

Dan JI Brett

List of Publications by Year in descending order

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480
papers

21,238
citations

12597

71
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23841

115
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493
all docs

493
docs citations

493
times ranked

20622
citing authors

#	ARTICLE	IF	CITATIONS
1	Strategic comparison of membrane-assisted and membrane-less water electrolyzers and their potential application in direct seawater splitting (DSS). <i>Green Energy and Environment</i> , 2023, 8, 989-1005.	4.7	15
2	Characteristics of a gold-doped electrode for application in high-performance lithium-sulfur battery. <i>Journal of Energy Chemistry</i> , 2022, 64, 116-128.	7.1	21
3	Reversible lithium storage in sp ² hydrocarbon frameworks. <i>Journal of Energy Chemistry</i> , 2022, 66, 161-167.	7.1	1
4	Machine learning as an online diagnostic tool for proton exchange membrane fuel cells. <i>Current Opinion in Electrochemistry</i> , 2022, 31, 100867.	2.5	16
5	Determining the electrochemical transport parameters of sodium-ions in hard carbon composite electrodes. <i>Electrochimica Acta</i> , 2022, 401, 139481.	2.6	14
6	In-situ X-ray tomographic imaging study of gas and structural evolution in a commercial Li-ion pouch cell. <i>Journal of Power Sources</i> , 2022, 520, 230818.	4.0	17
7	Mass transport in PEM water electrolyzers: A review. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 30-56.	3.8	60
8	A Review of Lithium-Ion Battery Electrode Drying: Mechanisms and Metrology. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	70
9	Progress and Perspectives of Organosulfur for Lithium-Ion Sulfur Batteries. <i>Advanced Energy Materials</i> , 2022, 12, 2103483.	10.2	69
10	The performance and durability of high-temperature proton exchange membrane fuel cells enhanced by single-layer graphene. <i>Nano Energy</i> , 2022, 93, 106829.	8.2	25
11	Neutron imaging of lithium batteries. <i>Joule</i> , 2022, 6, 35-52.	11.7	29
12	In-Situ Li-Ion Pouch Cell Diagnostics Utilising Plasmonic Based Optical Fibre Sensors. <i>Sensors</i> , 2022, 22, 738.	2.1	6
13	Spatially Resolved Operando Synchrotron-Based X-Ray Diffraction Measurements of Ni-Rich Cathodes for Li-Ion Batteries. <i>Frontiers in Chemical Engineering</i> , 2022, 3, .	1.3	9
14	Study of Tire Pyrolysis Oil Model Compound Structure on Carbon Nanomaterial Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 800-809.	3.2	7
15	Dual-Metal Atom Electrocatalysts: Theory, Synthesis, Characterization, and Applications (<i>Adv. Energy</i>) Tj ETQq1 1,0,784314,rgBT /Ove	10.2	10
16	Thermal Runaway of Li-Ion Cells: How Internal Dynamics, Mass Ejection, and Heat Vary with Cell Geometry and Abuse Type. <i>Journal of the Electrochemical Society</i> , 2022, 169, 020526.	1.3	11
17	The effect of non-uniform compression on the performance of polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , 2022, 521, 230973.	4.0	10
18	Self-assembled carbon nanoribbons with the heteroatom doping used as ultrafast charging cathodes in zinc-ion hybrid supercapacitors. <i>Science China Materials</i> , 2022, 65, 1495-1502.	3.5	16

