Kristina EdstrÃ¶m

List of Publications by Year
in descending order

245 papers	16,903 citations	16451 64 h-index	19190 118 g-index
250 all docs	250 docs citations	250 times ranked	14409 citing authors

#	Article	IF	Citations
1	Ternary Ionogel Electrolytes Enable Quasiâ€Solidâ€State Potassium Dualâ€Ion Intercalation Batteries. Advanced Energy and Sustainability Research, 2022, 3, 2100122.	5.8	6
2	Face to Face at the Cathode Electrolyte Interphase: From Interface Features to Interphase Formation and Dynamics. Advanced Materials Interfaces, 2022, 9, .	3.7	38
3	A Roadmap for Transforming Research to Invent the Batteries of the Future Designed within the European Large Scale Research Initiative BATTERY 2030+. Advanced Energy Materials, 2022, 12, .	19.5	70
4	Concentrated LiFSIâ€“Ethylene Carbonate Electrolytes and Their Compatibility with High-Capacity and High-Voltage Electrodes. ACS Applied Energy Materials, 2022, 5, 585-595.	5.1	15
5	Accelerating Battery Characterization Using Neutron and Synchrotron Techniques: Toward a Multiâ€Modal and Multiâ€Scale Standardized Experimental Workflow. Advanced Energy Materials, 2022, 12, .	19.5	17
6	Rechargeable Batteries of the Futureâ€"The State of the Art from a BATTERY 2030+ Perspective. Advanced Energy Materials, 2022, 12, .	19.5	124
7	Synthesisâ€“structure relationships in Li- and Mn-rich layered oxides: phase evolution, superstructure ordering and stacking faults. Dalton Transactions, 2022, 51, 4435-4446.	3.3	8
8	Anionic Redox and Electrochemical Kinetics of the Na₂Mn₃O₇ Cathode Material for Sodium-Ion Batteries. Energy & Fuels, 2022, 36, 4015-4025.	5.1	11
9	Understanding Battery Interfaces by Combined Characterization and Simulation Approaches: Challenges and Perspectives. Advanced Energy Materials, 2022, 12, .	19.5	46
10	Perspectives on Iron Oxide-Based Materials with Carbon as Anodes for Li- and K-Ion Batteries. Nanomaterials, 2022, 12, 1436.	4.1	17
11	Editorial to the Special Issue: How to Reinvent the Ways to Invent the Batteries of the Future â€“ the Battery 2030+ Largeâ€Scale Research Initiative Roadmap. Advanced Energy Materials, 2022, 12, .	19.5	6
12	Nature of the Cathodeâ€“Electrolyte Interface in Highly Concentrated Electrolytes Used in Graphite Dual-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 3867-3880.	8.0	47
13	Synthetic Pathway Determines the Nonequilibrium Crystallography of Li- and Mn-Rich Layered Oxide Cathode Materials. ACS Applied Energy Materials, 2021, 4, 1924-1935.	5.1	15
14	Garnet-Poly(Îµ-caprolactone-<i>co</i>-trimethylene carbonate) Polymer-in-Ceramic Composite Electrolyte for All-Solid-State Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 2531-2542.	5.1	32
15	Toward Better and Smarter Batteries by Combining AI with Multisensory and Selfâ€Healing Approaches. Advanced Energy Materials, 2021, 11, 2100362.	19.5	32
16	Future Material Developments for Electric Vehicle Battery Cells Answering Growing Demands from an End-User Perspective. Energies, 2021, 14, 4223.	3.1	21
17	Probing Electrochemical Potential Differences over the Solid/Liquid Interface in Li-Ion Battery Model Systems. ACS Applied Materials & Interfaces, 2021, 13, 32989-32996.	8.0	6
18	A Lignosulfonate Binder for Hard Carbon Anodes in Sodium-Ion Batteries: A Comparative Study. ACS Sustainable Chemistry and Engineering, 2021, 9, 12708-12717.	6.7	10

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19	Influence of Synthesis Routes on the Crystallography, Morphology, and Electrochemistry of Li₂MnO₃. ACS Applied Materials & Interfaces, 2020, 12, 5939-5950.	8.0	20
20	Highly Concentrated LiTFSIâ€"EC Electrolytes for Lithium Metal Batteries. ACS Applied Energy Materials, 2020, 3, 200-207.	5.1	67
21	Sulfolaneâ€Based Ethylene Carbonateâ€Free Electrolytes for LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂â"Li₄Ti₅O₁₂ Batteries. Batteries and Supercaps, 2020, 3, 201-207.	4.7	12
22	Lithium-ion batteries â€" Current state of the art and anticipated developments. Journal of Power Sources, 2020, 479, 228708.	7.8	401
23	Direct <i>Operando</i> Observation of Double Layer Charging and Early Solid Electrolyte Interphase Formation in Li-Ion Battery Electrolytes. Journal of Physical Chemistry Letters, 2020, 11, 4119-4123.	4.6	38
24	How Mn/Ni Ordering Controls Electrochemical Performance in High-Voltage Spinel LiNi_{0.44}Mn_{1.56}O₄ with Fixed Oxygen Content. ACS Applied Energy Materials, 2020, 3, 6001-6013.	5.1	33
25	Stabilization of Li-Rich Disordered Rocksalt Oxyfluoride Cathodes by Particle Surface Modification. ACS Applied Energy Materials, 2020, 3, 5937-5948.	5.1	19
26	Influence of Electrolyte Additives on the Degradation of Li₂VO₂F Li-Rich Cathodes. Journal of Physical Chemistry C, 2020, 124, 12956-12967.	3.1	8
27	Understanding the Roles of Tris(trimethylsilyl) Phosphite (TMSPi) in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂ (NMC811)/Siliconâ€"Graphite (Siâ€"Gr) Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2020, 7, 2000277.	3.7	56
28	Elimination of Fluorination: The Influence of Fluorine-Free Electrolytes on the Performance of LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Siliconâ€"Graphite Li-Ion Battery Cells. ACS Sustainable Chemistry and Engineering, 2020, 8, 10041-10052.	6.7	35
29	Catalytically graphitized freestanding carbon foams for 3D Li-ion microbatteries. Journal of Power Sources Advances, 2020, 1, 100002.	5.1	5
30	Understanding the redox process upon electrochemical cycling of the P2-Na0.78Co1/2Mn1/3Ni1/6O2 electrode material for sodium-ion batteries. Communications Chemistry, 2020, 3, .	4.5	41
31	Micro versus Nano: Impact of Particle Size on the Flow Characteristics of Silicon Anode Slurries. Energy Technology, 2020, 8, 2000056.	3.8	22
32	Interactions and Transport in Highly Concentrated LiTFSIâ€based Electrolytes. ChemPhysChem, 2020, 21, 1166-1176.	2.1	25
33	Solid Electrolyte Interphase (SEI) Formation on the Graphite Anode in Electrolytes Containing the Anion Receptor Tris(hexafluoroisopropyl)borate (THFIPB). Journal of the Electrochemical Society, 2020, 167, 130504.	2.9	3
34	Tailoring the Microstructure and Electrochemical Performance of 3D Microbattery Electrodes Based on Carbon Foams. Energy Technology, 2019, 7, 1900797.	3.8	10
35	Probing a battery electrolyte drop with ambient pressure photoelectron spectroscopy. Nature Communications, 2019, 10, 3080.	12.8	41
36	On the Capacity Losses Seen for Optimized Nanoâ€Si Composite Electrodes in Liâ€Metal Halfâ€Cells. Advanced Energy Materials, 2019, 9, 1901608.	19.5	32

