Bryan D Mccloskey

List of Publications by Year
in descending order

161 papers	21,141 citations	17776 65 h-index	10955 142 g-index
182 all docs	182 docs citations	182 times ranked	17709 citing authors

#	Article	IF	Citations
1	Singleâ€Crystal LiNi_xMn_yCo_{1â^'}_x_{â^'}_y₂/₃O₂ Cathodes for Extreme Fast Charging. Small, 2022, 18, e2105833.	13.3	31
2	Liquid electrolyte development for low-temperature lithium-ion batteries. Energy and Environmental Science, 2022, 15, 550-578.	15.6	159
3	Quantification of Dead Lithium on Graphite Anode under Fast Charging Conditions. Journal of the Electrochemical Society, 2022, 169, 040520.	1.3	5
4	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
5	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
6	Theoretical Prediction of Freezing Point Depression of Lithium-Ion Battery Electrolytes. ECS Meeting Abstracts, 2022, MA2022-01, 194-194.	0.0	0
7	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
8	Cation-disordered rocksalt-type high-entropy cathodes for Li-ion batteries. Nature Materials, 2021, 20, 214-221.	13.3	290
9	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.	4.0	10
10	A comparison of high voltage outgassing of LiCoO2, LiNiO2, and Li2MnO3 layered Li-ion cathode materials. Electrochimica Acta, 2021, 368, 137505.	2.6	49
11	Tailoring the Redox Reactions for Highâ€Capacity Cycling of Cationâ€Disordered Rocksalt Cathodes. Advanced Functional Materials, 2021, 31, 2008696.	7.8	23
12	Deconvolution of intermixed redox processes in Ni-based cation-disordered Li-excess cathodes. Energy and Environmental Science, 2021, 14, 1553-1562.	15.6	17
13	Ion Correlations and Their Impact on Transport in Polymer-Based Electrolytes. Macromolecules, 2021, 54, 2575-2591.	2.2	50
14	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.	10.2	114
15	Effect of pressure and temperature on carbon dioxide reduction at a plasmonically active silver cathode. Electrochimica Acta, 2021, 374, 137820.	2.6	4
16	Layered-rocksalt intergrown cathode for high-capacity zero-strain battery operation. Nature Communications, 2021, 12, 2348.	5.8	43
17	Surface Lithium Carbonate Influences Electrolyte Degradation via Reactive Oxygen Attack in Lithium-Excess Cathode Materials. Chemistry of Materials, 2021, 33, 4170-4176.	3.2	44
18	Non-topotactic reactions enable high rate capability in Li-rich cathode materials. Nature Energy, 2021, 6, 706-714.	19.8	65

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19	Probing Ionomer Interactions with Electrocatalyst Particles in Solution. ACS Energy Letters, 2021, 6, 2275-2282.	8.8	36
20	(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
21	Interfacial Effects on Transport Coefficient Measurements in Li-ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 060543.	1.3	16
22	Electrochemical Oxidative Fluorination of an Oxide Perovskite. Chemistry of Materials, 2021, 33, 5757-5768.	3.2	11
23	Transport Phenomena in Low Temperature Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 080501.	1.3	35
24	Interplay between Cation and Anion Redox in Ni-Based Disordered Rocksalt Cathodes. ACS Nano, 2021, 15, 13360-13369.	7.3	13
25	Exposure History and its Effect Towards Stabilizing Li Exchange Across Disordered Rock Salt Interfaces. ChemElectroChem, 2021, 8, 3982-3991.	1.7	4
26	Detecting onset of lithium plating during fast charging of Li-ion batteries using operando electrochemical impedance spectroscopy. Cell Reports Physical Science, 2021, 2, 100589.	2.8	27
27	First-Principles Computational and Experimental Investigation of Molten-Salt Electrolytes: Implications for Liâ€“O2 Battery. Journal of Physical Chemistry C, 2021, 125, 3698-3705.	1.5	1
28	Realizing continuous cation order-to-disorder tuning in a class of high-energy spinel-type Li-ion cathodes. Matter, 2021, 4, 3897-3916.	5.0	32
29	Mapping Lithium Plating Conditions for Fast Charging Using High-Throughput Coulombic Efficiency Techniques. ECS Meeting Abstracts, 2021, MA2021-02, 464-464.	0.0	0
30	Layered-Rocksalt Intergrown Cathode for High-Capacity Zero-Strain Battery Operation. ECS Meeting Abstracts, 2021, MA2021-02, 193-193.	0.0	0
31	A Theoretical Model for Computing Freezing Point Depression of Lithium-Ion Battery Electrolytes. Journal of the Electrochemical Society, 2021, 168, 120532.	1.3	6
32	Lithium Plating Kinetics Under Fast Charge Conditions. ECS Meeting Abstracts, 2021, MA2021-02, 462-462.	0.0	0
33	Multimodal Characterization of Degradation Mechanisms in Lithium-Ion Batteries from Extreme Fast Charging. ECS Meeting Abstracts, 2021, MA2021-02, 482-482.	0.0	1
34	Design Principles for High-Capacity Mn-Based Cation-Disordered Rocksalt Cathodes. CheM, 2020, 6, 153-168.	5.8	103
35	Electrolyte additives to enable nonaqueous polyelectrolyte solutions for lithium ion batteries. Molecular Systems Design and Engineering, 2020, 5, 91-96.	1.7	13
36	Mechanisms of Two-Electron and Four-Electron Electrochemical Oxygen Reduction Reactions at Nitrogen-Doped Reduced Graphene Oxide. ACS Catalysis, 2020, 10, 852-863.	5.5	184