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19	The effect of cell geometry and trigger method on the risks associated with thermal runaway of lithium-ion batteries. <i>Journal of Power Sources</i> , 2022, 524, 230645.	4.0	28
20	Identification and manipulation of dynamic active site deficiency-induced competing reactions in electrocatalytic oxidation processes. <i>Energy and Environmental Science</i> , 2022, 15, 2386-2396.	15.6	71
21	An open-source platform for 3D-printed redox flow battery test cells. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1529-1540.	2.5	7
22	Dynamic acoustic emission analysis of polymer electrolyte membrane fuel cells. <i>Energy Advances</i> , 2022, 1, 258-268.	1.4	2
23	liionpack: A Python package for simulating packs of batteries with PyBaMM. <i>Journal of Open Source Software</i> , 2022, 7, 4051.	2.0	3
24	Seed-Mediated, Shape-Controlled Synthesis Methods for Platinum-Based Electrocatalysts for the Oxygen Reduction Reaction—A Mini Review. <i>Frontiers in Chemistry</i> , 2022, 10, 865214.	1.8	1
25	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
26	Disentangling water, ion and polymer dynamics in an anion exchange membrane. <i>Nature Materials</i> , 2022, 21, 555-563.	13.3	32
27	Motion-enhancement assisted digital image correlation of lithium-ion batteries during lithiation. <i>Journal of Power Sources</i> , 2022, 527, 231150.	4.0	4
28	Cracking predictions of lithium-ion battery electrodes by X-ray computed tomography and modelling. <i>Journal of Power Sources</i> , 2022, 526, 231119.	4.0	47
29	Investigation of the Effect of Temperature on Lithium-Sulfur Cell Cycle Life Performance Using System Identification and X-Ray Tomography. <i>Batteries and Supercaps</i> , 2022, 5, .	2.4	5
30	Precisely visit the performance modulation of functionalized separator in Li-S batteries via consecutive multiscale analysis. <i>Energy Storage Materials</i> , 2022, 49, 85-92.	9.5	7
31	Effective Ultrasound Acoustic Measurement to Monitor the Lithium-Ion Battery Electrode Drying Process with Various Coating Thicknesses. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 2092-2101.	4.0	4
32	In situ x-ray computed tomography of zinc-air primary cells during discharge: correlating discharge rate to anode morphology. <i>JPhys Materials</i> , 2022, 5, 014001.	1.8	4
33	Dual-Metal Atom Electrocatalysts: Theory, Synthesis, Characterization, and Applications. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	78
34	Applications of advanced metrology for understanding the effects of drying temperature in the lithium-ion battery electrode manufacturing process. <i>Journal of Materials Chemistry A</i> , 2022, 10, 10593-10603.	5.2	10
35	Operando Ultrasonic Monitoring of Lithium-Ion Battery Temperature and Behaviour at Different Cycling Rates and under Drive Cycle Conditions. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040563.	1.3	16
36	MOF-based nanomaterials for zinc-based battery cathodes. , 2022, , 315-340.		0

