Torsten Brezesinski

List of Publications by Year
in descending order

196 papers	18,140 citations	13865 67 h-index	12946 131 g-index
208 all docs	208 docs citations	208 times ranked	17344 citing authors

#	Article	IF	Citations
1	The interplay between (electro)chemical and (chemo)mechanical effects in the cycling performance of thiophosphate-based solid-state batteries. Materials Futures, 2022, 1, 015102.	8.4	40
2	Multiâ€Element Surface Coating of Layered Niâ€Rich Oxide Cathode Materials and Their Longâ€Term Cycling Performance in Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2022, 9, 2101100.	3.7	10
3	High-Entropy Polyanionic Lithium Superionic Conductors. , 2022, 4, 418-423.		27
4	Design of Ordered Mesoporous CeO₂â€“YSZ Nanocomposite Thin Films with Mixed Ionic/Electronic Conductivity via Surface Engineering. ACS Nano, 2022, 16, 3182-3193.	14.6	8
5	Single step synthesis of W-modified LiNiO₂ using an ammonium tungstate flux. Journal of Materials Chemistry A, 2022, 10, 7841-7855.	10.3	17
6	Advanced Nanoparticle Coatings for Stabilizing Layered Niâ€Rich Oxide Cathodes in Solidâ€State Batteries. Advanced Functional Materials, 2022, 32, .	14.9	45
7	A Quasiâ€Multinary Composite Coating on a Nickelâ€Rich NCM Cathode Material for Allâ€Solidâ€State Batteries. Batteries and Supercaps, 2022, 5, .	4.7	9
8	Tracing Low Amounts of Mg in the Doped Cathode Active Material LiNiO₂. Journal of the Electrochemical Society, 2022, 169, 030540.	2.9	15
9	Acoustic Emission Monitoring of High-Entropy Oxyfluoride Rock-Salt Cathodes during Battery Operation. Coatings, 2022, 12, 402.	2.6	8
10	On the role of surface carbonate species in determining the cycling performance of all-solid-state batteries. Materials Futures, 2022, 1, 023501.	8.4	17
11	Probing the Lithium Substructure and Ionic Conductivity of the Solid Electrolyte Li₄PS₄I. Inorganic Chemistry, 2022, 61, 5885-5890.	4.0	2
12	Materials Futuresâ€"an open access journal to serve the materials science community. Materials Futures, 2022, 1, 010201.	8.4	0
13	Oneâ€pot synthesis of highâ€capacity silicon anodes via onâ€copper growth of a semiconducting, porous polymer. Natural Sciences, 2022, 2, .	2.1	0
14	Resolving the Role of Configurational Entropy in Improving Cycling Performance of Multicomponent Hexacyanoferrate Cathodes for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2022, 32, .	14.9	37
15	In situ analysis of gas evolution in liquid- and solid-electrolyte-based batteries with current and next-generation cathode materials. Journal of Materials Research, 2022, 37, 3146-3168.	2.6	21
16	Advanced Nanoparticle Coatings for Stabilizing Layered Niâ€Rich Oxide Cathodes in Solidâ€State Batteries (Adv. Funct. Mater. 23/2022). Advanced Functional Materials, 2022, 32, .	14.9	2
17	(Digital Presentation) Modifying LiNiO₂ with W Via a Single Step Synthesis Route. ECS Meeting Abstracts, 2022, MA2022-01, 218-218.	0.0	0
18	High Entropy and Low Symmetry: Triclinic High-Entropy Molybdates. Inorganic Chemistry, 2021, 60, 115-123.	4.0	10

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19	Ordered mesoporous metal oxides for electrochemical applications: correlation between structure, electrical properties and device performance. Physical Chemistry Chemical Physics, 2021, 23, 10706-10735.	2.8	25
20	High-entropy energy materials: challenges and new opportunities. Energy and Environmental Science, 2021, 14, 2883-2905.	30.8	282
21	Effect of surface carbonates on the cyclability of LiNbO3-coated NCM622 in all-solid-state batteries with lithium thiophosphate electrolytes. Scientific Reports, 2021, 11, 5367.	3.3	21
22	Operando Characterization Techniques for Allâ€Solidâ€State Lithiumâ€Ion Batteries. Advanced Energy and Sustainability Research, 2021, 2, 2100004.	5.8	38
