Amy C Marschilok

List of Publications by Year
in descending order

277 papers	8,730 citations	47 h-index (47006)	79 g-index (64796)
290 all docs	290 docs citations	290 times ranked	8198 citing authors

#	Article	IF	Citations
1	Reversible epitaxial electrodeposition of metals in battery anodes. Science, 2019, 366, 645-648.	12.6	1,097
2	Cathode materials for magnesium and magnesium-ion based batteries. Coordination Chemistry Reviews, 2015, 287, 15-27.	18.8	341
3	Batteries used to power implantable biomedical devices. Electrochimica Acta, 2012, 84, 155-164.	5.2	293
4	A Tunable 3D Nanostructured Conductive Gel Framework Electrode for Highâ€Performance Lithium Ion Batteries. Advanced Materials, 2017, 29, 1603922.	21.0	175
5	Regulating electrodeposition morphology in high-capacity aluminium and zinc battery anodes using interfacial metalâ€"substrate bonding. Nature Energy, 2021, 6, 398-406.	39.5	169
6	Spontaneous and field-induced crystallographic reorientation of metal electrodeposits at battery anodes. Science Advances, 2020, 6, eabb1122.	10.3	143
7	Multiscale Understanding and Architecture Design of High Energy/Power Lithiumâ€Ion Battery Electrodes. Advanced Energy Materials, 2021, 11, 2000808.	19.5	143
8	Transition-Metal Complexes Containing trans-Spanning Diphosphine Ligands. Chemical Reviews, 2001, 101, 1031-1066.	47.7	138
9	Nanostructured Conductive Polymer Gels as a General Framework Material To Improve Electrochemical Performance of Cathode Materials in Li-Ion Batteries. Nano Letters, 2017, 17, 1906-1914.	9.1	131
10	In situ visualization of Li/Ag ₂ VP ₂ O ₈ batteries revealing rate-dependent discharge mechanism. Science, 2015, 347, 149-154.	12.6	106
11	Promoting Transport Kinetics in Li-Ion Battery with Aligned Porous Electrode Architectures. Nano Letters, 2019, 19, 8255-8261.	9.1	104
12	Synthesis of cryptomelane type Î±-MnO₂(K_xMn₈O₁₆) cathode materials with tunable K⁺content: the role of tunnel cation concentration on electrochemistry. Journal of Materials Chemistry A, 2017, 5, 16914-16928.	10.3	91
13	From Fundamental Understanding to Engineering Design of Highâ€Performance Thick Electrodes for Scalable Energyâ€Storage Systems. Advanced Materials, 2021, 33, e2101275.	21.0	89
14	Nanocrystalline iron oxide based electroactive materials in lithium ion batteries: the critical role of crystallite size, morphology, and electrode heterostructure on battery relevant electrochemistry. Inorganic Chemistry Frontiers, 2016, 3, 26-40.	6.0	83
15	Structural Defects of Silver Hollandite, Ag_{<i>x</i>}Mn₈O_{<i>y</i>,} Nanorods: Dramatic Impact on Electrochemistry. ACS Nano, 2015, 9, 8430-8439.	14.6	81
16	SWNT Anchored with Carboxylated Polythiophene â€œLinksâ€•on High-Capacity Li-Ion Battery Anode Materials. Journal of the American Chemical Society, 2018, 140, 5666-5669.	13.7	80
17	Magnesium-ion battery-relevant electrochemistry of MgMn₂O₄: crystallite size effects and the notable role of electrolyte water content. Chemical Communications, 2017, 53, 3665-3668.	4.1	79
18	Electrochemical Reduction of Silver Vanadium Phosphorus Oxide, Ag₂VO₂PO₄: The Formation of Electrically Conductive Metallic Silver Nanoparticles. Chemistry of Materials, 2009, 21, 4934-4939.	6.7	78

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19	Progress towards high-power Li/CF_xbatteries: electrode architectures using carbon nanotubes with CF_x. Physical Chemistry Chemical Physics, 2015, 17, 22504-22518.	2.8	76
20	Structural and Electrochemical Characteristics of Ca-Doped â€œFlower-likeâ€• Li₄Ti₅O₁₂Motifs as High-Rate Anode Materials for Lithium-Ion Batteries. Chemistry of Materials, 2018, 30, 671-684.	6.7	76
21	Insights into Ionic Transport and Structural Changes in Magnetite during Multipleâ€Electron Transfer Reactions. Advanced Energy Materials, 2016, 6, 1502471.	19.5	72