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37	A sustainable sulfurâ€“carbonaceous composite electrode toward high specific energy rechargeable cells. Materials Horizons, 2020, 7, 524-529.	6.4	9
38	Transport phenomena in electrolyte solutions: Nonequilibrium thermodynamics and statistical mechanics. AICHE Journal, 2020, 66, e17091.	1.8	37
39	Onsager Transport Coefficients and Transference Numbers in Polyelectrolyte Solutions and Polymerized Ionic Liquids. Macromolecules, 2020, 53, 9503-9512.	2.2	42
40	Enabling Facile Anionic Kinetics through Cationic Redox Mediator in Li-Rich Layered Cathodes. ACS Energy Letters, 2020, 5, 3535-3543.	8.8	21
41	Correlating the phase evolution and anionic redox in Co-Free Ni-Rich layered oxide cathodes. Nano Energy, 2020, 78, 105365.	8.2	36
42	Impact of Dispersion Solvent on Ionomer Thin Films and Membranes. ACS Applied Polymer Materials, 2020, 2, 5824-5834.	2.0	38
43	Reduction of carbon dioxide at a plasmonically active copperâ€“silver cathode. Chemical Communications, 2020, 56, 9970-9973.	2.2	14
44	Anion Reactivity in Cationâ€Disordered Rocksalt Cathode Materials: The Influence of Fluorine Substitution. Advanced Energy Materials, 2020, 10, 2001500.	10.2	38
45	Suppression of Parasitic Chemistry in Liâ€“O₂ Batteries Incorporating Thianthrene-Based Proposed Redox Mediators. ACS Applied Energy Materials, 2020, 3, 8812-8821.	2.5	13
46	Detecting the Onset of Lithium Plating and Monitoring Fast Charging Performance with Voltage Relaxation. ACS Energy Letters, 2020, 5, 1750-1757.	8.8	91
47	Role of Redoxâ€Inactive Transitionâ€Metals in the Behavior of Cationâ€Disordered Rocksalt Cathodes. Small, 2020, 16, e2000656.	5.2	37
48	Quantification of Inactive Lithium and Solidâ€“Electrolyte Interphase Species on Graphite Electrodes after Fast Charging. ACS Energy Letters, 2020, 5, 2045-2051.	8.8	97
49	In Situ ATRâ€“SEIRAS of Carbon Dioxide Reduction at a Plasmonic Silver Cathode. Journal of the American Chemical Society, 2020, 142, 11750-11762.	6.6	68
50	Ultrahigh power and energy density in partially ordered lithium-ion cathode materials. Nature Energy, 2020, 5, 213-221.	19.8	158
51	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.	2.1	36
52	Important Considerations in Plasmon-Enhanced Electrochemical Conversion at Voltage-Biased Electrodes. IScience, 2020, 23, 100911.	1.9	19
53	Quantifying the Capacity Contributions during Activation of Li₂MnO₃. ACS Energy Letters, 2020, 5, 634-641.	8.8	105
54	Extended Interfacial Stability through Simple Acid Rinsing in a Li-Rich Oxide Cathode Material. Journal of the American Chemical Society, 2020, 142, 8522-8531.	6.6	88

