 11.	1.7	4
40	Visualization of magnetic domain structure in FeSi based high permeability steel plates by neutron imaging. <i>Materials Letters</i> , 2020, 259, 126816.	1.3	7
41	Virtual unfolding of folded papyri. <i>Journal of Cultural Heritage</i> , 2020, 41, 264-269.	1.5	12
42	X-ray Computed Radiography and Tomography Study of Electrolyte Invasion and Distribution inside Pristine and Heat-Treated Carbon Felts for Redox Flow Batteries. <i>Energy Technology</i> , 2020, 8, 1901214.	1.8	19
43	Characterization of water management in metal foam flow-field based polymer electrolyte fuel cells using in-operando neutron radiography. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 2195-2205.	3.8	41
44	Morphological Reversibility of Modified Li-Based Anodes for Next-Generation Batteries. <i>ACS Energy Letters</i> , 2020, 5, 152-161.	8.8	53
45	On the stability of bismuth in modified carbon felt electrodes for vanadium redox flow batteries: An in-operando X-ray computed tomography study. <i>Journal of Power Sources</i> , 2020, 478, 228695.	4.0	7
46	Multi-scale Analysis and Phase Segmentation of FIB and X-ray Tomographic Data of Electrolyzer Electrodes Using Machine Learning Algorithms. <i>ECS Transactions</i> , 2020, 97, 639-649.	0.3	1
47	Effect of Tomography Resolution on Calculation of Microstructural Properties for Lithium Ion Porous Electrodes. <i>ECS Transactions</i> , 2020, 97, 255-266.	0.3	9
48	Performance and behavior of LLZO-based composite polymer electrolyte for lithium metal electrode with high capacity utilization. <i>Nano Energy</i> , 2020, 77, 105196.	8.2	32
49	Morphological evolution of a single crystal silicon battery electrode during lithiation and delithiation: An operando phase-contrast imaging study. <i>Energy Storage Materials</i> , 2020, 32, 377-385.	9.5	4
50	Hierarchical Structuring of NMC111-Cathode Materials in Lithium-Ion Batteries: An In-Depth Study on the Influence of Primary and Secondary Particle Sizes on Electrochemical Performance. <i>ACS Applied Energy Materials</i> , 2020, 3, 12565-12574.	2.5	40
51	Real-space simulation of cyclic voltammetry in carbon felt electrodes by combining micro X-ray CT data, digital simulation and convolutive modeling. <i>Electrochimica Acta</i> , 2020, 353, 136487.	2.6	6
52	A Multidimensional Operando Study Showing the Importance of the Electrode Macrostructure in Lithium Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 6965-6976.	2.5	11
53	Non-invasive characterization of ancient Indonesian Kris through neutron methods. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	3
54	Influence of Conductive Additives and Binder on the Impedance of Lithium-Ion Battery Electrodes: Effect of Morphology. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013546.	1.3	105

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55	Mass transport in polymer electrolyte membrane water electrolyser liquid-gas diffusion layers: A combined neutron imaging and X-ray computed tomography study. <i>Journal of Power Sources</i> , 2020, 455, 227968.	4.0	41
56	3D classification of polymer electrolyte membrane fuel cell materials from in-situ X-ray tomographic datasets. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 12161-12169.	3.8	7
57	Detailed and Direct Observation of Sulfur Crystal Evolution During <i>Operando</i> Analysis of a Li-S Cell with Synchrotron Imaging. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 5674-5679.	2.1	5
58	Non-destructive characterisation of dopant spatial distribution in cuprate superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2020, 575, 1353691.	0.6	4
59	4D imaging of lithium-batteries using correlative neutron and X-ray tomography with a virtual unrolling technique. <i>Nature Communications</i> , 2020, 11, 777.	5.8	104
60	Improvement of Oxygen-Depolarized Cathodes in Highly Alkaline Media by Electrospinning of Poly(vinylidene fluoride) Barrier Layers. <i>ChemElectroChem</i> , 2020, 7, 830-837.	1.7	7