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37	Unraveling and Mitigating the Storage Instability of Fluoroethylene Carbonate-Containing LiPF₆ Electrolytes To Stabilize Lithium Metal Anodes for High-Temperature Rechargeable Batteries. ACS Applied Energy Materials, 2019, 2, 4925-4935.	5.1	49
38	Efficient BiVO₄ Photoanodes by Postsynthetic Treatment: Remarkable Improvements in Photoelectrochemical Performance from Facile Borate Modification. Angewandte Chemie - International Edition, 2019, 58, 19027-19033.	13.8	108
39	Challenges and development of composite solid-state electrolytes for high-performance lithium ion batteries. Journal of Power Sources, 2019, 441, 227175.	7.8	168
40	Challenges and perspectives for new material solutions in batteries. Solid State Communications, 2019, 303-304, 113733.	1.9	13
41	Efficient BiVO₄ Photoanodes by Postsynthetic Treatment: Remarkable Improvements in Photoelectrochemical Performance from Facile Borate Modification. Angewandte Chemie, 2019, 131, 19203-19209.	2.0	35
42	Manganese Hexacyanomanganate as a Positive Electrode for Nonaqueous Li-, Na-, and K-Ion Batteries. Journal of Physical Chemistry C, 2019, 123, 22040-22049.	3.1	16
43	Improved cycling stability in high-capacity Li-rich vanadium containing disordered rock salt oxyfluoride cathodes. Journal of Materials Chemistry A, 2019, 7, 21244-21253.	10.3	37
44	Redox-State-Dependent Interplay between Pendant Group and Conducting Polymer Backbone in Quinone-Based Conducting Redox Polymers for Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 7162-7170.	5.1	17
45	Temperature Dependence of Electrochemical Degradation in LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Li₄Ti₅O₁₂ Cells. Energy Technology, 2019, 7, 1900310.	3.8	5
46	Neutron Pair Distribution Function Study of FePO4 and LiFePO4. Chemistry of Materials, 2019, 31, 5024-5034.	6.7	11
47	Investigation of Dimethyl Carbonate and Propylene Carbonate Mixtures for LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂â€“Li₄Ti₅O₁₂ Cells. ChemElectroChem, 2019, 6, 3429-3436.	3.4	8
48	Double-sided conductive separators for lithium-metal batteries. Energy Storage Materials, 2019, 21, 464-473.	18.0	34
49	Degradation Mechanisms in Li₂VO₂F Li-Rich Disordered Rock-Salt Cathodes. Chemistry of Materials, 2019, 31, 6084-6096.	6.7	31
50	Cation Ordering and Oxygen Release in LiNi_{0.5â€“<i>x</i>}Mn_{1.5+<i>x</i>}O_{4â€“<i>y</i>} (LNMO): In Situ Neutron Diffraction and Performance in Li Ion Full Cells. ACS Applied Energy Materials, 2019, 2, 3323-3335.	5.1	39
51	Fast-charging effects on ageing for energy-optimized automotive LiNi1/3Mn1/3Co1/3O2/graphite prismatic lithium-ion cells. Journal of Power Sources, 2019, 422, 175-184.	7.8	86
52	Depth-dependent oxygen redox activity in lithium-rich layered oxide cathodes. Journal of Materials Chemistry A, 2019, 7, 25355-25368.	10.3	62
53	Polydopamine-based redox-active separators for lithium-ion batteries. Journal of Materiomics, 2019, 5, 204-213.	5.7	20
54	Sandwich-structured nano/micro fiber-based separators for lithium metal batteries. Nano Energy, 2019, 55, 316-326.	16.0	84