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37	Proton exchange membrane fuel cell performance investigation considering internal heterogeneity of current density – A novel method study. International Journal of Hydrogen Energy, 2022, 47, 20205-20217.	3.8	12
38	Rationally Designed Sodium Chromium Vanadium Phosphate Cathodes with Multi-Electron Reaction for Fast-Charging Sodium-Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	71
39	A greyscale erosion algorithm for tomography (GREAT) to rapidly detect battery particle defects. Npj Materials Degradation, 2022, 6, .	2.6	3
40	Comparative study of energy management systems for a hybrid fuel cell electric vehicle - A novel mutative fuzzy logic controller to prolong fuel cell lifetime. International Journal of Hydrogen Energy, 2022, 47, 24042-24058.	3.8	33
41	Cover Feature: Investigation of the Effect of Temperature on Lithium-Sulfur Cell Cycle Life Performance Using System Identification and X-Ray Tomography (Batteries & Supercaps 8/2022). Batteries and Supercaps, 2022, 5, .	2.4	0
42	Correlative electrochemical acoustic time-of-flight spectroscopy and X-ray imaging to monitor the performance of single-crystal and polycrystalline NMC811/Gr lithium-ion batteries. Journal of Power Sources, 2022, 542, 231775.	4.0	5
43	Exploring the influence of porosity and thickness on lithium-ion battery electrodes using an image-based model. Journal of Power Sources, 2022, 542, 231779.	4.0	14
44	Controlling molten carbonate distribution in dual-phase molten salt-ceramic membranes to increase carbon dioxide permeation rates. Journal of Membrane Science, 2021, 617, 118640.	4.1	12
45	Structural engineering of cathodes for improved Zn-ion batteries. Journal of Energy Chemistry, 2021, 58, 147-155.	7.1	52
46	Self-activated cathode substrates in rechargeable zinc-air batteries. Energy Storage Materials, 2021, 35, 530-537.	9.5	11
47	3D Imaging of Lithium Protrusions in Solid-State Lithium Batteries using X-Ray Computed Tomography. Advanced Functional Materials, 2021, 31, 2007564.	7.8	31
48	Electrospinning as a route to advanced carbon fibre materials for selected low-temperature electrochemical devices: A review. Journal of Energy Chemistry, 2021, 59, 492-529.	7.1	56
49	Fabrication of high surface area ribbon electrodes for use in redox flow batteries via coaxial electrospinning. Journal of Energy Storage, 2021, 33, 102079.	3.9	21
50	Effect of reactant gas flow orientation on the current and temperature distribution in self-heating polymer electrolyte fuel cells. International Journal of Hydrogen Energy, 2021, 46, 7502-7514.	3.8	11
51	<i>Operando</i> Bragg Coherent Diffraction Imaging of $\text{LiNi}_{0.8}\text{Mn}_{0.1}\text{Co}_{0.1}\text{O}_2$ Primary Particles within Commercially Printed NMC811 Electrode Sheets. ACS Nano, 2021, 15, 1321-1330.	7.3	23
52	Probing adsorbent heterogeneity using Toth isotherms. Journal of Materials Chemistry A, 2021, 9, 944-962.	5.2	12
53	Hard Carbon Composite Electrodes for Sodium-Ion Batteries with Nano-Zeolite and Carbon Black Additives. Batteries and Supercaps, 2021, 4, 163-172.	2.4	17
54	Towards a mechanistic understanding of particle shrinkage during biomass pyrolysis via synchrotron X-ray microtomography and in-situ radiography. Scientific Reports, 2021, 11, 2656.	1.6	10

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55	Alleviation of Dendrite Formation on Zinc Anodes via Electrolyte Additives. ACS Energy Letters, 2021, 6, 395-403.	8.8	340
56	Thermo-chemical conversion of carbonaceous wastes for CNT and hydrogen production: a review. Sustainable Energy and Fuels, 2021, 5, 4173-4208.	2.5	33
57	Palladium alloys used as electrocatalysts for the oxygen reduction reaction. Energy and Environmental Science, 2021, 14, 2639-2669.	15.6	158
58	Contrasting the EXAFS obtained under air and H ₂ environments to reveal details of the surface structure of Pt-Sn nanoparticles. Physical Chemistry Chemical Physics, 2021, 23, 11738-11745.	1.3	3
59	3D X-Ray Characterization of Energy Storage and Conversion Devices. , 2021, , 513-544.		0
60	Multi-length scale characterization of compression on metal foam flow-field based fuel cells using X-ray computed tomography and neutron radiography. Energy Conversion and Management, 2021, 230, 113785.	4.4	19
61	Porous 3D graphene aerogel co-doped with nitrogen and sulfur for high-performance supercapacitors. Nanotechnology, 2021, 32, 195405.	1.3	12
62	Current Imbalance in Parallel Battery Strings Measured Using a Hall Effect Sensor Array. Energy Technology, 2021, 9, 2001014.	1.8	9
63	Acoustic time-of-flight imaging of polymer electrolyte membrane water electrolyzers to probe internal structure and flow characteristics. International Journal of Hydrogen Energy, 2021, 46, 11523-11535.	3.8	5
64	Multivalent Ion Batteries: Cathode Design for Aqueous Rechargeable Multivalent Ion Batteries: Challenges and Opportunities (Adv. Funct. Mater. 13/2021). Advanced Functional Materials, 2021, 31, 2170089.	7.8	1
65	Prevention of lithium-ion battery thermal runaway using polymer-substrate current collectors. Cell Reports Physical Science, 2021, 2, 100360.	2.8	22
66	A Multiscale X-Ray Tomography Study of the Cycled-Induced Degradation in Magnesium-Sulfur Batteries. Small Methods, 2021, 5, e2001193.	4.6	10
67	2021 roadmap on lithium sulfur batteries. JPhys Energy, 2021, 3, 031501.	2.3	74
68	Tracking lithium penetration in solid electrolytes in 3D by in-situ synchrotron X-ray computed tomography. Nano Energy, 2021, 82, 105744.	8.2	54
69	Insights on Flexible Zinc-Ion Batteries from Lab Research to Commercialization. Advanced Materials, 2021, 33, e2007548.	11.1	191
70	Optimisation of Mass Transport Parameters in a Polymer Electrolyte Membrane Electrolyser Using Factorial Design-of-Experiment. Frontiers in Energy Research, 2021, 9, .	1.2	6
71	Developments in Dilatometry for Characterisation of Electrochemical Devices. Batteries and Supercaps, 2021, 4, 1378-1396.	2.4	12
72	High-Density Lignin-Derived Carbon Nanofiber Supercapacitors with Enhanced Volumetric Energy Density. Advanced Science, 2021, 8, e2100016.	5.6	42