61	Synchrotron Radiography for a Proton Exchange Membrane (PEM) Electrolyzer. <i>Fuel Cells</i> , 2020, 20, 300-306.	1.5	12
62	Li-based anode: Is dendrite-free sufficient?. <i>Materials Today</i> , 2020, 38, 7-9.	8.3	21
63	Enhanced Water Management in PEMFCs: Perforated Catalyst Layer and Microporous Layers. <i>ChemSusChem</i> , 2020, 13, 2931-2934.	3.6	25
64	Prediction of Electrolyte Distribution in Technical Gas Diffusion Electrodes: From Imaging to SPH Simulations. <i>Transport in Porous Media</i> , 2020, 132, 381-403.	1.2	5
65	Influence of Structural Modification of Micro-Porous Layer and Catalyst Layer on Performance and Water Management of PEM Fuel Cells: Hydrophobicity and Porosity. <i>Fuel Cells</i> , 2020, 20, 469-476.	1.5	14
66	Non-destructive in-operando investigation of catalyst layer degradation for water electrolyzers using synchrotron radiography. <i>Materials Today Energy</i> , 2020, 16, 100394.	2.5	5
67	Understanding the Impact of Compression on the Active Area of Carbon Felt Electrodes for Redox Flow Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 4384-4393.	2.5	24
68	Editors' Choice 4D Neutron and X-ray Tomography Studies of High Energy Density Primary Batteries: Part I. Dynamic Studies of LiSOCl <sub>2</sub> during Discharge. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130545.	1.3	12
69	Editors' Choice 4D Neutron and X-ray Tomography Studies of High Energy Density Primary Batteries: Part II. Multi-Modal Microscopy of LiSOCl <sub>2</sub> Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 140509.	1.3	7
70	Energy-selective neutron imaging by exploiting wavelength gradients of double crystal monochromators Simulations and experiments. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 943, 162477.	0.7	17
71	Quantitative synchrotron X-ray tomography of the material-tissue interface in rat cortex implanted with neural probes. <i>Scientific Reports</i> , 2019, 9, 7646.	1.6	12
72	Fossil evidence of core monocots in the Early Cretaceous. <i>Nature Plants</i> , 2019, 5, 691-696.	4.7	32

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73	Parametric microstructure modeling of compressed cathode materials for Li-ion batteries. Computational Materials Science, 2019, 169, 109083.	1.4	18
74	Characterization of hierarchically structured electrodes with different thicknesses by means of experiments and image analysis. Materials Characterization, 2019, 155, 109778.	1.9	4
75	Operando Laboratory X-Ray Imaging of Silver-Based Gas Diffusion Electrodes during Oxygen Reduction Reaction in Highly Alkaline Media. Materials, 2019, 12, 2686.	1.3	19
76	Analysis of structural and functional aging of electrodes in lithium-ion batteries during rapid charge and discharge rates using synchrotron tomography. Journal of Power Sources, 2019, 443, 227259.	4.0	10
77	Differentiating and Quantifying Dead Lithium.. ChemElectroChem, 2019, 6, 5787-5789.	1.7	5
78	Confined Fe <sub>2</sub> VO <sub>4</sub> , Nitrogen-Doped Carbon Nanowires with Internal Void Space for High-Rate and Ultrastable Potassium-Ion Storage. Advanced Energy Materials, 2019, 9, 1902674.	10.2	81
79	Multidimensional Integrated Chalcogenides Nanoarchitecture Achieves Highly Stable and Ultrafast Potassium-Ion Storage. Small, 2019, 15, e1903720.	5.2	49
80	Investigation of water generation and accumulation in polymer electrolyte fuel cells using hydro-electrochemical impedance imaging. Journal of Power Sources, 2019, 414, 272-277.	4.0	21
81	Testing Contrast Agents to Improve Micro Computerized Tomography (µCT) for Spatial Location of Organic Matter and Biological Material in Soil. Frontiers in Environmental Science, 2019, 7, .	1.5	13
82	Effect of cell compression on the water dynamics of a polymer electrolyte fuel cell using in-plane and through-plane in-operando neutron radiography. Journal of Power Sources, 2019, 439, 227074.	4.0	26