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55	Molybdenum Oxide Nanosheets with Tunable Plasmonic Resonance: Aqueous Exfoliation Synthesis and Charge Storage Applications. Advanced Functional Materials, 2019, 29, 1806699.	14.9	55
56	Ambient Pressure XPS Studies of Liquid Solid Interfaces in Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
57	Synthesis of Single Crystalline Ni-Rich NMC811 Cathode Materials and Improved Performance Enabled By Ultrathin Surface Coating Layer. ECS Meeting Abstracts, 2019, , .	0.0	1
58	(Invited) Design of the Separators for Li-Ion and Lithium Metal Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
59	(Invited) Solid State Electrochemistry and Future Battery Chemistries. ECS Meeting Abstracts, 2019, , .	0.0	0
60	Lithium Trapping in Microbatteries Based on Lithiumâ€•and Cu₂Oâ€Coated Copper Nanorods. ChemistrySelect, 2018, 3, 2311-2314.	1.5	8
61	Nanocellulose Modified Polyethylene Separators for Lithium Metal Batteries. Small, 2018, 14, e1704371.	10.0	130
62	Conducting polymer paper-derived separators for lithium metal batteries. Energy Storage Materials, 2018, 13, 283-292.	18.0	64
63	Sizeâ€Dependent Electrochemical Performance of Monolithic Anatase TiO₂ Nanotube Anodes for Sodiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 674-684.	3.4	18
64	Redoxâ€Active Separators for Lithiumâ€Ion Batteries. Advanced Science, 2018, 5, 1700663.	11.2	48
65	The Role of LiTDI Additive in LiNi_{1/3}Mn_{1/3}Co_{1/3}O₂/Graphite Lithium-Ion Batteries at Elevated Temperatures. Journal of the Electrochemical Society, 2018, 165, A40-A46.	2.9	16
66	Understanding the Capacity Loss in LiNi_{0.5}Mn_{1.5}O₄â€“Li₄Ti₅O₁₂ Lithium-Ion Cells at Ambient and Elevated Temperatures. Journal of Physical Chemistry C, 2018, 122, 11234-11248.	3.1	67
67	Manganese pyrosilicates as novel positive electrode materials for Na-ion batteries. Sustainable Energy and Fuels, 2018, 2, 941-945.	4.9	3
68	Critical evaluation of the stability of highly concentrated LiTFSI - Acetonitrile electrolytes vs. graphite, lithium metal and LiFePO4 electrodes. Journal of Power Sources, 2018, 384, 334-341.	7.8	41
69	On the P2-Na<i>_x</i>Co_{1â€“<i>y</i>}(Mn_{2/3}Ni_{1/3})<i>y</i>O₂ Cathode Materials for Sodium-Ion Batteries: Synthesis, Electrochemical Performance, and Redox Processes Occurring during the Electrochemical Cycling. ACS Applied Materials & Interfaces, 2018, 10, 488-501.	8.0	32
70	Toward Solid-State 3D-Microbatteries Using Functionalized Polycarbonate-Based Polymer Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 2407-2413.	8.0	25
71	Influence of state-of-charge in commercial LiNi 0.33 Mn 0.33 Co 0.33 O 2 /LiMn 2 O 4 -graphite cells analyzed by synchrotron-based photoelectron spectroscopy. Journal of Energy Storage, 2018, 15, 172-180.	8.1	13
72	A free standing Ruâ€“TiC nanowire array/carbon textile cathode with enhanced stability for Liâ€“O₂ batteries. Journal of Materials Chemistry A, 2018, 6, 23659-23668.	10.3	12

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73	Lightweight, Thin, and Flexible Silver Nanopaper Electrodes for Highâ€Capacity Dendriteâ€Free Sodium Metal Anodes. Advanced Functional Materials, 2018, 28, 1804038.	14.9	73
74	Conducting Polymer Paper-Derived Mesoporous 3D N-doped Carbon Current Collectors for Na and Li Metal Anodes: A Combined Experimental and Theoretical Study. Journal of Physical Chemistry C, 2018, 122, 23352-23363.	3.1	27
75	Towards high-voltage Li-ion batteries: Reversible cycling of graphite anodes and Li-ion batteries in adiponitrile-based electrolytes. Electrochimica Acta, 2018, 281, 299-311.	5.2	33
76	Multiscale Interfacial Strategy to Engineer Mixed Metal-Oxide Anodes toward Enhanced Cycling Efficiency. ACS Applied Materials & Interfaces, 2018, 10, 20095-20105.	8.0	5
77	Nanocellulose Structured Paper-Based Lithium Metal Batteries. ACS Applied Energy Materials, 2018, 1, 4341-4350.	5.1	45
78	Towards Li-Ion Batteries Operating at 80 Â°C: Ionic Liquid versus Conventional Liquid Electrolytes. Batteries, 2018, 4, 2.	4.5	14
79	Photoelectron Spectroscopic Evidence for Overlapping Redox Reactions for SnO₂ Electrodes in Lithium-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 4924-4936.	3.1	31
80	Adiponitrileâ€"Lithium Bis(trimethylsulfonyl)imide Solutions as Alkyl Carbonateâ€free Electrolytes for Li₄Ti₅O₁₂ (LTO)/LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂ (NMC) Liâ€Ion Batteries. ChemPhysChem, 2017, 18, 1333-1344.	2.1	44
81	LiTDI: A Highly Efficient Additive for Electrolyte Stabilization in Lithium-Ion Batteries. Chemistry of Materials, 2017, 29, 2254-2263.	6.7	69
82	Elevated Temperature Lithium-Ion Batteries Containing SnO₂Electrodes and LiTFSI-Pip₁₄TFSI Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2017, 164, A701-A708.	2.9	4
83	Ironâ€Based Electrodes Meet Waterâ€Based Preparation, Fluorineâ€Free Electrolyte and Binder: A Chance for More Sustainable Lithiumâ€Ion Batteries?. ChemSusChem, 2017, 10, 2431-2448.	6.8	32
84	Towards an Understanding of Li₂O₂ Evolution in Liâ€"O₂ Batteries: An Inâ€…Operando Synchrotron Xâ€ray Diffraction Study. ChemSusChem, 2017, 10, 1592-1599.	6.8	29
85	Dilithium 2-aminoterephthalate as a negative electrode material for lithium-ion batteries. Solid State Ionics, 2017, 307, 1-5.	2.7	12
86	Lithium trapping in alloy forming electrodes and current collectors for lithium based batteries. Energy and Environmental Science, 2017, 10, 1350-1357.	30.8	152
87	On the Electrochemical Properties and Interphase Composition of Graphite: PVdF-HFP Electrodes in Dependence of Binder Content. Journal of the Electrochemical Society, 2017, 164, A1765-A1772.	2.9	21
88	Different Shades of Li₄Ti₅O₁₂ Composites: The Impact of the Binder on Interface Layer Formation. ChemElectroChem, 2017, 4, 2683-2692.	3.4	14
89	Thickness difference induced pore structure variations in cellulosic separators for lithium-ion batteries. Cellulose, 2017, 24, 2903-2911.	4.9	53
90	Highly efficient Ru/MnO2 nano-catalysts for Li-O2 batteries: Quantitative analysis of catalytic Li2O2 decomposition by operando synchrotron X-ray diffraction. Journal of Power Sources, 2017, 352, 208-215.	7.8	16