22	Quantitative temporally and spatially resolved X-ray fluorescence microprobe characterization of the manganese dissolution-deposition mechanism in aqueous Zn/Î±-MnO₂ batteries. Energy and Environmental Science, 2020, 13, 4322-4333.	30.8	72
23	Understanding Thickness-Dependent Transport Kinetics in Nanosheet-Based Battery Electrodes. Chemistry of Materials, 2020, 32, 1684-1692.	6.7	68
24	Evaporationâ€Induced Vertical Alignment Enabling Directional Ion Transport in a 2Dâ€Nanosheetâ€Based Battery Electrode. Advanced Materials, 2020, 32, e1907941.	21.0	66
25	Tunable Porous Electrode Architectures for Enhanced Li-Ion Storage Kinetics in Thick Electrodes. Nano Letters, 2021, 21, 5896-5904.	9.1	66
26	Investigation of Î±-MnO₂ Tunneled Structures as Model Cation Hosts for Energy Storage. Accounts of Chemical Research, 2018, 51, 575-582.	15.6	64
27	Interaction of CuS and Sulfur in Li-S Battery System. Journal of the Electrochemical Society, 2015, 162, A2834-A2839.	2.9	62
28	Probing the Li Insertion Mechanism of ZnFe₂O₄ in Li-Ion Batteries: A Combined X-Ray Diffraction, Extended X-Ray Absorption Fine Structure, and Density Functional Theory Study. Chemistry of Materials, 2017, 29, 4282-4292.	6.7	62
29	Two-Dimensional Holey Nanoarchitectures Created by Confined Self-Assembly of Nanoparticles <i>via</i> Block Copolymers: From Synthesis to Energy Storage Property. ACS Nano, 2018, 12, 820-828.	14.6	62
30	Electron/Ion Transport Enhancer in High Capacity Li-Ion Battery Anodes. Chemistry of Materials, 2016, 28, 6689-6697.	6.7	60
31	Interaction of TiS₂and Sulfur in Li-S Battery System. Journal of the Electrochemical Society, 2017, 164, A1291-A1297.	2.9	60
32	Ionic Liquid Hybrid Electrolytes for Lithium-Ion Batteries: A Key Role of the Separatorâ€“Electrolyte Interface in Battery Electrochemistry. ACS Applied Materials & Interfaces, 2015, 7, 11724-11731.	8.0	59
33	Synthesis and characterization of sodium vanadium oxide gels: the effects of water (n) and sodium (x) content on the electrochemistry of NaxV2O5Â·nH2O. Physical Chemistry Chemical Physics, 2011, 13, 18047.	2.8	58
34	Unraveling the Dissolutionâ€Mediated Reaction Mechanism of Î±â€MnO₂ Cathodes for Aqueous Znâ€Ion Batteries. Small, 2020, 16, e2005406.	10.0	58
35	Multi-Stage Structural Transformations in Zero-Strain Lithium Titanate Unveiled by <i>in Situ</i> X-ray Absorption Fingerprints. Journal of the American Chemical Society, 2017, 139, 16591-16603.	13.7	57
36	Peering into Batteries: Electrochemical Insight Through In Situ and Operando Methods over Multiple Length Scales. Joule, 2021, 5, 77-88.	24.0	57

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37	Morphological and Chemical Tuning of High-Energy-Density Metal Oxides for Lithium Ion Battery Electrode Applications. ACS Energy Letters, 2017, 2, 1465-1478.	17.4	56
38	Effective recycling of manganese oxide cathodes for lithium based batteries. Green Chemistry, 2016, 18, 3414-3421.	9.0	55
39	Size dependent behavior of Fe₃O₄crystals during electrochemical (de)lithiation: an in situ X-ray diffraction, ex situ X-ray absorption spectroscopy, transmission electron microscopy and theoretical investigation. Physical Chemistry Chemical Physics, 2017, 19, 20867-20880.	2.8	54
40	Gradient Design for Highâ€Energy and Highâ€Power Batteries. Advanced Materials, 2022, 34, .	21.0	53
41	Visualization of lithium-ion transport and phase evolution within and between manganese oxide nanorods. Nature Communications, 2017, 8, 15400.	12.8	52
42	Lithiation Mechanism of Tunnelâ€Structured MnO₂ Electrode Investigated by In Situ Transmission Electron Microscopy. Advanced Materials, 2017, 29, 1703186.	21.0	52