83	What comes NeXT? – High-Speed Neutron Tomography at ILL. Optics Express, 2019, 27, 28640.	1.7	39
84	Zinc electrode shape-change in secondary air batteries: A 2D modeling approach. Journal of Power Sources, 2019, 432, 119-132.	4.0	34
85	Probing the 3D molecular and mineralogical heterogeneity in oil reservoir rocks at the pore scale. Scientific Reports, 2019, 9, 8263.	1.6	7
86	Influence of binder content in silver-based gas diffusion electrodes on pore system and electrochemical performance. Journal of Applied Electrochemistry, 2019, 49, 705-713.	1.5	36
87	Non-destructive characterization of lithium deposition at the Li/separator and Li/carbon matrix interregion by synchrotron X-ray tomography. Nano Energy, 2019, 62, 11-19.	8.2	26
88	Design of an In-Operando Cell for X-Ray and Neutron Imaging of Oxygen-Depolarized Cathodes in Chlor-Alkali Electrolysis. Materials, 2019, 12, 1275.	1.3	18
89	Absorption edge sensitive radiography and tomography of Egyptian Papyri. Journal of Cultural Heritage, 2019, 39, 13-20.	1.5	10
90	Evaluation of a High-Intensive Mixing Process in a Ring Shear Mixer and Its Impact on the Properties of Composite Particles for Lithium-Sulfur Battery Cathodes. Energy Technology, 2019, 7, 1801059.	1.8	6

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91	Practical Implications of Using a Solid Electrolyte in Batteries with a Sodium Anode: A Combined X-ray Tomography and Model-Based Study. <i>Energy Technology</i> , 2019, 7, 1801146.	1.8	14
92	Analysis of microstructural effects in multi-layer lithium-ion battery cathodes. <i>Materials Characterization</i> , 2019, 151, 166-174.	1.9	16
93	Characterization of the 3D microstructure of Ibuprofen tablets by means of synchrotron tomography. <i>Journal of Microscopy</i> , 2019, 274, 102-113.	0.8	9
94	Catalytic Reactivation of Industrial Oxygen Depolarized Cathodes by in-situ Generation of Atomic Hydrogen. <i>ChemSusChem</i> , 2019, 12, 2732-2739.	3.6	3
95	Influence of Stoichiometry on the Two-Phase Flow Behavior of Proton Exchange Membrane Electrolyzers. <i>Energies</i> , 2019, 12, 350.	1.6	16
96	Up-scaling transport in porous polymer membranes using asymptotic homogenization. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2019, 30, 266-289.	1.6	3
97	Correction approach of detector backlighting in radiography. <i>Review of Scientific Instruments</i> , 2019, 90, 125108.	0.6	14
98	Polarization measurements in neutron imaging. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 123001.	1.3	21
99	Advancing knowledge of electrochemically generated lithium microstructure and performance decay of lithium ion battery by synchrotron X-ray tomography. <i>Materials Today</i> , 2019, 27, 21-32.	8.3	47
100	Revealing Hidden Facts of Li Anode in Cycled Lithium-Oxygen Batteries through X-ray and Neutron Tomography. <i>ACS Energy Letters</i> , 2019, 4, 306-316.	8.8	61
101	Morphology correction technique for tomographic in-situ and operando studies in energy research. <i>Journal of Power Sources</i> , 2019, 414, 8-12.	4.0	10
102	Effect of solid phase corrugation on the thermo-mechanical properties of low density flexible cellular polymers. <i>Materials and Design</i> , 2019, 161, 106-113.	3.3	4
103	Neutron Imaging. , 2019, , 47-59.		1
104	On a pluri-Gaussian model for three-phase microstructures, with applications to 3D image data of gas-diffusion electrodes. <i>Computational Materials Science</i> , 2019, 156, 325-331.	1.4	19
105	External water transport is more important than vascular transport in the extreme atmospheric epiphyte <i>Tillandsia usneoides</i> (Spanish moss). <i>Plant, Cell and Environment</i> , 2019, 42, 1645-1656.	2.8	17
106	In-situ and Operando Tracking of Microstructure and Volume Evolution of Silicon Electrodes by using Synchrotron X-ray Imaging. <i>ChemSusChem</i> , 2019, 12, 261-269.	3.6	20
107	Spatially resolved time-of-flight neutron imaging using a scintillator CMOS-camera detector with kHz time resolution. <i>Optics Express</i> , 2019, 27, 26218.	1.7	12