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91	The Effect of the Fluoroethylene Carbonate Additive in LiNi_{0.5}Mn_{1.5}O₄-Li₄Ti₅O₁₂Lithium-Ion Cells. Journal of the Electrochemical Society, 2017, 164, A942-A948.	2.9	25
92	Surface Layer Evolution on Graphite During Electrochemical Sodium-tetraglyme Co-intercalation. ACS Applied Materials & Interfaces, 2017, 9, 12373-12381.	8.0	49
93	Investigation of the Structural and Electrochemical Properties of Mn₂Sb₃O₆Cl upon Reaction with Li Ions. Journal of Physical Chemistry C, 2017, 121, 5949-5958.	3.1	3
94	How the Negative Electrode Influences Interfacial and Electrochemical Properties of LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂Cathodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A3054-A3059.	2.9	67
95	A Water Based Synthesis of Ultrathin Hydrated Vanadium Pentoxide Nanosheets for Lithium Battery Application: Free Standing Electrodes or Conventionally Casted Electrodes?. Electrochimica Acta, 2017, 252, 254-260.	5.2	14
96	Overâ€Stoichiometric NbO₂ Nanoparticles for a High Energy and Power Density Lithium Microbattery. ChemNanoMat, 2017, 3, 646-655.	2.8	19
97	Oxygen redox reactions in Li ion battery electrodes studied by resonant inelastic X-ray scattering. Journal of Electron Spectroscopy and Related Phenomena, 2017, 221, 79-87.	1.7	7
98	Overlapping and rate controlling electrochemical reactions for tin(IV) oxide electrodes in lithium-ion batteries. Journal of Electroanalytical Chemistry, 2017, 797, 47-60.	3.8	14
99	Modelling the morphological background to capacity fade in Si-based lithium-ion batteries. Electrochimica Acta, 2017, 258, 755-763.	5.2	19
100	Breaking Down a Complex System: Interpreting PES Peak Positions for Cycled Li-Ion Battery Electrodes. Journal of Physical Chemistry C, 2017, 121, 27303-27312.	3.1	33
101	Passivation Layer and Cathodic Redox Reactions in Sodiumâ€Ion Batteries Probed by HAXPES. ChemSusChem, 2016, 9, 97-108.	6.8	64
102	Electric Potential Gradient at the Buried Interface between Lithium-Ion Battery Electrodes and the SEI Observed Using Photoelectron Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 1775-1780.	4.6	62
103	3-D binder-free graphene foam as a cathode for high capacity Liâ€"O₂ batteries. Journal of Materials Chemistry A, 2016, 4, 9767-9773.	10.3	30
104	Mesoporous Cladophora cellulose separators for lithium-ion batteries. Journal of Power Sources, 2016, 321, 185-192.	7.8	98
105	Electrode Based on Oxyphosphates as Anode Materials for High Energy Density Lithium-ion Batteries. Procedia Engineering, 2016, 138, 281-290.	1.2	2
106	Ni₃Sb₄O₆F₆and Its Electrochemical Behavior toward Lithiumâ€"A Combination of Conversion and Alloying Reactions. Chemistry of Materials, 2016, 28, 6520-6527.	6.7	7
107	Encasing Si particles within a versatile TiO2â^'xFx layer as an extremely reversible anode for high energy-density lithium-ion battery. Nano Energy, 2016, 30, 745-755.	16.0	33
108	Constraining Si Particles within Graphene Foam Monolith: Interfacial Modification for Highâ€Performance Li⁺ Storage and Flexible Integrated Configuration. Advanced Functional Materials, 2016, 26, 6797-6806.	14.9	82

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109	Boosting the thermal stability of emulsion-templated polymers via sulfonation: an efficient synthetic route to hierarchically porous carbon foams. ChemistrySelect, 2016, 1, 784-792.	1.5	14
110	A one-step water based strategy for synthesizing hydrated vanadium pentoxide nanosheets from VO₂(B) as free-standing electrodes for lithium battery applications. Journal of Materials Chemistry A, 2016, 4, 17988-18001.	10.3	38
111	A large format in operando wound cell for analysing the structural dynamics of lithium insertion materials. Journal of Power Sources, 2016, 336, 279-285.	7.8	16
112	Influence of inactive electrode components on degradation phenomena in nano-Si electrodes for Li-ion batteries. Journal of Power Sources, 2016, 325, 513-524.	7.8	54
113	SEI Formation and Interfacial Stability of a Si Electrode in a LiTDI-Salt Based Electrolyte with FEC and VC Additives for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 15758-15766.	8.0	105
114	Photoelectron Spectroscopy for Lithium Battery Interface Studies. Journal of the Electrochemical Society, 2016, 163, A178-A191.	2.9	109
115	Compatibility of microwave plasma chemical vapor deposition manufactured Si/C electrodes with new LiTDI-based electrolytes. Solid State Ionics, 2016, 286, 90-95.	2.7	9
116	Charge-compensation in 3d-transition-metal-oxide intercalation cathodes through the generation of localized electron holes on oxygen. Nature Chemistry, 2016, 8, 684-691.	13.6	898
117	Manganese in the SEI Layer of Li₄Ti₅O₁₂ Studied by Combined NEXAFS and HAXPES Techniques. Journal of Physical Chemistry C, 2016, 120, 3206-3213.	3.1	44
118	Insight into the processes controlling the electrochemical reactions of nanostructured iron oxide electrodes in Li- and Na-half cells. Electrochimica Acta, 2016, 194, 74-83.	5.2	12
119	Role of iron in Na 1.5Fe 0.5Ti 1.5(PO 4) 3/C as electrode material for Na-ion batteries studied by operando MÃ¶ssbauer spectroscopy. Hyperfine Interactions, 2016, 237, 1.	0.5	6
120	Superlithiation of Organic Electrode Materials: The Case of Dilithium Benzenedipropiolate. Chemistry of Materials, 2016, 28, 1920-1926.	6.7	109
121	The Liâ€"S battery: an investigation of redox shuttle and self-discharge behaviour with LiNO₃-containing electrolytes. RSC Advances, 2016, 6, 3632-3641.	3.6	80
122	A hard X-ray photoelectron spectroscopy study on the solid electrolyte interphase of a lithium 4,5-dicyano-2-(trifluoromethyl)imidazolide based electrolyte for Si-electrodes. Journal of Power Sources, 2016, 301, 105-112.	7.8	33
123	Electrochemical characterizations of Co0.5TiOPO4 as anode material for lithium-ion batteries. Solar Energy Materials and Solar Cells, 2016, 148, 44-51.	6.2	8
124	New electrochemical cells for operando neutron diffraction of battery materials. Acta Crystallographica Section A: Foundations and Advances, 2016, 72, s293-s293.	0.1	0
125	Recycled Poly(vinyl alcohol) Sponge for Carbon Encapsulation of Sizeâ€Tunable Tin Dioxide Nanocrystalline Composites. ChemSusChem, 2015, 8, 2084-2092.	6.8	7
126	An Organic Catalyst for Liâ€"O₂ Batteries: Dilithium Quinoneâ€1,4â€Dicarboxylate. ChemSusChem, 2015, 8, 2198-2203.	6.8	13