23	The Working Principle of a Li₂CO₃/LiNbO₃ Coating on NCM for Thiophosphate-Based All-Solid-State Batteries. Chemistry of Materials, 2021, 33, 2110-2125.	6.7	116
24	Design-of-experiments-guided optimization of slurry-cast cathodes for solid-state batteries. Cell Reports Physical Science, 2021, 2, 100465.	5.6	23
25	High Performance All-Solid-State Batteries with a Ni-Rich NCM Cathode Coated by Atomic Layer Deposition and Lithium Thiophosphate Solid Electrolyte. ACS Applied Energy Materials, 2021, 4, 7338-7345.	5.1	48
26	Influence of synthesis parameters on crystallization behavior and ionic conductivity of the Li4PS4I solid electrolyte. Scientific Reports, 2021, 11, 14073.	3.3	8
27	Highâ€Entropy Metalâ€“Organic Frameworks for Highly Reversible Sodium Storage. Advanced Materials, 2021, 33, e2101342.	21.0	97
28	Highâ€Entropy Metalâ€“Organic Frameworks for Highly Reversible Sodium Storage (Adv. Mater. 34/2021). Advanced Materials, 2021, 33, 2170269.	21.0	4
29	Cycling Performance and Limitations of LiNiO₂ in Solid-State Batteries. ACS Energy Letters, 2021, 6, 3020-3028.	17.4	39
30	Quasi-homogenous photocatalysis of quantum-sized Fe-doped TiO2 in optically transparent aqueous dispersions. Scientific Reports, 2021, 11, 17687.	3.3	22
31	Understanding the formation of antiphase boundaries in layered oxide cathode materials and their evolution upon electrochemical cycling. Matter, 2021, 4, 3953-3966.	10.0	20
32	Single versus poly-crystalline layered oxide cathode materials for solid-state battery applications - a short review article. Current Opinion in Electrochemistry, 2021, 31, 100877.	4.8	16
33	Operando acoustic emission monitoring of degradation processes in lithium-ion batteries with a high-entropy oxide anode. Scientific Reports, 2021, 11, 23381.	3.3	8
34	An <i>in situ</i> structural study on the synthesis and decomposition of LiNiO₂. Journal of Materials Chemistry A, 2020, 8, 1808-1820.	10.3	72
35	Influence of electronically conductive additives on the cycling performance of argyrodite-based all-solid-state batteries. RSC Advances, 2020, 10, 1114-1119.	3.6	50
36	Highly Reversible Sodiation of Tin in Glyme Electrolytes: The Critical Role of the Solid Electrolyte Interphase and Its Formation Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 3697-3708.	8.0	37

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37	Rational Design of Quasi-Zero-Strain NCM Cathode Materials for Minimizing Volume Change Effects in All-Solid-State Batteries. , 2020, 2, 84-88.		66
38	From LiNiO₂ to Li₂NiO₃: Synthesis, Structures and Electrochemical Mechanisms in Li-Rich Nickel Oxides. Chemistry of Materials, 2020, 32, 9211-9227.	6.7	28
39	Surface Modification Strategies for Improving the Cycling Performance of Niâ€Rich Cathode Materials. European Journal of Inorganic Chemistry, 2020, 2020, 3117-3130.	2.0	46
40	The Sound of Batteries: An Operando Acoustic Emission Study of the LiNiO 2 Cathode in Liâ€“Ion Cells. Batteries and Supercaps, 2020, 3, 965-965.	4.7	1
41	Lithium containing layered high entropy oxide structures. Scientific Reports, 2020, 10, 18430.	3.3	47
42	Investigations into the superionic glass phase of Li₄PS₄I for improving the stability of high-loading all-solid-state batteries. Inorganic Chemistry Frontiers, 2020, 7, 3953-3960.	6.0	18
43	Li₇GeS₅Brâ€"An Argyrodite Li-Ion Conductor Prepared by Mechanochemical Synthesis. Inorganic Chemistry, 2020, 59, 12954-12959.	4.0	17
44	<i>In Situ</i> Monitoring of Thermally Induced Effects in Nickel-Rich Layered Oxide Cathode Materials at the Atomic Level. ACS Applied Materials & Interfaces, 2020, 12, 57047-57054.	8.0	16
