Bryan D Mccloskey

List of Publications by Year
in descending order

161 papers	21,141 citations	15504 65 h-index	9589 142 g-index
182 all docs	182 docs citations	182 times ranked	15160 citing authors

#	Article	IF	Citations
1	Lithiumâ^'Air Battery: Promise and Challenges. Journal of Physical Chemistry Letters, 2010, 1, 2193-2203.	4.6	2,314
2	Advances in understanding mechanisms underpinning lithiumâ€“air batteries. Nature Energy, 2016, 1, .	39.5	1,050
3	Twin Problems of Interfacial Carbonate Formation in Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2012, 3, 997-1001.	4.6	992
4	Solventsâ€™ Critical Role in Nonaqueous Lithiumâ€“Oxygen Battery Electrochemistry. Journal of Physical Chemistry Letters, 2011, 2, 1161-1166.	4.6	926
5	Nonaqueous Liâ€“Air Batteries: A Status Report. Chemical Reviews, 2014, 114, 11721-11750.	47.7	848
6	Solvating additives drive solution-mediated electrochemistry and enhance toroid growth in non-aqueous Liâ€“O2 batteries. Nature Chemistry, 2015, 7, 50-56.	13.6	716
7	Efficient hydrogen peroxide generation using reduced graphene oxide-based oxygen reduction electrocatalysts. Nature Catalysis, 2018, 1, 282-290.	34.4	699
8	On the Efficacy of Electrocatalysis in Nonaqueous Liâ€“O₂ Batteries. Journal of the American Chemical Society, 2011, 133, 18038-18041.	13.7	606
9	Promising Routes to a High Li⁺ Transference Number Electrolyte for Lithium Ion Batteries. ACS Energy Letters, 2017, 2, 2563-2575.	17.4	577
10	Reversible Mn2+/Mn4+ double redox in lithium-excess cathode materials. Nature, 2018, 556, 185-190.	27.8	525
11	Electrical conductivity in Li2O2 and its role in determining capacity limitations in non-aqueous Li-O2 batteries. Journal of Chemical Physics, 2011, 135, 214704.	3.0	502
12	Limitations in Rechargeability of Li-O₂ Batteries and Possible Origins. Journal of Physical Chemistry Letters, 2012, 3, 3043-3047.	4.6	387
13	Recyclable, Strong Thermosets and Organogels via Paraformaldehyde Condensation with Diamines. Science, 2014, 344, 732-735.	12.6	362
14	Influence of polydopamine deposition conditions on pure water flux and foulant adhesion resistance of reverse osmosis, ultrafiltration, and microfiltration membranes. Polymer, 2010, 51, 3472-3485.	3.8	338
15	Combining Accurate O₂ and Li₂O₂ Assays to Separate Discharge and Charge Stability Limitations in Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2013, 4, 2989-2993.	4.6	337
16	On the Mechanism of Nonaqueous Liâ€“O₂ Electrochemistry on C and Its Kinetic Overpotentials: Some Implications for Liâ€“Air Batteries. Journal of Physical Chemistry C, 2012, 116, 23897-23905.	3.1	328
17	Surface modification of thin film composite membrane support layers with polydopamine: Enabling use of reverse osmosis membranes in pressure retarded osmosis. Journal of Membrane Science, 2011, 375, 55-62.	8.2	297
18	A bioinspired fouling-resistant surface modification for water purification membranes. Journal of Membrane Science, 2012, 413-414, 82-90.	8.2	295

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19	Enhancing electrochemical intermediate solvation through electrolyte anion selection to increase nonaqueous Liâ€“O ₂ battery capacity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9293-9298.	7.1	293
20	Cation-disordered rocksalt-type high-entropy cathodes for Li-ion batteries. Nature Materials, 2021, 20, 214-221.	27.5	290
21	Residual Lithium Carbonate Predominantly Accounts for First Cycle CO₂ and CO Outgassing of Li-Stoichiometric and Li-Rich Layered Transition-Metal Oxides. Journal of the American Chemical Society, 2017, 139, 17853-17860.	13.7	281
22	PEG-coated reverse osmosis membranes: Desalination properties and fouling resistance. Journal of Membrane Science, 2009, 340, 92-108.	8.2	260