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127	Conducting Polymer Paperâ€Based Cathodes for Highâ€Arealâ€Capacity Lithiumâ€“Organic Batteries. Energy Technology, 2015, 3, 563-569.	3.8	21
128	At the polymer electrolyte interfaces: the role of the polymer host in interphase layer formation in Li-batteries. Journal of Materials Chemistry A, 2015, 3, 13994-14000.	10.3	101
129	Lithium salts for advanced lithium batteries: Liâ€“metal, Liâ€“O₂, and Liâ€“S. Energy and Environmental Science, 2015, 8, 1905-1922.	30.8	460
130	Flexible freestanding Cladophora nanocellulose paper based Si anodes for lithium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 14109-14115.	10.3	91
131	Hierarchical self-assembled structures based on nitrogen-doped carbon nanotubes as advanced negative electrodes for Li-ion batteries and 3D microbatteries. Journal of Power Sources, 2015, 279, 581-592.	7.8	41
132	Realization of high performance polycarbonate-based Li polymer batteries. Electrochemistry Communications, 2015, 52, 71-74.	4.7	84
133	Reduced graphene oxide for Liâ€“air batteries: The effect of oxidation time and reduction conditions for graphene oxide. Carbon, 2015, 85, 233-244.	10.3	78
134	On the electrochemistry of tin oxide coated tin electrodes in lithium-ion batteries. Electrochimica Acta, 2015, 179, 482-494.	5.2	21
135	Three-dimensional carbon foam supported tin oxide nanocrystallites with tunable size range: Sulfonate anchoring synthesis and high rate lithium storage properties. Journal of Power Sources, 2015, 294, 208-215.	7.8	28
136	Electrochemical fabrication and characterization of Cu/Cu₂O multi-layered micro and nanorods in Li-ion batteries. Nanoscale, 2015, 7, 13591-13604.	5.6	29
137	A high pressure x-ray photoelectron spectroscopy experimental method for characterization of solid-liquid interfaces demonstrated with a Li-ion battery system. Review of Scientific Instruments, 2015, 86, 044101.	1.3	34
138	Electronic and Structural Changes in Ni_{0.5}TiOPO₄ Li-Ion Battery Cells Upon First Lithiation and Delithiation, Studied by High-Energy X-ray Spectroscopies. Journal of Physical Chemistry C, 2015, 119, 9692-9704.	3.1	17
139	A General Method to Fabricate Free-Standing Electrodes: Sulfonate Directed Synthesis and their Li⁺ Storage Properties. Chemistry of Materials, 2015, 27, 3957-3965.	6.7	23
140	Improved Performance of the Silicon Anode for Li-Ion Batteries: Understanding the Surface Modification Mechanism of Fluoroethylene Carbonate as an Effective Electrolyte Additive. Chemistry of Materials, 2015, 27, 2591-2599.	6.7	494
141	Analysis of the Interphase on Carbon Black Formed in High Voltage Batteries. Journal of the Electrochemical Society, 2015, 162, A1289-A1296.	2.9	65
142	Visualising the problems with balancing lithiumâ€“sulfur batteries by â€œmappingâ€•internal resistance. Chemical Communications, 2015, 51, 16502-16505.	4.1	26
143	Iron Doping in Spinel NiMn₂O₄: Stabilization of the Mesoporous Cubic Phase and Kinetics Activation toward Highly Reversible Li⁺ Storage. Chemistry of Materials, 2015, 27, 7698-7709.	6.7	37
144	Depth profiling the solid electrolyte interphase on lithium titanate (Li4Ti5O12) using synchrotron-based photoelectron spectroscopy. Journal of Power Sources, 2015, 294, 173-179.	7.8	43