45	Li₂ZrO₃-Coated NCM622 for Application in Inorganic Solid-State Batteries: Role of Surface Carbonates in the Cycling Performance. ACS Applied Materials & Interfaces, 2020, 12, 57146-57154.	8.0	90
46	Tailoring the protonic conductivity of porous yttria-stabilized zirconia thin films by surface modification. Physical Chemistry Chemical Physics, 2020, 22, 11519-11528.	2.8	14
47	The Sound of Batteries: An Operando Acoustic Emission Study of the LiNiO₂ Cathode in Liâ€“Ion Cells. Batteries and Supercaps, 2020, 3, 1021-1027.	4.7	12
48	The effect of gallium substitution on the structure and electrochemical performance of LiNiO₂ in lithium-ion batteries. Materials Advances, 2020, 1, 639-647.	5.4	23
49	Enhancing the Electrochemical Performance of LiNi_{0.70}Co_{0.15}Mn_{0.15}O₂ Cathodes Using a Practical Solution-Based Al₂O₃ Coating. ACS Applied Materials & Interfaces, 2020, 12, 31392-31400.	8.0	57
50	Understanding the Origin of Higher Capacity for Ni-Based Disordered Rock-Salt Cathodes. Chemistry of Materials, 2020, 32, 3447-3461.	6.7	16
51	Kinetic Limitations in Cycled Nickel-Rich NCM Cathodes and Their Effect on the Phase Transformation Behavior. ACS Applied Energy Materials, 2020, 3, 2821-2827.	5.1	25
52	Gassing Behavior of Highâ€Entropy Oxide Anode and Oxyfluoride Cathode Probed Using Differential Electrochemical Mass Spectrometry. Batteries and Supercaps, 2020, 3, 361-369.	4.7	31
53	Gas Evolution in Lithium-Ion Batteries: Solid versus Liquid Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 20462-20468.	8.0	62
54	Spinel to Rock-Salt Transformation in High Entropy Oxides with Li Incorporation. Electrochem, 2020, 1, 60-74.	3.3	35

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55	Visualization of Light Elements using 4D STEM: The Layeredâ€toâ€Rock Salt Phase Transition in LiNiO₂ Cathode Material. Advanced Energy Materials, 2020, 10, 2001026.	19.5	43
56	Operando Gassing Studies of All-Solid-State Battery Cells. ECS Meeting Abstracts, 2020, MA2020-02, 890-890.	0.0	0
57	In Situ Studies for Understanding Intragranular Nanopore Evolution in Ni-rich Layered Oxide Cathode Material. Microscopy and Microanalysis, 2019, 25, 2032-2033.	0.4	0
58	Thin Films of Thermally Stable Ordered Mesoporous Rh₂O₃(I) for Visible-Light Photocatalysis and Humidity Sensing. ACS Applied Nano Materials, 2019, 2, 7126-7133.	5.0	9
59	Stabilizing Effect of a Hybrid Surface Coating on a Ni-Rich NCM Cathode Material in All-Solid-State Batteries. Chemistry of Materials, 2019, 31, 9664-9672.	6.7	174
60	Indirect state-of-charge determination of all-solid-state battery cells by X-ray diffraction. Chemical Communications, 2019, 55, 11223-11226.	4.1	25
61	The Role of Intragranular Nanopores in Capacity Fade of Nickel-Rich Layered Li(Ni_{1â€“<i>x</i>â€“<i>y</i>}Co_{<i>x</i>}Mn_{<i>y</i>})O₂ Cathode Materials. ACS Nano, 2019, 13, 10694-10704.	14.6	79
62	Investigation into Mechanical Degradation and Fatigue of High-Ni NCM Cathode Material: A Long-Term Cycling Study of Full Cells. ACS Applied Energy Materials, 2019, 2, 7375-7384.	5.1	106
63	Reversible control of magnetism: on the conversion of hydrated FeF₃ with Li to Fe and LiF. Journal of Materials Chemistry A, 2019, 7, 24005-24011.	10.3	6
64	General Synthesis of Ordered Mesoporous Rare-Earth Orthovanadate Thin Films and Their Use as Photocatalysts and Phosphors for Lighting Applications. ACS Applied Nano Materials, 2019, 2, 1063-1071.	5.0	19
65	Room temperature, liquid-phase Al₂O₃ surface coating approach for Ni-rich layered oxide cathode material. Chemical Communications, 2019, 55, 2174-2177.	4.1	79
66	High entropy oxides as anode material for Li-ion battery applications: A practical approach. Electrochemistry Communications, 2019, 100, 121-125.	4.7	125