23	Identifying Capacity Limitations in the Li/Oxygen Battery Using Experiments and Modeling. Journal of the Electrochemical Society, 2011, 158, A343.	2.9	254
24	The Compensation Effect in the Vogelâ€“Tammannâ€“Fulcher (VTF) Equation for Polymer-Based Electrolytes. Macromolecules, 2017, 50, 3831-3840.	4.8	249
25	Elucidating anionic oxygen activity in lithium-rich layered oxides. Nature Communications, 2018, 9, 947.	12.8	241
26	Implications of CO₂ Contamination in Rechargeable Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2013, 4, 276-279.	4.6	240
27	Attainable Gravimetric and Volumetric Energy Density of Liâ€“S and Li Ion Battery Cells with Solid Separator-Protected Li Metal Anodes. Journal of Physical Chemistry Letters, 2015, 6, 4581-4588.	4.6	235
28	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. ACS Energy Letters, 0, , 1399-1404.	17.4	228
29	Oxygen Concentration Control of Dopamine-Induced High Uniformity Surface Coating Chemistry. ACS Applied Materials & Interfaces, 2013, 5, 233-238.	8.0	206
30	Electrochemical Oxidation of Lithium Carbonate Generates Singlet Oxygen. Angewandte Chemie - International Edition, 2018, 57, 5529-5533.	13.8	204
31	Crosslinked poly(ethylene oxide) fouling resistant coating materials for oil/water separation. Journal of Membrane Science, 2008, 307, 260-267.	8.2	203
32	Mitigating oxygen loss to improve the cycling performance of high capacity cation-disordered cathode materials. Nature Communications, 2017, 8, 981.	12.8	197
33	Chemical and Electrochemical Differences in Nonaqueous Liâ€“O₂ and Naâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2014, 5, 1230-1235.	4.6	186
34	Mechanisms of Two-Electron and Four-Electron Electrochemical Oxygen Reduction Reactions at Nitrogen-Doped Reduced Graphene Oxide. ACS Catalysis, 2020, 10, 852-863.	11.2	184
35	Liquid electrolyte development for low-temperature lithium-ion batteries. Energy and Environmental Science, 2022, 15, 550-578.	30.8	159
36	Ultrahigh power and energy density in partially ordered lithium-ion cathode materials. Nature Energy, 2020, 5, 213-221.	39.5	158

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37	Preparation and characterization of crosslinked poly(ethylene glycol) diacrylate hydrogels as fouling-resistant membrane coating materials. Journal of Membrane Science, 2009, 330, 180-188.	8.2	145
38	Implications of 4 e^{â€“} Oxygen Reduction via Iodide Redox Mediation in Liâ€“O₂ Batteries. ACS Energy Letters, 2016, 1, 747-756.	17.4	145
39	Evolution of the Solidâ€“Electrolyte Interphase on Carbonaceous Anodes Visualized by Atomic-Resolution Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 5140-5148.	9.1	132
40	Improved Cycling Performance of Liâ€Excess Cationâ€Disordered Cathode Materials upon Fluorine Substitution. Advanced Energy Materials, 2019, 9, 1802959.	19.5	127
41	Ion Transport and the True Transference Number in Nonaqueous Polyelectrolyte Solutions for Lithium Ion Batteries. ACS Central Science, 2019, 5, 1250-1260.	11.3	126
42	Design principles for high transition metal capacity in disordered rocksalt Li-ion cathodes. Energy and Environmental Science, 2018, 11, 2159-2171.	30.8	123
43	A Molten Salt Lithiumâ€“Oxygen Battery. Journal of the American Chemical Society, 2016, 138, 2656-2663.	13.7	114
44	A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Liâ€Ion and Liâ€Metal Batteries. Advanced Energy Materials, 2021, 11, 2100372.	19.5	114
45	Unraveling the Cationic and Anionic Redox Reactions in a Conventional Layered Oxide Cathode. ACS Energy Letters, 2019, 4, 2836-2842.	17.4	111
46	Poly(vinylidene fluoride) (PVDF) Binder Degradation in Liâ€“O₂ Batteries: A Consideration for the Characterization of Lithium Superoxide. Journal of Physical Chemistry Letters, 2017, 8, 1169-1174.	4.6	110