43	Low-Tortuosity Thick Electrodes with Active Materials Gradient Design for Enhanced Energy Storage. ACS Nano, 2022, 16, 4805-4812.	14.6	52
44	Electrochemical reduction of silver vanadium phosphorous oxide, Ag2VO2PO4: Silver metal deposition and associated increase in electrical conductivity. Journal of Power Sources, 2010, 195, 6839-6846.	7.8	51
45	Carbon nanotube substrate electrodes for lightweight, long-life rechargeable batteries. Energy and Environmental Science, 2011, 4, 2943.	30.8	51
46	Battery Electrolytes Based on Unsaturated Ring Ionic Liquids: Conductivity and Electrochemical Stability. Journal of the Electrochemical Society, 2013, 160, A1399-A1405.	2.9	51
47	Carbon Nanotube Web with Carboxylated Polythiophene â€œAssistâ€•for High-Performance Battery Electrodes. ACS Nano, 2018, 12, 3126-3139.	14.6	51
48	Crystallite Size Control and Resulting Electrochemistry of Magnetite, Fe[sub 3]O[sub 4]. Electrochemical and Solid-State Letters, 2009, 12, A91.	2.2	49
49	Enhanced Performance of â€œFlowerâ€likeâ€•Li₄Ti₅O₁₂ Motifs as Anode Materials for Highâ€Rate Lithiumâ€Ion Batteries. ChemSusChem, 2015, 8, 3304-3313.	6.8	49
50	Ultrahigh-Capacity and Scalable Architected Battery Electrodes <i>via</i> Tortuosity Modulation. ACS Nano, 2021, 15, 19109-19118.	14.6	48
51	A kinetics and equilibrium study of vanadium dissolution from vanadium oxides and phosphates in battery electrolytes: Possible impacts on ICD battery performance. Journal of Power Sources, 2013, 231, 219-225.	7.8	47
52	Toward Uniformly Dispersed Battery Electrode Composite Materials: Characteristics and Performance. ACS Applied Materials & Interfaces, 2016, 8, 3452-3463.	8.0	47
53	Nanocrystalline Magnetite: Synthetic Crystallite Size Control and Resulting Magnetic and Electrochemical Properties. Journal of the Electrochemical Society, 2010, 157, A1158.	2.9	46
54	Interaction of FeS₂and Sulfur in Li-S Battery System. Journal of the Electrochemical Society, 2017, 164, A6039-A6046.	2.9	46

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55	Dispersion of Nanocrystalline Fe₃O₄ within Composite Electrodes: Insights on Battery-Related Electrochemistry. ACS Applied Materials & Interfaces, 2016, 8, 11418-11430.	8.0	45
56	A first principles study of spinel ZnFe₂O₄ for electrode materials in lithium-ion batteries. Physical Chemistry Chemical Physics, 2017, 19, 26322-26329.	2.8	45
57	Synthesis, Structural Characterization, and Electronic Structure of Single-Crystalline CuxV2O5 Nanowires. Inorganic Chemistry, 2009, 48, 3145-3152.	4.0	44
58	Synthetic Control of Composition and Crystallite Size of Silver Hollandite, Ag_{<i>x</i>}Mn₈O₁₆: Impact on Electrochemistry. ACS Applied Materials & Interfaces, 2012, 4, 5547-5554.	8.0	44
59	Modeling the Mesoscale Transport of Lithium-Magnetite Electrodes Using Insight from Discharge and Voltage Recovery Experiments. Journal of the Electrochemical Society, 2015, 162, A2817-A2826.	2.9	44
60	Preparation and Electrochemistry of Silver Vanadium Phosphorous Oxide, Ag[sub 2]VO[sub 2]PO[sub 4]. Electrochemical and Solid-State Letters, 2009, 12, A5.	2.2	43
61	Energy dispersive X-ray diffraction of lithiumâ€“silver vanadium phosphorous oxide cells: in situ cathode depth profiling of an electrochemical reductionâ€“displacement reaction. Energy and Environmental Science, 2013, 6, 1465.	30.8	43
62	2D Cross Sectional Analysis and Associated Electrochemistry of Composite Electrodes Containing Dispersed Agglomerates of Nanocrystalline Magnetite, Fe₃O₄. ACS Applied Materials & Interfaces, 2015, 7, 13457-13466.	8.0	43
63	Unveiling the dimensionality effect of conductive fillers in thick battery electrodes for high-energy storage systems. Applied Physics Reviews, 2020, 7, .	11.3	43
64	Holy Grails in Chemistry: Investigating and Understanding Fast Electron/Cation Coupled Transport within Inorganic Ionic Matrices. Accounts of Chemical Research, 2017, 50, 544-548.	15.6	42