67	Oxygen Activity in Li-Rich Disordered Rock-Salt Oxide and the Influence of LiNbO₃ Surface Modification on the Electrochemical Performance. Chemistry of Materials, 2019, 31, 4330-4340.	6.7	33
68	Chemical, Structural, and Electronic Aspects of Formation and Degradation Behavior on Different Length Scales of Niâ€Rich NCM and Liâ€Rich HEâ€NCM Cathode Materials in Liâ€Ion Batteries. Advanced Materials, 2019, 31, e1900985.	21.0	319
69	Multi-anionic and -cationic compounds: new high entropy materials for advanced Li-ion batteries. Energy and Environmental Science, 2019, 12, 2433-2442.	30.8	241
70	Highâ€Entropy Oxides: Fundamental Aspects and Electrochemical Properties. Advanced Materials, 2019, 31, e1806236.	21.0	412
71	Phase Transformation Behavior and Stability of LiNiO₂ Cathode Material for Liâ€Ion Batteries Obtained from Inâ€…Situ Gas Analysis and Operando Xâ€Ray Diffraction. ChemSusChem, 2019, 12, 2240-2250.	6.8	146
72	Effect of Low-Temperature Al2O3 ALD Coating on Ni-Rich Layered Oxide Composite Cathode on the Long-Term Cycling Performance of Lithium-Ion Batteries. Scientific Reports, 2019, 9, 5328.	3.3	91

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73	Robust Macroscopic Polarization of Block Copolymerâ€"Templated Mesoporous Perovskiteâ€Type Thinâ€Film Ferroelectrics. Advanced Electronic Materials, 2019, 5, 1800287.	5.1	3
74	Hin und zurÃ¼ck â€" die Entwicklung von LiNiO₂ als Kathodenaktivmaterial. Angewandte Chemie, 2019, 131, 10542-10569.	2.0	25
75	There and Back Againâ€"The Journey of LiNiO₂ as a Cathode Active Material. Angewandte Chemie - International Edition, 2019, 58, 10434-10458.	13.8	400
76	(Invited) Ordered Mesoporous Metal Oxide Thin Films: From Room Temperature Ferroelectrics to Tunable Magnetic Materials. ECS Meeting Abstracts, 2019, , .	0.0	0
77	Comparing Operando XRD and Dems to Investigate Metal-Substituted LiNiO2. ECS Meeting Abstracts, 2019, , .	0.0	0
78	Investigation into Mechanical Degradation of Lithium-Ion Batteries with Nickel-Rich Cathode Materials - A Long-Term Cycling Study. ECS Meeting Abstracts, 2019, , .	0.0	0
79	Artificial Composite Anode Comprising Highâ€Capacity Silicon and Carbonaceous Nanostructures for Long Cycle Life Lithiumâ€Ion Batteries. Batteries and Supercaps, 2018, 1, 27-32.	4.7	8
80	Volume Changes of Graphite Anodes Revisited: A Combined <i>Operando</i> X-ray Diffraction and <i>In Situ</i> Pressure Analysis Study. Journal of Physical Chemistry C, 2018, 122, 8829-8835.	3.1	256
81	Impact of Cathode Material Particle Size on the Capacity of Bulk-Type All-Solid-State Batteries. ACS Energy Letters, 2018, 3, 992-996.	17.4	201
82	Synthesis, structural characterization and magnetic properties of ordered mesoporous Pr_{1â^'x}Ca_xMnO₃ thin films. CrystEngComm, 2018, 20, 245-250.	2.6	4
83	Electrochemical Tuning of Magnetism in Ordered Mesoporous Transition-Metal Ferrite Films for Micromagnetic Actuation. ACS Applied Nano Materials, 2018, 1, 65-72.	5.0	24
84	Silicon Nanoparticles with a Polymer-Derived Carbon Shell for Improved Lithium-Ion Batteries: Investigation into Volume Expansion, Gas Evolution, and Particle Fracture. ACS Omega, 2018, 3, 16706-16713.	3.5	27
85	Differential Electrochemical Mass Spectrometry in Lithium Battery Research. , 2018, , 44-53.		4
86	Gas Evolution in All-Solid-State Battery Cells. ACS Energy Letters, 2018, 3, 2539-2543.	17.4	100
87	Origin of Carbon Dioxide Evolved during Cycling of Nickel-Rich Layered NCM Cathodes. ACS Applied Materials & Interfaces, 2018, 10, 38892-38899.	8.0	193
88	Ordered Mesoporous LiFe 5 O 8 Thinâ€Film Photoanodes for Water Splitting. ChemPhotoChem, 2018, 2, 1022-1026.	3.0	8