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55	Definition of Redox Centers in Reactions of Lithium Intercalation in Li₃RuO₄ Polymorphs. Journal of the American Chemical Society, 2020, 142, 8160-8173.	6.6	12
56	Impact of Frictional Interactions on Conductivity, Diffusion, and Transference Number in Ether- and Perfluoroether-Based Electrolytes. Journal of the Electrochemical Society, 2020, 167, 120540.	1.3	16
57	(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
58	Definition of Redox Centers in Reactions of Lithium Intercalation in Li3RuO4 Polymorphs. ECS Meeting Abstracts, 2020, MA2020-02, 120-120.	0.0	0
59	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
60	Anion Reactivity in Cation-Disordered Rocksalt Cathode Materials: The Influence of Fluorine Substitution. ECS Meeting Abstracts, 2020, MA2020-02, 160-160.	0.0	0
61	(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
62	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
63	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
64	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
65	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
66	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
67	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.	1.3	15
68	Evolution of the Solidâ€“Electrolyte Interphase on Carbonaceous Anodes Visualized by Atomic-Resolution Cryogenic Electron Microscopy. Nano Letters, 2019, 19, 5140-5148.	4.5	132
69	Polyanion Electrolytes with Well-Ordered Ionic Layers in Simulations and Experiment. Macromolecules, 2019, 52, 5518-5528.	2.2	11
70	Current Trends in Electrolytes. Electrochemical Society Interface, 2019, 28, 47-47.	0.3	1
71	Unraveling the Cationic and Anionic Redox Reactions in a Conventional Layered Oxide Cathode. ACS Energy Letters, 2019, 4, 2836-2842.	8.8	111
72	Energy Spotlight. ACS Energy Letters, 2019, 4, 2763-2769.	8.8	1

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73	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.	4.0	37
74	Carbon Defect Characterization of Nitrogen-Doped Reduced Graphene Oxide Electrocatalysts for the Two-Electron Oxygen Reduction Reaction. Chemistry of Materials, 2019, 31, 3967-3973.	3.2	85
75	Ion Transport and the True Transference Number in Nonaqueous Polyelectrolyte Solutions for Lithium Ion Batteries. ACS Central Science, 2019, 5, 1250-1260.	5.3	126
76	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.	2.5	71
77	Directing Selectivity of Electrochemical Carbon Dioxide Reduction Using Plasmonics. ACS Energy Letters, 2019, 4, 1098-1105.	8.8	68
78	Enhanced Forward Osmosis Desalination with a Hybrid Ionic Liquid/Hydrogel Thermoresponsive Draw Agent System. ACS Omega, 2019, 4, 4296-4303.	1.6	25
79	Counterion Transport and Transference Number in Aqueous and Nonaqueous Short-Chain Polyelectrolyte Solutions. Journal of Physical Chemistry B, 2019, 123, 10858-10867.	1.2	7
80	Rechargeable-battery chemistry based on lithium oxide growth through nitrate anion redox. Nature Chemistry, 2019, 11, 1133-1138.	6.6	31
81	Improved Cycling Performance of Liâ€Excess Cationâ€Disordered Cathode Materials upon Fluorine Substitution. Advanced Energy Materials, 2019, 9, 1802959.	10.2	127
82	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.	1.3	18
83	Elucidating anionic oxygen activity in lithium-rich layered oxides. Nature Communications, 2018, 9, 947.	5.8	241
84	Elektrochemische Oxidation von Lithiumcarbonat generiert Singulettâ€Sauerstoff. Angewandte Chemie, 2018, 130, 5627-5631.	1.6	13
85	Reversible Mn2+/Mn4+ double redox in lithium-excess cathode materials. Nature, 2018, 556, 185-190.	13.7	525
86	Oxygen Pressure Influences Spatial NaO₂ Deposition and the Sudden Death Mechanism in Naâ€“O₂ Batteries. Journal of Physical Chemistry C, 2018, 122, 13462-13472.	1.5	11
87	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.	3.2	84
88	Scalable CO2-to-oxygenate production. Nature Catalysis, 2018, 1, 6-7.	16.1	13
89	Electrochemical Oxidation of Lithium Carbonate Generates Singlet Oxygen. Angewandte Chemie - International Edition, 2018, 57, 5529-5533.	7.2	204
90	Efficient hydrogen peroxide generation using reduced graphene oxide-based oxygen reduction electrocatalysts. Nature Catalysis, 2018, 1, 282-290.	16.1	699