65	Synthesis and Characterization of CuFe₂O₄ Nano/Submicron Wireâ€“Carbon Nanotube Composites as Binder-free Anodes for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 8770-8785.	8.0	42
66	Ex Situ and Operando XRD and XAS Analysis of MoS₂: A Lithiation Study of Bulk and Nanosheet Materials. ACS Applied Energy Materials, 2019, 2, 7635-7646.	5.1	42
67	Investigation of Structural Evolution of Li_{1.1}V₃O₈ by <i>In Situ</i> X-ray Diffraction and Density Functional Theory Calculations. Chemistry of Materials, 2017, 29, 2364-2373.	6.7	40
68	An X-ray Absorption Spectroscopy Study of the Cathodic Discharge of Ag₂VO₂PO₄: Geometric and Electronic Structure Characterization of Intermediate phases and Mechanistic Insights. Journal of Physical Chemistry C, 2011, 115, 14437-14447.	3.1	39
69	Investigating the Complex Chemistry of Functional Energy Storage Systems: The Need for an Integrative, Multiscale (Molecular to Mesoscale) Perspective. ACS Central Science, 2016, 2, 380-387.	11.3	39
70	M_xMn₈O₁₆ (M = Ag or K) as promising cathode materials for secondary Mg based batteries: the role of the cation M. Chemical Communications, 2016, 52, 4088-4091.	4.1	39
71	Silver-Containing Î±-MnO₂ Nanorods: Electrochemistry in Na-Based Battery Systems. ACS Applied Materials & Interfaces, 2017, 9, 4333-4342.	8.0	39
72	Size-dependent kinetics during non-equilibrium lithiation of nano-sized zinc ferrite. Nature Communications, 2019, 10, 93.	12.8	39

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73	Investigation of Solid Electrolyte Interphase Layer Formation and Electrochemical Reversibility of Magnetite, Fe₃O₄, Electrodes: A Combined X-ray Absorption Spectroscopy and X-ray Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2018, 122, 14257-14271.	3.1	37
74	Probing Sources of Capacity Fade in LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂ (NMC622): An <i>Operando</i> XRD Study of Li/NMC622 Batteries during Extended Cycling. Journal of Physical Chemistry C, 2020, 124, 8119-8128.	3.1	37
75	New Insights into the Reaction Mechanism of Sodium Vanadate for an Aqueous Zn Ion Battery. Chemistry of Materials, 2020, 32, 2053-2060.	6.7	37
76	Gradient Architecture Design in Scalable Porous Battery Electrodes. Nano Letters, 2022, 22, 2521-2528.	9.1	37
77	Revealing and Rationalizing the Rich Polytypism of Todorokite MnO₂. Journal of the American Chemical Society, 2018, 140, 6961-6968.	13.7	36
78	Systems-level investigation of aqueous batteries for understanding the benefit of water-in-salt electrolyte by synchrotron nanoimaging. Science Advances, 2020, 6, eaay7129.	10.3	35
79	Electrochemical discharge of nanocrystalline magnetite: structure analysis using X-ray diffraction and X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2013, 15, 18539.	2.8	33
80	Variation in the iron oxidation states of magnetite nanocrystals as a function of crystallite size: The impact on electrochemical capacity. Electrochimica Acta, 2013, 94, 320-326.	5.2	33
81	Tunnel Structured Î±-MnO₂with Different Tunnel Cations (H⁺, K⁺,) Tj ETQq1 1 0.784314 rgBT /O Electrochemistry. Journal of the Electrochemical Society, 2017, 164, A1983-A1990.	2.9	33
82	Achieving Stable Molybdenum Oxide Cathodes for Aqueous Zincâ€Ion Batteries in Waterâ€inâ€Salt Electrolyte. Advanced Materials Interfaces, 2021, 8, 2002080.	3.7	33
83	Synthesis and Electrochemistry of Silver Hollandite. Electrochemical and Solid-State Letters, 2010, 13, A98.	2.2	32
84	Effect of Carbon and Binder on High Sulfur Loading Electrode for Li-S Battery Technology. Electrochimica Acta, 2017, 235, 399-408.	5.2	32
85	Understanding aggregation hindered Li-ion transport in transition metal oxide at mesoscale. Energy Storage Materials, 2019, 19, 439-445.	18.0	32