89	Molecular Surface Modification of NCM622 Cathode Material Using Organophosphates for Improved Li-Ion Battery Full-Cells. ACS Applied Materials & Interfaces, 2018, 10, 20487-20498.	8.0	76
90	Chemo-mechanical expansion of lithium electrode materials â€" on the route to mechanically optimized all-solid-state batteries. Energy and Environmental Science, 2018, 11, 2142-2158.	30.8	512

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91	High entropy oxides for reversible energy storage. Nature Communications, 2018, 9, 3400.	12.8	643
92	Impact of Cathode Material Particle Size and Applied Pressure on the Cycling Performance of All-Solid-State Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
93	Interfacial Stability of Argyrodite-Based Solid Electrolytes in All-Solid-State Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
94	Electrochemical Tuning of Ordered Mesoporous Oxides with Spinel and Perovskite Structures for Reversible Control of Magnetization. ECS Meeting Abstracts, 2018, , .	0.0	0
95	E-MRS spring meeting 2016 symposium AA: solution processing and properties of functional oxide thin films and nanostructures II. Journal of Sol-Gel Science and Technology, 2017, 81, 311-312.	2.4	0
96	Anisotropic Lattice Strain and Mechanical Degradation of High- and Low-Nickel NCM Cathode Materials for Li-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 3286-3294.	3.1	472
97	Improving the capacity of lithiumâ€“sulfur batteries by tailoring the polysulfide adsorption efficiency of hierarchical oxygen/nitrogen-functionalized carbon host materials. Physical Chemistry Chemical Physics, 2017, 19, 8349-8355.	2.8	24
98	Sustainable and surfactant-free high-throughput synthesis of highly dispersible zirconia nanocrystals. Journal of Materials Chemistry A, 2017, 5, 16296-16306.	10.3	8
99	Applying Capacitive Energy Storage for In Situ Manipulation of Magnetization in Ordered Mesoporous Perovskite-Type LSMO Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 22799-22807.	8.0	13
100	Electrochemical Cross-Talk Leading to Gas Evolution and Capacity Fade in LiNi_{0.5}Mn_{1.5}O₄/Graphite Full-Cells. Journal of Physical Chemistry C, 2017, 121, 211-216.	3.1	57
101	Between Scylla and Charybdis: Balancing Among Structural Stability and Energy Density of Layered NCM Cathode Materials for Advanced Lithium-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 26163-26171.	3.1	233
102	Charge-Transfer-Induced Lattice Collapse in Ni-Rich NCM Cathode Materials during Delithiation. Journal of Physical Chemistry C, 2017, 121, 24381-24388.	3.1	242
103	Embroidered Copper Microwire Current Collector for Improved Cycling Performance of Silicon Anodes in Lithium-Ion Batteries. Scientific Reports, 2017, 7, 13010.	3.3	12
104	The Critical Role of Fluoroethylene Carbonate in the Gassing of Silicon Anodes for Lithium-Ion Batteries. ACS Energy Letters, 2017, 2, 2228-2233.	17.4	97
105	High-Throughput in Situ Pressure Analysis of Lithium-Ion Batteries. Analytical Chemistry, 2017, 89, 8122-8128.	6.5	42
106	Template-Free Electrodeposition of Uniform and Highly Crystalline Tin Nanowires from Organic Solvents Using Unconventional Additives. Electrochimica Acta, 2017, 246, 1016-1022.	5.2	6
107	(Invited) Applying Energy Storage to Tune the Magnetism of Large-Pore Ordered Mesoporous Metal Oxide Thin Films. ECS Meeting Abstracts, 2017, , .	0.0	0
108	Microwave synthesis of high-quality and uniform 4 nm ZnFe₂O₄ nanocrystals for application in energy storage and nanomagnetics. Beilstein Journal of Nanotechnology, 2016, 7, 1350-1360.	2.8	32

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109	Mesoporous hollow carbon spheres for lithiumâ€“sulfur batteries: distribution of sulfur and electrochemical performance. Beilstein Journal of Nanotechnology, 2016, 7, 1229-1240.	2.8	28