108	Stochastic model for the 3D microstructure of pristine and cyclically aged cathodes in Li-ion batteries. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2018, 26, 035005.	0.8	18

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109	Effects of compression on water distribution in gas diffusion layer materials of PEMFC in a point injection device by means of synchrotron X-ray imaging. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 391-406.	3.8	72
110	Correlating Morphological Evolution of Li Electrodes with Degrading Electrochemical Performance of Li/LiCoO <sub>2</sub> and Li/S Battery Systems: Investigated by Synchrotron X-ray Phase Contrast Tomography. <i>ACS Energy Letters</i> , 2018, 3, 356-365.	8.8	64
111	Advances in neutron imaging. <i>Materials Today</i> , 2018, 21, 652-672.	8.3	138
112	In-situ two-phase flow investigation of different porous transport layer for a polymer electrolyte membrane (PEM) electrolyzer with neutron spectroscopy. <i>Journal of Power Sources</i> , 2018, 390, 108-115.	4.0	71
113	Unveiling 3D physicochemical changes of sugarcane bagasse during sequential acid/alkali pretreatments by synchrotron phase-contrast imaging. <i>Industrial Crops and Products</i> , 2018, 114, 19-27.	2.5	6
114	Investigating phase behavior and structural changes in NiO/Ni-YSZ composite with monochromatic in-situ 2D and static 3D neutron imaging. <i>Physica B: Condensed Matter</i> , 2018, 551, 24-28.	1.3	6
115	Visualizing the morphological and compositional evolution of the interface of InLi-anode   thio-LISION electrolyte in an all-solid-state Li-S cell by <i>in operando</i> synchrotron X-ray tomography and energy dispersive diffraction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22489-22496.	5.2	47
116	Multi-scale tomographic analysis of polymeric foams: A detailed study of the cellular structure. <i>European Polymer Journal</i> , 2018, 109, 169-178.	2.6	29
117	Transient limiting current measurements for characterization of gas diffusion layers. <i>Journal of Power Sources</i> , 2018, 402, 237-245.	4.0	26
118	Tensorial neutron tomography of three-dimensional magnetic vector fields in bulk materials. <i>Nature Communications</i> , 2018, 9, 4023.	5.8	36
119	In Operando Neutron Radiography Analysis of a High-Temperature Polymer Electrolyte Fuel Cell Based on a Phosphoric Acid-Doped Polybenzimidazole Membrane Using the Hydrogen-Deuterium Contrast Method. <i>Energies</i> , 2018, 11, 2214.	1.6	4
120	An X-ray Tomographic Study of Rechargeable Zn/MnO <sub>2</sub> Batteries. <i>Materials</i> , 2018, 11, 1486.	1.3	8
121	Neutron Tomographic Investigation of the Effect of Hydrophobicity Gradients within MPL and MEA on the Spatial Distribution and Transport of Liquid Water in PEMFCs. <i>ECS Transactions</i> , 2018, 85, 927-934.	0.3	3
122	Influence of impurities, strontium addition and cooling rate on microstructure evolution in Al-10Si-0.3Fe casting alloys. <i>Journal of Alloys and Compounds</i> , 2018, 766, 818-827.	2.8	22
123	Neutron Radiographic Investigations on the Effect of Hydrophobicity Gradients within MPL and MEA on Liquid Water Distribution and Transport in PEMFCs. <i>ECS Transactions</i> , 2018, 85, 1013-1021.	0.3	5
124	Nano-scale Monte Carlo study on liquid water distribution within the polymer electrolyte membrane fuel cell microporous layer, catalyst layer and their interfacial region. <i>Journal of Power Sources</i> , 2018, 397, 271-279.	4.0	14
125	In-operando stress measurement and neutron imaging of metal hydride composites for solid-state hydrogen storage. <i>Journal of Power Sources</i> , 2018, 397, 262-270.	4.0	19
126	Generation of virtual lithium-ion battery electrode microstructures based on spatial stochastic modeling. <i>Computational Materials Science</i> , 2018, 151, 53-64.	1.4	40



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127	Imaging with Polarized Neutrons. <i>Journal of Imaging</i> , 2018, 4, 23.	1.7	7