86	Anode Overpotential Control via Interfacial Modification: Inhibition of Lithium Plating on Graphite Anodes. ACS Applied Materials & Interfaces, 2019, 11, 46864-46874.	8.0	32
87	Nonplanar Electrode Architectures for Ultrahigh Areal Capacity Batteries. ACS Energy Letters, 2019, 4, 271-275.	17.4	32
88	Building Efficient Ion Pathway in Highly Densified Thick Electrodes with High Gravimetric and Volumetric Energy Densities. Nano Letters, 2021, 21, 9339-9346.	9.1	31
89	Silver vanadium phosphorous oxide, Ag2VO2PO4: Chimie douce preparation and resulting lithium cell electrochemistry. Journal of Power Sources, 2011, 196, 6781-6787.	7.8	30
90	Correlating Titania Nanostructured Morphologies with Performance as Anode Materials for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2016, 4, 6299-6312.	6.7	29

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91	Lithiation of Magnetite (Fe₃O₄): Analysis Using Isothermal Microcalorimetry and Operando X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 10316-10326.	3.1	29
92	Battery electrolytes based on saturated ring ionic liquids: Physical and electrochemical properties. Electrochimica Acta, 2013, 109, 27-32.	5.2	28
93	Communicationâ€"Sol-Gel Synthesized Magnesium Vanadium Oxide, Mg_xV₂O₅Â· nH₂O: The Role of Structural Mg²⁺on Battery Performance. Journal of the Electrochemical Society, 2016, 163, A1941-A1943.	2.9	28
94	Effect of Electrolyte on High Sulfur Loading Li-S Batteries. Journal of the Electrochemical Society, 2018, 165, A416-A423.	2.9	28
95	Insights into Reactivity of Silicon Negative Electrodes: Analysis Using Isothermal Microcalorimetry. ACS Applied Materials & Interfaces, 2019, 11, 37567-37577.	8.0	28
96	Multi-electron transfer enabled by topotactic reaction in magnetite. Nature Communications, 2019, 10, 1972.	12.8	28
97	Discharging Behavior of Hollandite Î±-MnO₂ in a Hydrated Zinc-Ion Battery. ACS Applied Materials & Interfaces, 2021, 13, 59937-59949.	8.0	28
98	Advanced lithium batteries for implantable medical devices: mechanistic study of SVO cathode synthesis. Journal of Power Sources, 2003, 119-121, 973-978.	7.8	27
99	Nickel-rich Nickel Manganese Cobalt (NMC622) Cathode Lithiation Mechanism and Extended Cycling Effects Using <i>Operando</i> X-ray Absorption Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 58-73.	3.1	27
100	Toward the Understanding of the Reaction Mechanism of Zn/MnO₂ Batteries Using Non-alkaline Aqueous Electrolytes. Chemistry of Materials, 2021, 33, 7283-7289.	6.7	27
101	Synthetic control of composition and crystallite size of silver ferrite composites: profound electrochemistry impacts. Chemical Communications, 2015, 51, 5120-5123.	4.1	26
102	Deliberate modification of the solid electrolyte interphase (SEI) during lithiation of magnetite, Fe₃O₄: impact on electrochemistry. Chemical Communications, 2017, 53, 13145-13148.	4.1	26
103	Energetics of Lithium Insertion into Magnetite, Defective Magnetite, and Maghemite. Chemistry of Materials, 2018, 30, 7922-7937.	6.7	26
104	Defect Control in the Synthesis of 2â€‰D MoS₂ Nanosheets: Polysulfide Trapping in Composite Sulfur Cathodes for Liâ€"S Batteries. ChemSusChem, 2020, 13, 1517-1528.	6.8	26
105	The Electrochemistry of Silver Hollandite Nanorods, Ag_xMn₈O₁₆: Enhancement of Electrochemical Battery Performance via Dimensional and Compositional Control. Journal of the Electrochemical Society, 2013, 160, A3090-A3094.	2.9	25
106	Visualization of structural evolution and phase distribution of a lithium vanadium oxide (Li_{1.1}V₃O₈) electrode via an operando and in situ energy dispersive X-ray diffraction technique. Physical Chemistry Chemical Physics, 2017, 19, 14160-14169.	2.8	25