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145	Flash Joule heating for ductilization of metallic glasses. Nature Communications, 2015, 6, 7932.	12.8	66
146	Mechanisms and Performances of Na1.5Fe0.5Ti1.5(PO4)3/C Composite as Electrode Material for Na-Ion Batteries. Journal of Physical Chemistry C, 2015, 119, 25220-25234.	3.1	31
147	A stable graphite negative electrode for the lithiumâ€"sulfur battery. Chemical Communications, 2015, 51, 17100-17103.	4.1	48
148	Electrochemical Interfaces in Electrochemical Energy Storage Systems. Journal of the Electrochemical Society, 2015, 162, Y13-Y13.	2.9	2
149	Formation of tavorite-type LiFeSO4F followed by in situ X-ray diffraction. Journal of Power Sources, 2015, 298, 363-368.	7.8	5
150	A versatile photoelectron spectrometer for pressures up to 30 mbar. Review of Scientific Instruments, 2014, 85, 075119.	1.3	41
151	Towards more sustainable negative electrodes in Na-ion batteries via nanostructured iron oxide. Journal of Power Sources, 2014, 245, 967-978.	7.8	168
152	A MÃ¶ssbauer spectroscopy study of polyol synthesized tavorite LiFeSO4F. Hyperfine Interactions, 2014, 226, 229-236.	0.5	7
153	Influence of deposition temperature and amorphous carbon on microstructure and oxidation resistance of magnetron sputtered nanocomposite CrC films. Applied Surface Science, 2014, 305, 143-153.	6.1	43
154	New in-situ neutron diffraction cell for electrode materials. Journal of Power Sources, 2014, 248, 900-904.	7.8	42
155	Electrodeposition of Vanadium Oxide/Manganese Oxide Hybrid Thin Films on Nanostructured Aluminum Substrates. Journal of the Electrochemical Society, 2014, 161, D515-D521.	2.9	19
156	Electrode materials for sodium ion batteries: A cheaper solution for the energy storage. , 2014, , .		5
157	Porosity Blocking in Highly Porous Carbon Black by PVdF Binder and Its Implications for the Liâ€"S System. Journal of Physical Chemistry C, 2014, 118, 25890-25898.	3.1	95
158	Interface layer formation in solid polymer electrolyte lithium batteries: an XPS study. Journal of Materials Chemistry A, 2014, 2, 7256-7264.	10.3	296
159	The impact of size effects on the electrochemical behaviour of Cu2O-coated Cu nanopillars for advanced Li-ion microbatteries. Journal of Materials Chemistry A, 2014, 2, 9574.	10.3	52
160	The Buried Carbon/Solid Electrolyte Interphase in Li-ion Batteries Studied by Hard X-ray Photoelectron Spectroscopy. Electrochimica Acta, 2014, 138, 430-436.	5.2	62
161	Analysis of soluble intermediates in the lithiumâ€"sulfur battery by a simple in situ electrochemical probe. Electrochemistry Communications, 2014, 46, 91-93.	4.7	23
162	On the origin of the capacity fading for aluminium negative electrodes in Li-ion batteries. Journal of Power Sources, 2014, 269, 266-273.	7.8	38

#	Article	IF	Citations
163	Investigation of the Electrode/Electrolyte Interface of Fe₂O₃ Composite Electrodes: Li vs Na Batteries. Chemistry of Materials, 2014, 26, 5028-5041.	6.7	99
164	Pt/Î±-MnO 2 nanotube: A highly active electrocatalyst for Liâ€“O 2 battery. Nano Energy, 2014, 10, 19-27.	16.0	54
165	Environmentallyâ€Friendly Lithium Recycling From a Spent Organic Liâ€Ion Battery. ChemSusChem, 2014, 7, 2859-2867.	6.8	47
166	Nanosized LiFePO₄-decorated emulsion-templated carbon foam for 3D micro batteries: a study of structure and electrochemical performance. Nanoscale, 2014, 6, 8804-8813.	5.6	27
167	Influence of annealing temperature on the electrochemical and surface properties of the 5-V spinel cathode material LiCr0.2Ni0.4Mn1.4O4 synthesized by a solâ€“gel technique. Journal of Solid State Electrochemistry, 2014, 18, 2157-2166.	2.5	12
168	Identification of an Intermediate Phase, Li_{1/2}FeSO₄F, Formed during Electrochemical Cycling of <i>Tavorite</i> LiFeSO₄F. Chemistry of Materials, 2014, 26, 4620-4628.	6.7	13
169	Impact of the flame retardant additive triphenyl phosphate (TPP) on the performance of graphite/LiFePO4 cells in high power applications. Journal of Power Sources, 2014, 256, 430-439.	7.8	43
170	Aging of Electrode/Electrolyte Interfaces in LiFePO₄/Graphite Cells Cycled with and without PMS Additive. Journal of Physical Chemistry C, 2014, 118, 12649-12660.	3.1	17
171	Functional, water-soluble binders for improved capacity and stability of lithiumâ€“sulfur batteries. Journal of Power Sources, 2014, 264, 8-14.	7.8	108
172	Non-uniform aging of cycled commercial LiFePO4//graphite cylindrical cells revealed by post-mortem analysis. Journal of Power Sources, 2014, 257, 126-137.	7.8	179
173	On the electrophoretic and solâ€“gel deposition of active materials on aluminium rod current collectors for three-dimensional Li-ion micro-batteries. Thin Solid Films, 2014, 562, 63-69.	1.8	15
174	Polycarbonate-based solid polymer electrolytes for Li-ion batteries. Solid State Ionics, 2014, 262, 738-742.	2.7	199
175	Stability of organic Na-ion battery electrode materials: The case of disodium pyromellitic diimidate. Electrochemistry Communications, 2014, 45, 52-55.	4.7	60
176	Synthesis and characterization of a new layered cathode material for sodium ion batteries. Journal of Power Sources, 2014, 266, 275-281.	7.8	71
177	Electrochemical elaboration of electrodes and electrolytes for 3D structured batteries. Journal of Materials Chemistry A, 2013, 1, 9281.	10.3	37
178	Comparing aging of graphite/LiFePO 4 cells at 22ÂÂ°C and 55ÂÂ°C â€“ Electrochemical and photoelectron spectroscopy studies. Journal of Power Sources, 2013, 243, 290-298.	7.8	37
179	Understanding and Controlling the Surface Chemistry of LiFeSO₄F for an Enhanced Cathode Functionality. Chemistry of Materials, 2013, 25, 3020-3029.	6.7	47
180	Why PEO as a binder or polymer coating increases capacity in the Liâ€“S system. Chemical Communications, 2013, 49, 8531.	4.1	98