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73	Evaluation and realization of safer Mg-S battery: The decisive role of the electrolyte. <i>Nano Energy</i> , 2021, 83, 105832.	8.2	10
74	Zinc-Ion Batteries: Insights on Flexible Zinc-Ion Batteries from Lab Research to Commercialization (Adv.) <i>Tj ETQq0 0 0 rgBI /Overlock</i>	11.1	5
75	Electrochemical Impedance Spectroscopy for All-Solid-State Batteries: Theory, Methods and Future Outlook. <i>ChemElectroChem</i> , 2021, 8, 1930-1947.	1.7	176
76	Enhancing Hydrogen Evolution Electrocatalytic Performance in Neutral Media via Nitrogen and Iron Phosphide Interactions. <i>Small Science</i> , 2021, 1, 2100032.	5.8	24
77	Flexible all-solid-state supercapacitors based on PPy/rGO nanocomposite on cotton fabric. <i>Nanotechnology</i> , 2021, 32, 305401.	1.3	22
78	A novel fuel cell design for operando energy-dispersive x-ray absorption measurements. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 314002.	0.7	6
79	Microstructure analysis and image-based modelling of face masks for COVID-19 virus protection. <i>Communications Materials</i> , 2021, 2, .	2.9	30
80	Open-circuit dissolution of platinum from the cathode in polymer electrolyte membrane water electrolyzers. <i>Journal of Power Sources</i> , 2021, 498, 229937.	4.0	9
81	Recent advances in acoustic diagnostics for electrochemical power systems. <i>JPhys Energy</i> , 2021, 3, 032011.	2.3	20
82	High CO ₂ permeability in supported molten-salt membranes with highly dense and aligned pores produced by directional solidification. <i>Journal of Membrane Science</i> , 2021, 630, 119057.	4.1	8
83	<i>In Situ</i> Ultrasound Acoustic Measurement of the Lithium-Ion Battery Electrode Drying Process. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36605-36620.	4.0	18
84	Influence of Flow Field Design on Zinc Deposition and Performance in a Zinc-Iodide Flow Battery. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41563-41572.	4.0	18
85	Developments in Dilatometry for Characterisation of Electrochemical Devices. <i>Batteries and Supercaps</i> , 2021, 4, 1376-1377.	2.4	0
86	Iron, Nitrogen Co-Doped Carbon Spheres as Low Cost, Scalable Electrocatalysts for the Oxygen Reduction Reaction. <i>Advanced Functional Materials</i> , 2021, 31, 2102974.	7.8	35
87	Tuning the Linkers in Polymer-Based Cathodes to Realize High Sulfur Content and High-Performance Potassium-Sulfur Batteries. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18604-18613.	1.5	10
88	Engineering Catalyst Layers for Next-Generation Polymer Electrolyte Fuel Cells: A Review of Design, Materials, and Methods. <i>Advanced Energy Materials</i> , 2021, 11, 2101025.	10.2	85
89	Facile Fabrication of Robust Hydrogen Evolution Electrodes under High Current Densities via Pt@Cu Interactions. <i>Advanced Functional Materials</i> , 2021, 31, 2105579.	7.8	45
90	Characterizing Batteries by In Situ Electrochemical Atomic Force Microscopy: A Critical Review. <i>Advanced Energy Materials</i> , 2021, 11, 2101518.	10.2	40