47	Mechanistic insights for the development of Liâ€“O₂battery materials: addressing Li₂O₂conductivity limitations and electrolyte and cathode instabilities. Chemical Communications, 2015, 51, 12701-12715.	4.1	109
48	Stoichiometric Layered Potassium Transition Metal Oxide for Rechargeable Potassium Batteries. Chemistry of Materials, 2018, 30, 6532-6539.	6.7	108
49	Quantifying the Capacity Contributions during Activation of Li₂MnO₃. ACS Energy Letters, 2020, 5, 634-641.	17.4	105
50	Design Principles for High-Capacity Mn-Based Cation-Disordered Rocksalt Cathodes. CheM, 2020, 6, 153-168.	11.7	103
51	Quantification of Inactive Lithium and Solidâ€“Electrolyte Interphase Species on Graphite Electrodes after Fast Charging. ACS Energy Letters, 2020, 5, 2045-2051.	17.4	97
52	An Electrochemical Impedance Spectroscopy Investigation of the Overpotentials in Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2015, 7, 4039-4047.	8.0	95
53	Reactive Amphiphilic Graft Copolymer Coatings Applied to Poly(vinylidene fluoride) Ultrafiltration Membranes. Macromolecules, 2007, 40, 3624-3630.	4.8	94
54	Detecting the Onset of Lithium Plating and Monitoring Fast Charging Performance with Voltage Relaxation. ACS Energy Letters, 2020, 5, 1750-1757.	17.4	91

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55	Bifunctional hydrogel coatings for water purification membranes: Improved fouling resistance and antimicrobial activity. Journal of Membrane Science, 2011, 372, 285-291.	8.2	88
56	Extended Interfacial Stability through Simple Acid Rinsing in a Li-Rich Oxide Cathode Material. Journal of the American Chemical Society, 2020, 142, 8522-8531.	13.7	88
57	Carbon Defect Characterization of Nitrogen-Doped Reduced Graphene Oxide Electrocatalysts for the Two-Electron Oxygen Reduction Reaction. Chemistry of Materials, 2019, 31, 3967-3973.	6.7	85
58	Unravelling Solid-State Redox Chemistry in Li_{1.3}Nb_{0.3}Mn_{0.4}O₂ Single-Crystal Cathode Material. Chemistry of Materials, 2018, 30, 1655-1666.	6.7	84
59	Novel thin film composite membrane containing ionizable hydrophobes: pH-dependent reverse osmosis behavior and improved chlorine resistance. Journal of Materials Chemistry, 2010, 20, 4615.	6.7	83
60	A Viewpoint on Heterogeneous Electrocatalysis and Redox Mediation in Nonaqueous Li-O₂ Batteries. ACS Catalysis, 2017, 7, 772-778.	11.2	82
61	A Novel Method for the Templated Synthesis of Homogeneous Samples of Hollow Carbon Nanospheres from Cellulose Chars. Journal of the American Chemical Society, 2003, 125, 9916-9917.	13.7	77
62	Expanding the Ragone Plot: Pushing the Limits of Energy Storage. Journal of Physical Chemistry Letters, 2015, 6, 3592-3593.	4.6	77
63	Inherent Acidity of Perfluorosulfonic Acid Ionomer Dispersions and Implications for Ink Aggregation. Journal of Physical Chemistry B, 2018, 122, 7790-7796.	2.6	75
64	Mg Anode Corrosion in Aqueous Electrolytes and Implications for Mg-Air Batteries. Journal of the Electrochemical Society, 2016, 163, A958-A963.	2.9	74
65	Quantification of Surface Oxygen Depletion and Solid Carbonate Evolution on the First Cycle of LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂ Electrodes. ACS Applied Energy Materials, 2019, 2, 3762-3772.	5.1	71
66	Nonaqueous Polyelectrolyte Solutions as Liquid Electrolytes with High Lithium Ion Transference Number and Conductivity. ACS Energy Letters, 2017, 2, 481-487.	17.4	69
67	Directing Selectivity of Electrochemical Carbon Dioxide Reduction Using Plasmonics. ACS Energy Letters, 2019, 4, 1098-1105.	17.4	68
68	In Situ ATRâ€“SEIRAS of Carbon Dioxide Reduction at a Plasmonic Silver Cathode. Journal of the American Chemical Society, 2020, 142, 11750-11762.	13.7	68
69	Non-topotactic reactions enable high rate capability in Li-rich cathode materials. Nature Energy, 2021, 6, 706-714.	39.5	65