128	Analysis of the 3D microstructure of experimental cathode films for lithium-ion batteries under increasing compaction. <i>Journal of Microscopy</i> , 2018, 272, 96-110.	0.8	20
129	Röntgen- und Neutronentomographie am knöchernen Innenohr der Bartenwale. <i>Materialprüfung/Materials Testing</i> , 2018, 60, 173-178.	0.8	2
130	Neutronen-Laminografie am Beispiel eines historischen Artefakts. <i>Materialprüfung/Materials Testing</i> , 2018, 60, 1209-1214.	0.8	1
131	In-situ investigation of water distribution in polymer electrolyte membrane fuel cells using high-resolution neutron tomography with 6.5 Åµm pixel size. <i>AIMS Energy</i> , 2018, 6, 607-614.	1.1	19
132	Relationships of cochlear coiling shape and hearing frequencies in cetaceans, and the occurrence of infrasonic hearing in Miocene Mysticeti. <i>Fossil Record</i> , 2018, 21, 33-45.	0.5	16
133	Complementary X-ray and neutron radiography study of the initial lithiation process in lithium-ion batteries containing silicon electrodes. <i>Applied Surface Science</i> , 2017, 399, 359-366.	3.1	40
134	Improved Performance of Polymer Electrolyte Membrane Fuel Cells with Modified Microporous Layer Structures. <i>Energy Technology</i> , 2017, 5, 1612-1618.	1.8	25
135	Formation of intermetallic $\hat{\Gamma}$ phase in Al-10Si-0.3Fe alloy investigated by in-situ 4D X-ray synchrotron tomography. <i>Acta Materialia</i> , 2017, 129, 194-202.	3.8	53
136	Phase-contrast synchrotron microtomography reveals the internal morphology of a new fossil species of the Corticaria-sylvicola-group (Coleoptera: Latridiidae). <i>Zootaxa</i> , 2017, 4242, 578.	0.2	6
137	Interfacial Processes and Influence of Composite Cathode Microstructure Controlling the Performance of All-Solid-State Lithium Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 17835-17845.	4.0	353
138	(Electro)chemical expansion during cycling: monitoring the pressure changes in operating solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9929-9936.	5.2	222
139	Time-resolved Bragg-edge neutron radiography for observing martensitic phase transformation from austenitized super martensitic steel. <i>Journal of Materials Science</i> , 2017, 52, 3490-3496.	1.7	13
140	<i>In Operando</i> Quantification of Three-Dimensional Water Distribution in Nanoporous Carbon-Based Layers in Polymer Electrolyte Membrane Fuel Cells. <i>ACS Nano</i> , 2017, 11, 5944-5949.	7.3	50
141	Combined application of imaging techniques for the characterization and authentication of ancient weapons. <i>European Physical Journal Plus</i> , 2017, 132, 1.	1.2	4
142	Study of the Mechanisms of Internal Short Circuit in a Li/Li Cell by Synchrotron X-ray Phase Contrast Tomography. <i>ACS Energy Letters</i> , 2017, 2, 94-104.	8.8	89
143	X-ray tomography as a powerful method for zinc-air battery research. <i>Journal of Power Sources</i> , 2017, 370, 45-51.	4.0	27
144	Setup for polarized neutron imaging using <i>in situ</i> $^3\text{He}$ cells at the Oak Ridge National Laboratory High Flux Isotope Reactor CG-1D beamline. <i>Review of Scientific Instruments</i> , 2017, 88, 095103.	0.6	12

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145	Neutron radiographic in operando investigation of water transport in polymer electrolyte membrane fuel cells with channel barriers. <i>Energy Conversion and Management</i> , 2017, 148, 604-610.	4.4	52
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157	Missing wedge computed tomography by iterative algorithm DIRECTT. <i>Journal of Microscopy</i> , 2016, 261, 36-45.	0.8	21
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161	Three-dimensional multiscale analysis of degradation of nano- and micro-structure in direct methanol fuel cell electrodes after methanol starvation. <i>Journal of Power Sources</i> , 2016, 327, 481-487.	4.0	12
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