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91	Pure Curcumin Spherulites from Impure Solutions <i>via</i> Nonclassical Crystallization. ACS Omega, 2021, 6, 23884-23900.	1.6	10
92	Scalable Sacrificial Templating to Increase Porosity and Platinum Utilisation in Graphene-Based Polymer Electrolyte Fuel Cell Electrodes. Nanomaterials, 2021, 11, 2530.	1.9	3
93	Neutron studies of Na-ion battery materials. JPhys Materials, 2021, 4, 042008.	1.8	5
94	Recovery of cobalt from lithium-ion batteries using fluidised cathode molten salt electrolysis. Electrochimica Acta, 2021, 391, 138846.	2.6	10
95	Inconsistent responses of cells on operating conditions in a 5 kW proton exchange membrane fuel cell stack. Electrochimica Acta, 2021, 391, 138925.	2.6	17
96	Sodium Superionic Conductors (NASICONs) as Cathode Materials for Sodium-Ion Batteries. Electrochemical Energy Reviews, 2021, 4, 793-823.	13.1	59
97	Lab-based X-ray micro-computed tomography coupled with machine-learning segmentation to investigate phosphoric acid leaching in high-temperature polymer electrolyte fuel cells. Journal of Power Sources, 2021, 509, 230347.	4.0	14
98	Dendrite suppression by anode polishing in zinc-ion batteries. Journal of Materials Chemistry A, 2021, 9, 15355-15362.	5.2	41
99	Oxygen evolution catalysts under proton exchange membrane conditions in a conventional three electrode cell <i>vs.</i> electrolyser device: a comparison study and a 3D-printed electrolyser for academic labs. Journal of Materials Chemistry A, 2021, 9, 9113-9123.	5.2	24
100	Cathode Design for Aqueous Rechargeable Multivalent Ion Batteries: Challenges and Opportunities. Advanced Functional Materials, 2021, 31, 2010445.	7.8	102
101	Supercapacitors: History, Theory, Emerging Technologies, and Applications. , 2021, , 417-449.		2
102	Multi-length scale microstructural design of lithium-ion battery electrodes for improved discharge rate performance. Energy and Environmental Science, 2021, 14, 5929-5946.	15.6	48
103	Investigation of a Biomass Hydrogel Electrolyte Naturally Stabilizing Cathodes for Zinc-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 745-754.	4.0	64
104	Rapid synthesis of supported single metal nanoparticles and effective removal of stabilizing ligands. Journal of Materials Chemistry A, 2021, 9, 24283-24289.	5.2	7
105	A New High: Cannabis as a budding source of carbon-based materials for electrochemical power sources. Current Opinion in Electrochemistry, 2021, , 100860.	2.5	0
106	Enhancing the Electrochemical Performance of Sodium-ion Batteries by Building Optimized NiS ₂ /NiSe ₂ Heterostructures. Small, 2021, 17, e2104186.	5.2	56
107	Electro-thermal mapping of polymer electrolyte membrane fuel cells with a fractal flow-field. Energy Conversion and Management, 2021, 250, 114924.	4.4	8
108	Rechargeable aqueous Zn-based energy storage devices. Joule, 2021, 5, 2845-2903.	11.7	201