70	Alleviating oxygen evolution from Li-excess oxide materials through theory-guided surface protection. Nature Communications, 2018, 9, 4597.	12.8	56
71	Composite Membranes Based on a Selective Chitosanâ”Poly(ethylene glycol) Hybrid Layer: Synthesis, Characterization, and Performance in Oilâ”Water Purification. Industrial & Engineering Chemistry Research, 2010, 49, 366-373.	3.7	53
72	Surfaceâ€Plasmonâ€Assisted Photoelectrochemical Reduction of CO₂ and NO₃^{â”} on Nanostructured Silver Electrodes. Advanced Energy Materials, 2018, 8, 1800363.	19.5	50

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73	Ion Correlations and Their Impact on Transport in Polymer-Based Electrolytes. Macromolecules, 2021, 54, 2575-2591.	4.8	50
74	A comparison of high voltage outgassing of LiCoO2, LiNiO2, and Li2MnO3 layered Li-ion cathode materials. Electrochimica Acta, 2021, 368, 137505.	5.2	49
75	Combining Experiment and Theory To Unravel the Mechanism of Two-Electron Oxygen Reduction at a Selective and Active Co-catalyst. ACS Catalysis, 2018, 8, 11940-11951.	11.2	45
76	Surface Lithium Carbonate Influences Electrolyte Degradation via Reactive Oxygen Attack in Lithium-Excess Cathode Materials. Chemistry of Materials, 2021, 33, 4170-4176.	6.7	44
77	Layered-rocksalt intergrown cathode for high-capacity zero-strain battery operation. Nature Communications, 2021, 12, 2348.	12.8	43
78	Liâ€“air batteries: Importance of singlet oxygen. Nature Energy, 2017, 2, .	39.5	42
79	Onsager Transport Coefficients and Transference Numbers in Polyelectrolyte Solutions and Polymerized Ionic Liquids. Macromolecules, 2020, 53, 9503-9512.	4.8	42
80	Disulfonated poly(arylene ether sulfone) random copolymer thin film composite membrane fabricated using a benign solvent for reverse osmosis applications. Journal of Membrane Science, 2012, 389, 363-371.	8.2	41
81	The Sudden Death Phenomena in Nonaqueous Naâ€“O₂ Batteries. Journal of Physical Chemistry C, 2017, 121, 85-96.	3.1	40
82	Comment on â€œCycling Li-O ₂ batteries via LiOH formation and decompositionâ€• Science, 2016, 352, 667-667.	12.6	38
83	An Electrochemical Impedance Study of the Capacity Limitations in Naâ€“O₂ Cells. Journal of Physical Chemistry C, 2016, 120, 10799-10805.	3.1	38
84	An Electrochemical Impedance Spectroscopy Study on the Effects of the Surface- and Solution-Based Mechanisms in Li-O₂Cells. Journal of the Electrochemical Society, 2016, 163, A2065-A2071.	2.9	38
85	Impact of Dispersion Solvent on Ionomer Thin Films and Membranes. ACS Applied Polymer Materials, 2020, 2, 5824-5834.	4.4	38
86	Anion Reactivity in Cationâ€Disordered Rocksalt Cathode Materials: The Influence of Fluorine Substitution. Advanced Energy Materials, 2020, 10, 2001500.	19.5	38
87	Altering Surface Contaminants and Defects Influences the First-Cycle Outgassing and Irreversible Transformations of LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂. ACS Applied Materials & Interfaces, 2019, 11, 34913-34921.	8.0	37
88	Transport phenomena in electrolyte solutions: Nonequilibrium thermodynamics and statistical mechanics. AICHE Journal, 2020, 66, e17091.	3.6	37
89	Role of Redoxâ€Inactive Transitionâ€Metals in the Behavior of Cationâ€Disordered Rocksalt Cathodes. Small, 2020, 16, e2000656.	10.0	37
90	Correlating the phase evolution and anionic redox in Co-Free Ni-Rich layered oxide cathodes. Nano Energy, 2020, 78, 105365.	16.0	36

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91	How Bulk Sensitive is Hard X-ray Photoelectron Spectroscopy: Accounting for the Cathodeâ€“Electrolyte Interface when Addressing Oxygen Redox. Journal of Physical Chemistry Letters, 2020, 11, 2106-2112.	4.6	36