#	Article	IF	Citations
181	Emulsion-templated bicontinuous carbon network electrodes for use in 3D microstructured batteries. Journal of Materials Chemistry A, 2013, 1, 13750.	10.3	41
182	The Influence of PMS-Additive on the Electrode/Electrolyte Interfaces in LiFePO₄/Graphite Li-Ion Batteries. Journal of Physical Chemistry C, 2013, 117, 23476-23486.	3.1	53
183	Accelerated Electrochemical Decomposition of Li₂O₂ under X-ray Illumination. Journal of Physical Chemistry Letters, 2013, 4, 4045-4050.	4.6	11
184	High energy and power density TiO2 nanotube electrodes for 3D Li-ion microbatteries. Journal of Materials Chemistry A, 2013, 1, 8160.	10.3	101
185	The SEI layer formed on lithium metal in the presence of oxygen: A seldom considered component in the development of the Liâ€“O2 battery. Journal of Power Sources, 2013, 225, 40-45.	7.8	107
186	Design of a new lithium ion battery test cell for in-situ neutron diffraction measurements. Journal of Power Sources, 2013, 226, 249-255.	7.8	62
187	Consequences of air exposure on the lithiated graphite SEI. Electrochimica Acta, 2013, 105, 83-91.	5.2	86
188	Comparing anode and cathode electrode/electrolyte interface composition and morphology using soft and hard X-ray photoelectron spectroscopy. Electrochimica Acta, 2013, 97, 23-32.	5.2	277
189	Cation profiling of passive films on stainless steel formed in sulphuric and acetic acid by deconvolution of angle-resolved X-ray photoelectron spectra. Applied Surface Science, 2013, 284, 700-714.	6.1	22
190	Intercalation and conversion reactions in Ni0.5TiOPO4 Li-ion battery anode materials. Journal of Power Sources, 2013, 229, 265-271.	7.8	34
191	Improving the electrochemical performance of organic Li-ion battery electrodes. Chemical Communications, 2013, 49, 1945.	4.1	85
192	Role of the LiPF₆ Salt for the Long-Term Stability of Silicon Electrodes in Li-Ion Batteries â€" A Photoelectron Spectroscopy Study. Chemistry of Materials, 2013, 25, 394-404.	6.7	241
193	Surface Characterization of the Carbon Cathode and the Lithium Anode of Liâ€“O₂ Batteries Using LiClO₄ or LiBOB Salts. ACS Applied Materials & Interfaces, 2013, 5, 1333-1341.	8.0	66
194	Improved Performances of Nanosilicon Electrodes Using the Salt LiFSI: A Photoelectron Spectroscopy Study. Journal of the American Chemical Society, 2013, 135, 9829-9842.	13.7	275
195	Liâ€“O₂ Battery Degradation by Lithium Peroxide (Li₂O₂): A Model Study. Chemistry of Materials, 2013, 25, 77-84.	6.7	179
196	Electrodeposition of V2O5 On Nanostructured 3-D Aluminium Current Collectors for Li-Ion Microbatteries. ECS Meeting Abstracts, 2013, , .	0.0	0
197	XPS study of duplex stainless steel as a possible current collector in a Li-ion battery. Electrochimica Acta, 2012, 79, 82-94.	5.2	29
198	Electrochemical lithium ion intercalation in Li0.5Ni0.25TiOPO4 examined by in situ X-ray diffraction. Solid State Ionics, 2012, 225, 547-550.	2.7	8

#	Article	IF	Citations
199	Origin of the irreversible capacity of the Fe0.5TiOPO4 anode material. Solid State Ionics, 2012, 224, 15-20.	2.7	17
200	Nanosilicon Electrodes for Lithium-Ion Batteries: Interfacial Mechanisms Studied by Hard and Soft X-ray Photoelectron Spectroscopy. Chemistry of Materials, 2012, 24, 1107-1115.	6.7	445
201	The Cathode Surface Composition of a Cycled Liâ€“O₂ Battery: A Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2012, 116, 20673-20680.	3.1	61
202	Ether Based Electrolyte, LiB(CN)₄ Salt and Binder Degradation in the Liâ€“O₂ Battery Studied by Hard X-ray Photoelectron Spectroscopy (HAXPES). Journal of Physical Chemistry C, 2012, 116, 18597-18604.	3.1	106
203	Electrochemical behavior of LiNi1âˆ’yâˆ’zCoyMnzO2 probed through structural and magnetic properties. Journal of Applied Physics, 2012, 111, .	2.5	25
204	3D lithium ion batteriesâ€"from fundamentals to fabrication. Journal of Materials Chemistry, 2011, 21, 9876.	6.7	231
205	Effect of manganese on the structural and thermal stability of Li0.3Ni0.7-Co0.3âˆ’Mn2O2 electrode materials (y= 0 and 0.05). Solid State Ionics, 2011, 203, 37-41.	2.7	20
206	Influence of the cathode porosity on the discharge performance of the lithiumâ€“oxygen battery. Journal of Power Sources, 2011, 196, 9835-9838.	7.8	83
207	The electrochemical behaviour of the carbon-coated Ni0.5TiOPO4 electrode material. Journal of Power Sources, 2011, 196, 2819-2825.	7.8	25
208	Galvanostatic electrodeposition of aluminium nano-rods for Li-ion three-dimensional micro-battery current collectors. Electrochimica Acta, 2011, 56, 3203-3208.	5.2	55
209	Nondestructive Depth Profiling of the Solid Electrolyte Interphase on LiFePO₄ and Graphite Electrodes. ECS Transactions, 2010, 25, 201-210.	0.5	14
210	Effect of ethanol-assisted electrode fabrication on the performance of silicon anodes. Journal of Power Sources, 2010, 195, 5370-5373.	7.8	15
211	Electrodeposited Cu2Sb as anode material for 3-dimensional Li-ion microbatteries. Journal of Materials Research, 2010, 25, 1485-1491.	2.6	27
212	Magnetic order, aging, and spin frustration in a percolating spin system, LiNi0.8Co0.1Mn0.1O2. Journal of Applied Physics, 2010, 108, 083909.	2.5	6
213	Dimensionality crossover and frustrated spin dynamics on a triangular lattice. Physical Review B, 2010, 81, .	3.2	6
214	Synthesis and characterization of carbon-coated Li0.5Ni0.25TiOPO4 anode material. Electrochimica Acta, 2009, 54, 5531-5536.	5.2	17
215	A delithiated LiNi0.65Co0.25Mn0.10O2 electrode material: A structural, magnetic and electrochemical study. Electrochimica Acta, 2009, 54, 3211-3217.	5.2	24
216	Self-Supported Three-Dimensional Nanoelectrodes for Microbattery Applications. Nano Letters, 2009, 9, 3230-3233.	9.1	226