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109	Nanoscale state-of-charge heterogeneities within polycrystalline nickel-rich layered oxide cathode materials. <i>Cell Reports Physical Science</i> , 2021, 2, 100647.	2.8	12
110	Design of Scalable, Next-Generation Thick Electrodes: Opportunities and Challenges. <i>ACS Nano</i> , 2021, 15, 18624-18632.	7.3	54
111	Design and synthesis of tremella-like Ni-Co-S flakes on co-coated cotton textile as high-performance electrode for flexible supercapacitor. <i>Journal of Alloys and Compounds</i> , 2020, 814, 151789.	2.8	43
112	Fe ₃ S ₄ nanoparticles for arterial inflammation therapy: Integration of magnetic hyperthermia and photothermal treatment. <i>Applied Materials Today</i> , 2020, 18, 100457.	2.3	25
113	Lignin-derived electrospun freestanding carbons as alternative electrodes for redox flow batteries. <i>Carbon</i> , 2020, 157, 847-856.	5.4	37
114	Fine structural changes of fluid catalytic catalysts and characterization of coke formed resulting from heavy oil devolatilization. <i>Applied Catalysis B: Environmental</i> , 2020, 263, 118329.	10.8	28
115	Vacancy engineering of group VI anions in NiCo ₂ A ₄ (A = O, S, Se) for efficient hydrogen production by weakening the shackles of hydronium ion. <i>Electrochimica Acta</i> , 2020, 333, 135515.	2.6	15
116	Room Temperature Synthesis of Phosphine-Capped Lead Bromide Perovskite Nanocrystals without Coordinating Solvents. <i>Particle and Particle Systems Characterization</i> , 2020, 37, 1900391.	1.2	27
117	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
118	Optimizing the architecture of lung-inspired fuel cells. <i>Chemical Engineering Science</i> , 2020, 215, 115375.	1.9	19
119	Enabling stable MnO ₂ matrix for aqueous zinc-ion battery cathodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22075-22082.	5.2	101
120	Increased Stability of Palladium-Iridium-Gold Electrocatalyst for the Hydrogen Oxidation Reaction in Polymer Electrolyte Membrane Fuel Cells. <i>Electroanalysis</i> , 2020, 32, 2893-2901.	1.5	2
121	The role of synthesis pathway on the microstructural characteristics of sulfur-carbon composites: X-ray imaging and electrochemistry in lithium battery. <i>Journal of Power Sources</i> , 2020, 472, 228424.	4.0	26
122	Operando Electrochemical Atomic Force Microscopy of Solid-Electrolyte Interphase Formation on Graphite Anodes: The Evolution of SEI Morphology and Mechanical Properties. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35132-35141.	4.0	65
123	Realizing optimal hydrogen evolution reaction properties via tuning phosphorous and transition metal interactions. <i>Green Energy and Environment</i> , 2020, 5, 506-512.	4.7	19
124	Probing Heterogeneity in Li-Ion Batteries with Coupled Multiscale Models of Electrochemistry and Thermal Transport using Tomographic Domains. <i>Journal of the Electrochemical Society</i> , 2020, 167, 110538.	1.3	27
125	Diagnosing Stagnant Gas Bubbles in a Polymer Electrolyte Membrane Water Electrolyser Using Acoustic Emission. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	10
126	Microstructural Evolution of Battery Electrodes During Calendaring. <i>Joule</i> , 2020, 4, 2746-2768.	11.7	95