92	Probing Ionomer Interactions with Electrocatalyst Particles in Solution. ACS Energy Letters, 2021, 6, 2275-2282.	17.4	36
93	Transport Phenomena in Low Temperature Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 080501.	2.9	35
94	Realizing continuous cation order-to-disorder tuning in a class of high-energy spinel-type Li-ion cathodes. Matter, 2021, 4, 3897-3916.	10.0	32
95	Investigation of Solvent Type and Salt Addition in High Transference Number Nonaqueous Polyelectrolyte Solutions for Lithium Ion Batteries. Macromolecules, 2018, 51, 8761-8771.	4.8	31
96	Rechargeable-battery chemistry based on lithium oxide growth through nitrate anion redox. Nature Chemistry, 2019, 11, 1133-1138.	13.6	31
97	Singleâ€Crystal LiNi_xMn_yCo_{1â^'}_x_{â^'}_yO₂ Cathodes for Extreme Fast Charging. Small, 2022, 18, e2105833.	13.3	31
98	Enhancing water permeability of fouling-resistant POSSâ€“PEGM hydrogels using â€˜additionâ€“extractionâ€™ of sacrificial additives. Journal of Membrane Science, 2012, 401-402, 306-312.	8.2	29
99	Polarizable Molecular Dynamics and Experiments of 1,2-Dimethoxyethane Electrolytes with Lithium and Sodium Salts: Structure and Transport Properties. Journal of Physical Chemistry B, 2018, 122, 8548-8559.	2.6	29
100	Detection of reactive intermediates during laser pyrolysis of cellulose char by molecular beam mass spectroscopy, implications for the formation of polycyclic aromatic hydrocarbons. Journal of Analytical and Applied Pyrolysis, 2003, 66, 165-182.	5.5	27
101	Detecting onset of lithium plating during fast charging of Li-ion batteries using operando electrochemical impedance spectroscopy. Cell Reports Physical Science, 2021, 2, 100589.	5.6	27
102	Detection of reactive intermediates from and characterization of biomass char by laser pyrolysis molecular beam mass spectroscopy. Fuel, 2004, 83, 1483-1494.	6.4	25
103	Wetting behavior of four polar organic solvents containing one of three lithium salts on a lithium-ion-battery separator. Journal of Colloid and Interface Science, 2018, 529, 582-587.	9.4	25
104	Enhanced Forward Osmosis Desalination with a Hybrid Ionic Liquid/Hydrogel Thermoresponsive Draw Agent System. ACS Omega, 2019, 4, 4296-4303.	3.5	25
105	Thermal Transitions in Perfluorosulfonated Ionomer Thin-Films. ACS Macro Letters, 2018, 7, 1237-1242.	4.8	23
106	Tailoring the Redox Reactions for Highâ€Capacity Cycling of Cationâ€Disordered Rocksalt Cathodes. Advanced Functional Materials, 2021, 31, 2008696.	14.9	23
107	Enhancing Separation and Mechanical Performance of Hybrid Membranes through Nanoparticle Surface Modification. ACS Macro Letters, 2015, 4, 1239-1243.	4.8	21
108	Investigating Li₂NiO₂â€“Li₂CuO₂ Solid Solutions as High-Capacity Cathode Materials for Li-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 11100-11107.	3.1	21

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109	Enabling Facile Anionic Kinetics through Cationic Redox Mediator in Li-Rich Layered Cathodes. ACS Energy Letters, 2020, 5, 3535-3543.	17.4	21
110	Important Considerations in Plasmon-Enhanced Electrochemical Conversion at Voltage-Biased Electrodes. IScience, 2020, 23, 100911.	4.1	19
111	12-Tungstophosphoric Acid Composites with Sulfonated or Unsulfonated Epoxies for High-Temperature PEMFCs. Journal of the Electrochemical Society, 2005, 152, A98.	2.9	18
112	Solubilities and ionic conductivities of ionic liquids containing lithium salts. Electrochimica Acta, 2017, 247, 1038-1043.	5.2	18
113	High-Capacity P2-Type Na_xLi_{0.25}Mn_{0.75}O₂ Cathode Enabled by Anionic Oxygen Redox. Journal of the Electrochemical Society, 2019, 166, A4136-A4140.	2.9	18
114	Deconvolution of intermixed redox processes in Ni-based cation-disordered Li-excess cathodes. Energy and Environmental Science, 2021, 14, 1553-1562.	30.8	17