110	Tuning Transition Metal Oxideâ€“Sulfur Interactions for Long Life Lithium Sulfur Batteries: The â€œGoldilocksâ€•Principle. Advanced Energy Materials, 2016, 6, 1501636.	19.5	623
111	Lithiumâ€Sulfur Batteries: Tuning Transition Metal Oxideâ€“Sulfur Interactions for Long Life Lithium Sulfur Batteries: The â€œGoldilocksâ€•Principle (Adv. Energy Mater. 6/2016). Advanced Energy Materials, 2016, 6, .	19.5	5
112	In situ and operando atomic force microscopy of high-capacity nano-silicon based electrodes for lithium-ion batteries. Nanoscale, 2016, 8, 14048-14056.	5.6	64
113	In situ tuning of magnetization via topotactic lithium insertion in ordered mesoporous lithium ferrite thin films. Journal of Materials Chemistry C, 2016, 4, 8889-8896.	5.5	18
114	Facile synthesis of micrometer-long antimony nanowires by template-free electrodeposition for next generation Li-ion batteries. Journal of Materials Chemistry A, 2016, 4, 12726-12729.	10.3	20
115	On the gassing behavior of lithium-ion batteries with NCM523 cathodes. Journal of Solid State Electrochemistry, 2016, 20, 2961-2967.	2.5	76
116	The critical role of lithium nitrate in the gas evolution of lithiumâ€“sulfur batteries. Energy and Environmental Science, 2016, 9, 2603-2608.	30.8	202
117	Hierarchical Carbon with High Nitrogen Doping Level: A Versatile Anode and Cathode Host Material for Long-Life Lithium-Ion and Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 10274-10282.	8.0	49
118	Gas Evolution in LiNi_{0.5}Mn_{1.5}O₄/Graphite Cells Studied In Operando by a Combination of Differential Electrochemical Mass Spectrometry, Neutron Imaging, and Pressure Measurements. Analytical Chemistry, 2016, 88, 2877-2883.	6.5	91
119	In Situ Characterization of Gassing Processes in Lithium-Ion Batteries By Dems-Deirs. ECS Meeting Abstracts, 2016, , .	0.0	0
120	A Link Between Lithium Diffusivity, Interplane Distance and Ni Redox State in Ni-Rich Ncm. ECS Meeting Abstracts, 2016, , .	0.0	0
121	Gas Evolution in Operating Lithium-Ion Batteries Studied In Situ by Neutron Imaging. Scientific Reports, 2015, 5, 15627.	3.3	104
122	Polymerâ€Templated Mesoporous Li₄Ti₅O₁₂ as a Highâ€Rate and Longâ€Life Anode Material for Rechargeable Liâ€Ion Batteries. ChemNanoMat, 2015, 1, 415-421.	2.8	22
123	Highâ€Performance Lithiumâ€“Sulfur Batteries using Yolkâ€“Shell Type Sulfurâ€“Silica Nanocomposite Particles with Raspberryâ€Like Morphology. Energy Technology, 2015, 3, 830-833.	3.8	15
124	Ionic Conductivity of Mesostructured Yttria-Stabilized Zirconia Thin Films with Cubic Pore Symmetryâ€"On the Influence of Water on the Surface Oxygen Ion Transport. ACS Applied Materials & Interfaces, 2015, 7, 11792-11801.	8.0	29
125	Ionic Liquid-Derived Nitrogen-Enriched Carbon/Sulfur Composite Cathodes with Hierarchical Microstructureâ€"A Step Toward Durable High-Energy and High-Performance Lithiumâ€“Sulfur Batteries. Chemistry of Materials, 2015, 27, 1674-1683.	6.7	76
126	Online Continuous Flow Differential Electrochemical Mass Spectrometry with a Realistic Battery Setup for High-Precision, Long-Term Cycling Tests. Analytical Chemistry, 2015, 87, 5878-5883.	6.5	89

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127	Template-Free Electrochemical Synthesis of High Aspect Ratio Sn Nanowires in Ionic Liquids: A General Route to Large-Area Metal and Semimetal Nanowire Arrays?. Chemistry of Materials, 2015, 27, 3830-3837.	6.7	38
128	Free-standing and binder-free highly N-doped carbon/sulfur cathodes with tailorable loading for high-areal-capacity lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2015, 3, 20482-20486.	10.3	46