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127	Using In-Situ Laboratory and Synchrotron-Based X-ray Diffraction for Lithium-Ion Batteries Characterization: A Review on Recent Developments. <i>Condensed Matter</i> , 2020, 5, 75.	0.8	37
128	Elucidating the Sodiation Mechanism in Hard Carbon by Operando Raman Spectroscopy. <i>ACS Applied Energy Materials</i> , 2020, 3, 7474-7484.	2.5	56
129	The Role of Bi-Polar Plate Design and the Start-Up Protocol in the Spatiotemporal Dynamics during Solid Oxide Fuel Cell Anode Reduction. <i>Energies</i> , 2020, 13, 3552.	1.6	4
130	Data for an Advanced Microstructural and Electrochemical Datasheet on 18650 Li-ion Batteries with Nickel-Rich NMC811 Cathodes and Graphite-Silicon Anodes. <i>Data in Brief</i> , 2020, 32, 106033.	0.5	11
131	An anti-aging polymer electrolyte for flexible rechargeable zinc-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22637-22644.	5.2	41
132	High-Performance Zinc-Air Batteries with Scalable Metal-Organic Frameworks and Platinum Carbon Black Bifunctional Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 42696-42703.	4.0	41
133	A universal pH range and a highly efficient Mo ₂ C-based electrocatalyst for the hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 19879-19886.	5.2	50
134	Study of H ₂ S Removal Capability from Simulated Biogas by Using Waste-Derived Adsorbent Materials. <i>Processes</i> , 2020, 8, 1030.	1.3	17
135	4D Bragg Edge Tomography of Directional Ice Templated Graphite Electrodes. <i>Journal of Imaging</i> , 2020, 6, 136.	1.7	8
136	Effect of extended short-circuiting in proton exchange membrane fuel cells. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5739-5746.	2.5	8
137	The Detection of Monoclinic Zirconia and Non-Uniform 3D Crystallographic Strain in a Re-Oxidized Ni-YSZ Solid Oxide Fuel Cell Anode. <i>Crystals</i> , 2020, 10, 941.	1.0	4
138	Identifying the Origins of Microstructural Defects Such as Cracking within Ni-Rich NMC811 Cathode Particles for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002655.	10.2	119
139	Rapid Preparation of Geometrically Optimal Battery Electrode Samples for Nano Scale X-ray Characterisation. <i>Journal of the Electrochemical Society</i> , 2020, 167, 060512.	1.3	7
140	X-ray Micro-Computed Tomography of Polymer Electrolyte Fuel Cells: What is the Representative Elementary Area?. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013545.	1.3	30
141	Correlative acoustic time-of-flight spectroscopy and X-ray imaging to investigate gas-induced delamination in lithium-ion pouch cells during thermal runaway. <i>Journal of Power Sources</i> , 2020, 470, 228039.	4.0	30
142	In situ visualization by X-Ray computed tomography on sulfur stabilization and lithium polysulfides immobilization in S@HCS/MnO cathode. <i>Energy Storage Materials</i> , 2020, 31, 164-171.	9.5	12
143	Exploring cycling induced crystallographic change in NMC with X-ray diffraction computed tomography. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 17814-17823.	1.3	28
144	Pore Network Modelling of Capillary Transport and Relative Diffusivity in Gas Diffusion Layers with Patterned Wettability. <i>Journal of the Electrochemical Society</i> , 2020, 167, 114512.	1.3	22

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145	Hydration state diagnosis in fractal flow-field based polymer electrolyte membrane fuel cells using acoustic emission analysis. <i>Energy Conversion and Management</i> , 2020, 220, 113083.	4.4	21
146	Investigating high-performance sulfurâ€metal nanocomposites for lithium batteries. <i>Sustainable Energy and Fuels</i> , 2020, 4, 2907-2923.	2.5	22
147	Theoretical transmissions for X-ray computed tomography studies of lithium-ion battery cathodes. <i>Materials and Design</i> , 2020, 191, 108585.	3.3	9
148	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
149	Probing the Structure-Performance Relationship of Lithium-Ion Battery Cathodes Using Pore-Networks Extracted from Three-Phase Tomograms. <i>Journal of the Electrochemical Society</i> , 2020, 167, 040528.	1.3	17
150	Nanoporous Carbons: Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbonâ€Dioxide, Hydrogen, Water, and Electric Charge (Adv.) <i>Tj ETQq010.2 rgBT /Overlock 1</i>	10.2	10
151	Realising the electrochemical stability of graphene: scalable synthesis of an ultra-durable platinum catalyst for the oxygen reduction reaction. <i>Nanoscale</i> , 2020, 12, 16113-16122.	2.8	11
152	Spatial dynamics of lithiation and lithium plating during high-rate operation of graphite electrodes. <i>Energy and Environmental Science</i> , 2020, 13, 2570-2584.	15.6	124
153	MoS ₂ /NiS core-shell structures for improved electrocatalytic process of hydrogen evolution. <i>Journal of Power Sources</i> , 2020, 472, 228497.	4.0	33
154	Hydrogen Evolution: The Role of Phosphate Group in Doped Cobalt Molybdate: Improved Electrocatalytic Hydrogen Evolution Performance (Adv. Sci. 12/2020). <i>Advanced Science</i> , 2020, 7, 2070067.	5.6	5
155	Defected vanadium bronzes as superb cathodes in aqueous zinc-ion batteries. <i>Nanoscale</i> , 2020, 12, 20638-20648.	2.8	61
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