115	Interfacial Effects on Transport Coefficient Measurements in Li-ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 060543.	2.9	16
116	Impact of Frictional Interactions on Conductivity, Diffusion, and Transference Number in Ether- and Perfluoroether-Based Electrolytes. Journal of the Electrochemical Society, 2020, 167, 120540.	2.9	16
117	The Role of Electrolyte in the First-Cycle Transformations of LiNi_{0.6}Mn_{0.2}Co_{0.2}O₂. Journal of the Electrochemical Society, 2019, 166, A2762-A2768.	2.9	15
118	Reduction of carbon dioxide at a plasmonically active copperâ€“silver cathode. Chemical Communications, 2020, 56, 9970-9973.	4.1	14
119	Elektrochemische Oxidation von Lithiumcarbonat generiert Singulettâ€Sauerstoff. Angewandte Chemie, 2018, 130, 5627-5631.	2.0	13
120	Scalable CO2-to-oxygenate production. Nature Catalysis, 2018, 1, 6-7.	34.4	13
121	A temperature-controlled photoelectrochemical cell for quantitative product analysis. Review of Scientific Instruments, 2018, 89, 055112.	1.3	13
122	Electrolyte additives to enable nonaqueous polyelectrolyte solutions for lithium ion batteries. Molecular Systems Design and Engineering, 2020, 5, 91-96.	3.4	13
123	Suppression of Parasitic Chemistry in Liâ€“O₂ Batteries Incorporating Thianthrene-Based Proposed Redox Mediators. ACS Applied Energy Materials, 2020, 3, 8812-8821.	5.1	13
124	Interplay between Cation and Anion Redox in Ni-Based Disordered Rocksalt Cathodes. ACS Nano, 2021, 15, 13360-13369.	14.6	13
125	Definition of Redox Centers in Reactions of Lithium Intercalation in Li₃RuO₄ Polymorphs. Journal of the American Chemical Society, 2020, 142, 8160-8173.	13.7	12
126	Oxygen Pressure Influences Spatial NaO₂ Deposition and the Sudden Death Mechanism in Naâ€“O₂ Batteries. Journal of Physical Chemistry C, 2018, 122, 13462-13472.	3.1	11

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127	Polyanion Electrolytes with Well-Ordered Ionic Layers in Simulations and Experiment. Macromolecules, 2019, 52, 5518-5528.	4.8	11
128	Electrochemical Oxidative Fluorination of an Oxide Perovskite. Chemistry of Materials, 2021, 33, 5757-5768.	6.7	11
129	Li-O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1665" altimg="si4.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math> batteries for high specific power applications: A multiphysics simulation study for a single discharge. Journal of Power Sources, 2021, 484, 229261.	7.8	10
130	A sustainable sulfurâ€“carbonaceous composite electrode toward high specific energy rechargeable cells. Materials Horizons, 2020, 7, 524-529.	12.2	9
131	Effect of Metal Doping on the Initial Pyrolysis Chemistry of Cellulose Chars. Energy & Fuels, 2008, 22, 2816-2825.	5.1	8
132	Understanding Binary Interactions in Fuel-Cell Catalyst-Layer Inks. ECS Transactions, 2017, 80, 309-319.	0.5	8
133	Exceptionally Reinforced Polymer Nanocomposites via Incorporated Surface Porosity on Graphene Oxide Sheets. Macromolecular Materials and Engineering, 2017, 302, 1700039.	3.6	7
134	Counterion Transport and Transference Number in Aqueous and Nonaqueous Short-Chain Polyelectrolyte Solutions. Journal of Physical Chemistry B, 2019, 123, 10858-10867.	2.6	7
135	A Theoretical Model for Computing Freezing Point Depression of Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 120532.	2.9	6
136	Quantification of Dead Lithium on Graphite Anode under Fast Charging Conditions. Journal of the Electrochemical Society, 2022, 169, 040520.	2.9	5
137	Effect of pressure and temperature on carbon dioxide reduction at a plasmonically active silver cathode. Electrochimica Acta, 2021, 374, 137820.	5.2	4
138	Exposure History and its Effect Towards Stabilizing Li Exchange Across Disordered Rock Salt Interfaces. ChemElectroChem, 2021, 8, 3982-3991.	3.4	4