#	Article	IF	Citations
217	Thin films of Cu2Sb and Cu9Sb2 as anode materials in Li-ion batteries. Electrochimica Acta, 2008, 53, 7226-7234.	5.2	45
218	Effect of the synthesis temperature on the structure and electrochemical behaviour of the LiNi0.65Co0.25Mn0.1O2 positive electrode material. Solid State Ionics, 2008, 178, 1668-1675.	2.7	27
219	Direct electrodeposition of aluminium nano-rods. Electrochemistry Communications, 2008, 10, 1467-1470.	4.7	86
220	Electrodeposited Sb and Sb/Sb2O3Nanoparticle Coatings as Anode Materials for Li-Ion Batteries. Chemistry of Materials, 2007, 19, 1170-1180.	6.7	171
221	Recent findings and prospects in the field of pure metals as negative electrodes for Li-ion batteries. Journal of Materials Chemistry, 2007, 17, 3759.	6.7	681
222	Electrodeposition and electrochemical characterisation of thick and thin coatings of Sb and Sb/Sb2O3 particles for Li-ion battery anodes. Electrochimica Acta, 2007, 53, 1062-1073.	5.2	39
223	How dynamic is the SEI?. Journal of Power Sources, 2007, 174, 970-975.	7.8	234
224	Surface characterization and stability phenomena in Li2FeSiO4studied by PES/XPS. Journal of Materials Chemistry, 2006, 16, 3483-3488.	6.7	106
225	Lithium Insertion into Vanadium Oxide Nanotubes:Â Electrochemical and Structural Aspects. Chemistry of Materials, 2006, 18, 495-503.	6.7	84
226	A new look at the solid electrolyte interphase on graphite anodes in Li-ion batteries. Journal of Power Sources, 2006, 153, 380-384.	7.8	472
227	Structural transformations in lithiated Mn2Sb electrodes probed by MÃ¶ssbauer spectroscopy and X-ray diffraction. Hyperfine Interactions, 2006, 167, 759-765.	0.5	4
228	THE CATHODE-ELECTROLYTE INTERFACE IN A Li-ION BATTERY. , 2004, , 337-364.		561
229	The cathodeâ€“electrolyte interface in the Li-ion battery. Electrochimica Acta, 2004, 50, 397-403.	5.2	783
230	Solid electrolyte interphase on graphite Li-ion battery anodes studied by soft X-ray spectroscopy. Physical Chemistry Chemical Physics, 2004, 6, 4185-4189.	2.8	83
231	Structural Characterization of Layered LixNi0.5Mn0.5O2 (0 < x â‰ 2) Oxide Electrodes for Li Batteries.. ChemInform, 2003, 34, no.	0.0	0
232	Electrochemically lithiated graphite characterised by photoelectron spectroscopy. Journal of Power Sources, 2003, 119-121, 522-527.	7.8	256
233	Redox Behavior of Vanadium Oxide Nanotubes As Studied by X-ray Photoelectron Spectroscopy and Soft X-ray Absorption Spectroscopy. Chemistry of Materials, 2003, 15, 3227-3232.	6.7	54
234	Infrared and in situ119Sn MÃ¶ssbauer study of lithiated tin borate glasses. Journal of Materials Chemistry, 2002, 12, 2965-2970.	6.7	11

#	Article	IF	Citations
235	Neutron-scattering studies on carbon anode materials used in lithium-ion batteries. Applied Physics A: Materials Science and Processing, 2002, 74, s1028-s1030.	2.3	15
236	The influence of lithium salt on the interfacial reactions controlling the thermal stability of graphite anodes. Electrochimica Acta, 2002, 47, 1885-1898.	5.2	259
237	Influence of carbon black and binder on Li-ion batteries. Journal of Power Sources, 2001, 101, 1-9.	7.8	200
238	Hyperfine Parameters of Î·â€²-Cu6Sn5 and Li2CuSn. Hyperfine Interactions, 2001, 136/137, 555-560.	0.5	6
239	The magnetic structure in K+ Î²-ferrite. Physica B: Condensed Matter, 2000, 276-278, 746-747.	2.7	0
240	The crystal and magnetic structure of nonstoichiometric K+ Î²-ferrite. Journal of Magnetism and Magnetic Materials, 2000, 212, 347-354.	2.3	11
241	Characterisation of the ambient and elevated temperature performance of a graphite electrode. Journal of Power Sources, 1999, 81-82, 8-12.	7.8	82
242	Crystal structure and charge compensation mechanisms in a barium potassium Î²-ferrite. Journal of Materials Chemistry, 1995, 5, 995-998.	6.7	4
243	Phase Transitions in CsH3(SeO3)2and CsD3(SeO3)2. Japanese Journal of Applied Physics, 1985, 24, 379.	1.5	3
244	Thermal expansion coefficients of NH4ReO4and NH4IO4down to 58 K. Journal of Chemical Physics, 1985, 82, 1611-1612.	3.0	10
245	Solid Electrolyte Interphase (SEI) of Water-Processed Graphite Electrodes Examined in a 65 mAh Full Cell Configuration. ACS Applied Energy Materials, 0, , .	5.1	8