129	Fair performance comparison of different carbon blacks in lithiumâ€“sulfur batteries with practical mass loadings â€“ Simple design competes with complex cathode architecture. Journal of Power Sources, 2015, 296, 454-461.	7.8	69
130	Simultaneous acquisition of differential electrochemical mass spectrometry and infrared spectroscopy data for in situ characterization of gas evolution reactions in lithium-ion batteries. Electrochemistry Communications, 2015, 60, 64-69.	4.7	56
131	Polymer-templated ordered large-pore mesoporous anataseâ€“rutile TiO2:Ta nanocomposite films: Microstructure, electrical conductivity, and photocatalytic and photoelectrochemical properties. Catalysis Today, 2014, 225, 55-63.	4.4	16
132	Large-Pore Mesoporous Ho3Fe5O12 Thin Films with a Strong Room-Temperature Perpendicular Magnetic Anisotropy by Solâ€“Gel Processing. Chemistry of Materials, 2014, 26, 2337-2343.	6.7	13
133	Simple cathode design for Liâ€“S batteries: cell performance and mechanistic insights by in operando X-ray diffraction. Physical Chemistry Chemical Physics, 2014, 16, 18765-18771.	2.8	55
134	Ordered Mesoporous Thin Film Ferroelectrics of Biaxially Textured Lead Zirconate Titanate (PZT) by Chemical Solution Deposition. Chemistry of Materials, 2014, 26, 2195-2202.	6.7	27
135	Large Magnetoresistance and Electrostatic Control of Magnetism in Ordered Mesoporous La_{1â€“<i>x</i>}Ca_{<i>x</i>}MnO₃ Thin Films. Chemistry of Materials, 2014, 26, 5745-5751.	6.7	24
136	Morphology, Microstructure, and Magnetic Properties of Ordered Large-Pore Mesoporous Cadmium Ferrite Thin Film Spin Glasses. Inorganic Chemistry, 2013, 52, 3744-3754.	4.0	38
137	Facile and General Synthesis of Thermally Stable Ordered Mesoporous Rare-Earth Oxide Ceramic Thin Films with Uniform Mid-Size to Large-Size Pores and Strong Crystalline Texture. Chemistry of Materials, 2013, 25, 4633-4642.	6.7	37
138	Toward Silicon Anodes for Next-Generation Lithium Ion Batteries: A Comparative Performance Study of Various Polymer Binders and Silicon Nanopowders. ACS Applied Materials & Interfaces, 2013, 5, 7299-7307.	8.0	192
139	Ordered Mesoporous <i>Î²</i>â€MgMoO₄ Thin Films for Lithiumâ€Ion Battery Applications. Small, 2013, 9, 2541-2544.	10.0	27
140	Room Temperature Magnetic Rare-Earth Iron Garnet Thin Films with Ordered Mesoporous Structure. Chemistry of Materials, 2013, 25, 2527-2537.	6.7	33
141	Defect Chemistry of Oxide Nanomaterials with High Surface Area: Ordered Mesoporous Thin Films of the Oxygen Storage Catalyst CeO₂â€“ZrO₂. ACS Nano, 2013, 7, 2999-3013.	14.6	85
142	Toward ordered mesoporous rare-earth sesquioxide thin films via polymer templating: high temperature stable C-type Er2O3 with finely-tunable crystallite sizes. RSC Advances, 2012, 2, 7053.	3.6	6
143	Nanocrystalline NaTaO3 thin film materials with ordered 3D mesoporous and nanopillar-like structures through PIB-b-PEO polymer templating: towards high-performance UV-light photocatalysts. RSC Advances, 2012, 2, 5130.	3.6	19
144	Morphology-Controlled Synthesis of Nanocrystalline Î·-Al₂O₃ Thin Films, Powders, Microbeads, and Nanofibers with Tunable Pore Sizes from Preformed Oligomeric Oxo-Hydroxo Building Blocks. Chemistry of Materials, 2012, 24, 486-494.	6.7	46

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145	Soft-templating synthesis of mesoporous magnetic CuFe2O4 thin films with ordered 3D honeycomb structure and partially inverted nanocrystalline spinel domains. Chemical Communications, 2012, 48, 4471.	4.1	81
146	Nanocrystalline NiMoO4 with an ordered mesoporous morphology as potential material for rechargeable thin film lithium batteries. Chemical Communications, 2012, 48, 6726.	4.1	125
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