139	Current Trends in Electrolytes. Electrochemical Society Interface, 2019, 28, 47-47.	0.4	1
140	Energy Spotlight. ACS Energy Letters, 2019, 4, 2763-2769.	17.4	1
141	First-Principles Computational and Experimental Investigation of Molten-Salt Electrolytes: Implications for Liâ€“O2 Battery. Journal of Physical Chemistry C, 2021, 125, 3698-3705.	3.1	1
142	Multimodal Characterization of Degradation Mechanisms in Lithium-Ion Batteries from Extreme Fast Charging. ECS Meeting Abstracts, 2021, MA2021-02, 482-482.	0.0	1
143	Effect of charging protocol and carbon electrode selection in Naâ€“O2 batteries. Journal of Materials Research, 0, , .	2.6	1
144	(Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award) Mass Spectrometry Titration for Quantitative Probing of Lithium Plating and Solid-Electrolyte Interphase Formation. ECS Meeting Abstracts, 2021, MA2021-01, 945-945.	0.0	0

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145	Mapping Lithium Plating Conditions for Fast Charging Using High-Throughput Coulombic Efficiency Techniques. ECS Meeting Abstracts, 2021, MA2021-02, 464-464.	0.0	0
146	Layered-Rocksalt Intergrown Cathode for High-Capacity Zero-Strain Battery Operation. ECS Meeting Abstracts, 2021, MA2021-02, 193-193.	0.0	0
147	(Invited) Quantifying Outgassing, Surface Oxygen Depletion and Solid Carbonate Evolution to Understand Interfacial Reactivity in Cathode Active Materials. ECS Meeting Abstracts, 2020, MA2020-02, 21-21.	0.0	0
148	Definition of Redox Centers in Reactions of Lithium Intercalation in Li3RuO4 Polymorphs. ECS Meeting Abstracts, 2020, MA2020-02, 120-120.	0.0	0
149	Characterizing Ion Transport in Non-Aqueous Electrolyte Solutions for Li-Ion and Li- Metal Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 829-829.	0.0	0
150	Anion Reactivity in Cation-Disordered Rocksalt Cathode Materials: The Influence of Fluorine Substitution. ECS Meeting Abstracts, 2020, MA2020-02, 160-160.	0.0	0
151	(Charles W. Tobias Young Investigator Award Address) Understanding Reactivity at Electrode-Electrolyte Interfaces in Li-O₂ and Li-ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 732-732.	0.0	0
152	On the Origin of Reactive Oxygen Species in Lithium-Excess Layered Oxide Cathode Materials. ECS Meeting Abstracts, 2020, MA2020-02, 756-756.	0.0	0
153	Quantification of Inactive Lithium, Solid Carbonate Species, and Lithium Acetylide on Graphite Electrodes after Fast Charging. ECS Meeting Abstracts, 2020, MA2020-02, 542-542.	0.0	0
154	Li Plating Detection during Extreme Fast Charging of Li-Ion Batteries Using Operando Impedance Spectroscopy. ECS Meeting Abstracts, 2020, MA2020-02, 592-592.	0.0	0
155	Lithium Plating Kinetics Under Fast Charge Conditions. ECS Meeting Abstracts, 2021, MA2021-02, 462-462.	0.0	0
156	Combining Acid Titration and Mass Spectrometry to Decouple Mixed Redox Processes in Cation-Disordered Li-Excess Cathodes. ECS Meeting Abstracts, 2020, MA2020-02, 131-131.	0.0	0
157	Electrochemical Techniques to Detect and Quantify Li Plating after Fast Charge of Li-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 593-593.	0.0	0
158	Electrolyte Development for Safe Li-Ion Battery Fast Charging: Decreasing Inactive Li on Graphite. ECS Meeting Abstracts, 2022, MA2022-01, 225-225.	0.0	0
159	The Role of Gas Evolution in Particle Surface Cracking in Nickel-Rich Lithium-Ion Cathode Materials. ECS Meeting Abstracts, 2022, MA2022-01, 437-437.	0.0	0
160	Theoretical Prediction of Freezing Point Depression of Lithium-Ion Battery Electrolytes. ECS Meeting Abstracts, 2022, MA2022-01, 194-194.	0.0	0
161	Quantitative Evaluation of the Low Temperature Discharge Performance of Li-Ion Batteries Using Electrochemical Impedance Spectroscopy. ECS Meeting Abstracts, 2022, MA2022-01, 169-169.	0.0	0