107	Supervised Learning of Synthetic Big Data for Liâ€Ion Battery Degradation Diagnosis. Batteries and Supercaps, 2022, 5, .	4.7	25
108	AgxVOPO4: A demonstration of the dependence of battery-related electrochemical properties of silver vanadium phosphorous oxides on Ag/V ratios. Journal of Power Sources, 2011, 196, 3325-3330.	7.8	24

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109	Essential Role of Spinel ZnFe₂O₄ Surfaces during Lithiation. ACS Applied Materials & Interfaces, 2018, 10, 35623-35630.	8.0	24
110	Energy dispersive X-ray diffraction (EDXRD) for operando materials characterization within batteries. Physical Chemistry Chemical Physics, 2020, 22, 20972-20989.	2.8	24
111	In situ profiling of lithium/Ag₂VP₂O₈primary batteries using energy dispersive X-ray diffraction. Physical Chemistry Chemical Physics, 2014, 16, 9138-9147.	2.8	23
112	Thick Electrode Design for Facile Electron and Ion Transport: Architectures, Advanced Characterization, and Modeling. Accounts of Materials Research, 2022, 3, 472-483.	11.7	23
113	Impact of Multifunctional Bimetallic Materials on Lithium Battery Electrochemistry. Accounts of Chemical Research, 2016, 49, 1864-1872.	15.6	21
114	Redox chemistry of a binary transition metal oxide (AB₂O₄): a study of the Cu²⁺/Cu⁰ and Fe³⁺/Fe⁰ interconversions observed upon lithiation in a CuFe₂O₄ battery using X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2016, 18, 16930-16940.	2.8	21
115	The Electrochemistry of Fe₃O₄/Polypyrrole Composite Electrodes in Lithium-Ion Cells: The Role of Polypyrrole in Capacity Retention. Journal of the Electrochemical Society, 2017, 164, A6260-A6267.	2.9	21
116	Silver-Containing Î±-MnO₂ÂNanorods: Electrochemistry in Rechargeable Aqueous Zn-MnO₂ Batteries. Journal of the Electrochemical Society, 2019, 166, A3575-A3584.	2.9	21
117	Silver vanadium oxide and silver vanadium phosphorous oxide dissolution kinetics: a mechanistic study with possible impact on future ICD battery lifetimes. Dalton Transactions, 2013, 42, 13981.	3.3	20
118	Toward Environmentally Friendly Lithium Sulfur Batteries: Probing the Role of Electrode Design in MoS2-Containing Liâ€“S Batteries with a Green Electrolyte. ACS Sustainable Chemistry and Engineering, 2019, 7, 5209-5222.	6.7	20
119	Electrochemical reduction of an Ag₂VO₂PO₄particle: dramatic increase of local electronic conductivity. Physical Chemistry Chemical Physics, 2015, 17, 11204-11210.	2.8	19
120	Probing Titanium Disulfide-Sulfur Composite Materials for Li-S Batteries via In Situ X-ray Diffraction (XRD). Journal of the Electrochemical Society, 2017, 164, A897-A901.	2.9	19
121	Isothermal Microcalorimetry: Insight into the Impact of Crystallite Size and Agglomeration on the Lithiation of Magnetite, Fe₃O₄. ACS Applied Materials & Interfaces, 2019, 11, 7074-7086.	8.0	19
122	Solutionâ€Based, Anionâ€Doping of Li₄Ti₅O₁₂ Nanoflowers for Lithiumâ€Ion Battery Applications. Chemistry - A European Journal, 2020, 26, 9389-9402.	3.3	19
123	Remarkable Spectator Ligand Effect on the Rate Constant of Ligand Substitution of (Aqua)ruthenium(II) Complexes. Journal of the American Chemical Society, 2001, 123, 8780-8784.	13.7	18
124	Metalâ€“Air Electrochemical Cells: Silverâ€“Polymerâ€“Carbon Composite Air Electrodes. Electrochemical and Solid-State Letters, 2010, 13, A162.	2.2	18
125	Tuning Conjugated Polymers for Binder Applications in High-Capacity Magnetite Anodes. ACS Applied Energy Materials, 2019, 2, 7584-7593.	5.1	18
126	Potassiumâ€Based Î±â€Manganese Dioxide Nanofiber Binderâ€Free Selfâ€Supporting Electrodes: A Design Strategy for High Energy Density Batteries. Energy Technology, 2016, 4, 1358-1368.	3.8	17

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127	Discharge, Relaxation, and Charge Model for the Lithium Trivanadate Electrode: Reactions, Phase Change, and Transport. Journal of the Electrochemical Society, 2016, 163, A2890-A2898.	2.9	17
128	Electrodes for Nonaqueous Oxygen Reduction Based upon Conductive Polymer-Silver Composites. Journal of the Electrochemical Society, 2011, 158, A223.	2.9	16
129	Silver Vanadium Phosphorous Oxide, Ag0.48VOPO4: Exploration as a Cathode Material in Primary and Secondary Battery Applications. Journal of the Electrochemical Society, 2012, 159, A1690-A1695.	2.9	16
130	Carbon nanotubeâ€“metal oxide composite electrodes for secondary lithium-based batteries. Journal of Composite Materials, 2013, 47, 41-49.	2.4	16
131	Mapping the Anode Surface-Electrolyte Interphase: Investigating a Life Limiting Process of Lithium Primary Batteries. ACS Applied Materials & Interfaces, 2015, 7, 5429-5437.	8.0	16
132	Operando Study of LiV₃O₈Cathode: Coupling EDXRD Measurements to Simulations. Journal of the Electrochemical Society, 2018, 165, A371-A379.	2.9	16
133	High capacity Li-ion battery anodes: Impact of crystallite size, surface chemistry and PEG-coating. Electrochimica Acta, 2018, 260, 235-245.	5.2	16
134	Optimal electrode-scale design of Li-ion electrodes: A general correlation. Energy Storage Materials, 2021, 39, 176-185.	18.0	16
135	Silver vanadium diphosphate Ag2VP2O8: Electrochemistry and characterization of reduced material providing mechanistic insights. Journal of Solid State Chemistry, 2013, 200, 232-240.	2.9	15
136	Probing enhanced lithium-ion transport kinetics in 2D holey nanoarchitectured electrodes. Nano Futures, 2018, 2, 035008.	2.2	15
137	Ionic liquid hybrids: Progress toward non-corrosive electrolytes with high-voltage oxidation stability for magnesium-ion based batteries. Electrochimica Acta, 2016, 219, 267-276.	5.2	14
138	Understanding the Effect of Preparative Approaches in the Formation of â€œFlower-likeâ€• Li4Ti5O12â€"Multiwalled Carbon Nanotube Composite Motifs with Performance as High-Rate Anode Materials for Li-Ion Battery Applications. Journal of the Electrochemical Society, 2017, 164, A524-A534.	2.9	14
139	Hybrid Ag₂VO₂PO₄/CF_xas a High Capacity and Energy Cathode for Primary Batteries. Journal of the Electrochemical Society, 2017, 164, A2457-A2467.	2.9	14
140	Unveiling the Structural Evolution of Ag_{1.2}Mn₈O₁₆ under Coulombically Controlled (De)Lithiation. Chemistry of Materials, 2018, 30, 366-375.	6.7	14
141	Atomic Scale Account of the Surface Effect on Ionic Transport in Silver Hollandite. Chemistry of Materials, 2018, 30, 6124-6133.	6.7	14
142	Rationalization of Diversity in Spinel MgFe₂O₄ Surfaces. Advanced Materials Interfaces, 2019, 6, 1901218.	3.7	14
143	Transition Metal Substitution of Hollandite Î±-MnO₂: Enhanced Potential and Structural Stability on Lithiation from First-Principles Calculation. Journal of Physical Chemistry C, 2019, 123, 25042-25051.	3.1	14
144	Carbon structure/function relationships: Characterization and electrochemistry of carbon nanofibers. Journal of Power Sources, 2006, 157, 543-549.	7.8	13

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145	Electrochemical reduction of Ag₂VP₂O₈composite electrodes visualized via in situ energy dispersive X-ray diffraction (EDXRD): unexpected conductive additive effects. Journal of Materials Chemistry A, 2015, 3, 18027-18035.	10.3	13
146	Structural and silver/vanadium ratio effects on silver vanadium phosphorous oxide solution formation kinetics: Impact on battery electrochemistry. Physical Chemistry Chemical Physics, 2015, 17, 2034-2042.	2.8	13
147	Synthesis of Copper Birnessite, Cu_xMnO_yÂ·nH₂O with Crystallite Size Control: Impact of Crystallite Size on Electrochemistry. Journal of the Electrochemical Society, 2016, 163, A281-A285.	2.9	13
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