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91	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.	5.5	45
92	Investigation of Solvent Type and Salt Addition in High Transference Number Nonaqueous Polyelectrolyte Solutions for Lithium Ion Batteries. Macromolecules, 2018, 51, 8761-8771.	2.2	31
93	Alleviating oxygen evolution from Li-excess oxide materials through theory-guided surface protection. Nature Communications, 2018, 9, 4597.	5.8	56
94	Thermal Transitions in Perfluorosulfonated Ionomer Thin-Films. ACS Macro Letters, 2018, 7, 1237-1242.	2.3	23
95	Stoichiometric Layered Potassium Transition Metal Oxide for Rechargeable Potassium Batteries. Chemistry of Materials, 2018, 30, 6532-6539.	3.2	108
96	Surfaceâ€Plasmonâ€Assisted Photoelectrochemical Reduction of CO₂ and NO₃^{â¯} on Nanostructured Silver Electrodes. Advanced Energy Materials, 2018, 8, 1800363.	10.2	50
97	Design principles for high transition metal capacity in disordered rocksalt Li-ion cathodes. Energy and Environmental Science, 2018, 11, 2159-2171.	15.6	123
98	A temperature-controlled photoelectrochemical cell for quantitative product analysis. Review of Scientific Instruments, 2018, 89, 055112.	0.6	13
99	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.	5.0	25
100	Inherent Acidity of Perfluorosulfonic Acid Ionomer Dispersions and Implications for Ink Aggregation. Journal of Physical Chemistry B, 2018, 122, 7790-7796.	1.2	75
101	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.	1.2	29
102	Nonaqueous Polyelectrolyte Solutions as Liquid Electrolytes with High Lithium Ion Transference Number and Conductivity. ACS Energy Letters, 2017, 2, 481-487.	8.8	69
103	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.	2.1	110
104	Exceptionally Reinforced Polymer Nanocomposites via Incorporated Surface Porosity on Graphene Oxide Sheets. Macromolecular Materials and Engineering, 2017, 302, 1700039.	1.7	7
105	Investigating Li₂NiO₂â€“Li₂CuO₂ Solid Solutions as High-Capacity Cathode Materials for Li-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 11100-11107.	1.5	21
106	The Compensation Effect in the Vogelâ€“Tammannâ€“Fulcher (VTF) Equation for Polymer-Based Electrolytes. Macromolecules, 2017, 50, 3831-3840.	2.2	249
107	Liâ€“air batteries: Importance of singlet oxygen. Nature Energy, 2017, 2, .	19.8	42
108	A Viewpoint on Heterogeneous Electrocatalysis and Redox Mediation in Nonaqueous Li-O₂ Batteries. ACS Catalysis, 2017, 7, 772-778.	5.5	82

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109	The Sudden Death Phenomena in Nonaqueous Naâ€“O₂ Batteries. Journal of Physical Chemistry C, 2017, 121, 85-96.	1.5	40
110	Promising Routes to a High Li⁺ Transference Number Electrolyte for Lithium Ion Batteries. ACS Energy Letters, 2017, 2, 2563-2575.	8.8	577
111	Mitigating oxygen loss to improve the cycling performance of high capacity cation-disordered cathode materials. Nature Communications, 2017, 8, 981.	5.8	197
112	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.	6.6	281
113	Solubilities and ionic conductivities of ionic liquids containing lithium salts. Electrochimica Acta, 2017, 247, 1038-1043.	2.6	18
114	Understanding Binary Interactions in Fuel-Cell Catalyst-Layer Inks. ECS Transactions, 2017, 80, 309-319.	0.3	8
115	Mg Anode Corrosion in Aqueous Electrolytes and Implications for Mg-Air Batteries. Journal of the Electrochemical Society, 2016, 163, A958-A963.	1.3	74
116	Comment on â€œCycling Li-O ₂ batteries via LiOH formation and decompositionâ€• Science, 2016, 352, 667-667.	6.0	38
117	An Electrochemical Impedance Study of the Capacity Limitations in Naâ€“O₂ Cells. Journal of Physical Chemistry C, 2016, 120, 10799-10805.	1.5	38
118	Implications of 4 e^{â€“} Oxygen Reduction via Iodide Redox Mediation in Liâ€“O₂ Batteries. ACS Energy Letters, 2016, 1, 747-756.	8.8	145
119	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.	1.3	38
120	Advances in understanding mechanisms underpinning lithiumâ€“air batteries. Nature Energy, 2016, 1, .	19.8	1,050
121	A Molten Salt Lithiumâ€“Oxygen Battery. Journal of the American Chemical Society, 2016, 138, 2656-2663.	6.6	114
122	An Electrochemical Impedance Spectroscopy Investigation of the Overpotentials in Liâ€“O₂ Batteries. ACS Applied Materials & Interfaces, 2015, 7, 4039-4047.	4.0	95
123	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.	3.3	293
124	Mechanistic insights for the development of Liâ€“O₂battery materials: addressing Li₂O₂conductivity limitations and electrolyte and cathode instabilities. Chemical Communications, 2015, 51, 12701-12715.	2.2	109
125	Expanding the Ragone Plot: Pushing the Limits of Energy Storage. Journal of Physical Chemistry Letters, 2015, 6, 3592-3593.	2.1	77
126	Enhancing Separation and Mechanical Performance of Hybrid Membranes through Nanoparticle Surface Modification. ACS Macro Letters, 2015, 4, 1239-1243.	2.3	21

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127	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.	2.1	235
128	Solvating additives drive solution-mediated electrochemistry and enhance toroid growth in non-aqueous Liâ€“O2 batteries. Nature Chemistry, 2015, 7, 50-56.	6.6	716
129	Recyclable, Strong Thermosets and Organogels via Paraformaldehyde Condensation with Diamines. Science, 2014, 344, 732-735.	6.0	362
130	Nonaqueous Liâ€“Air Batteries: A Status Report. Chemical Reviews, 2014, 114, 11721-11750.	23.0	848
131	Chemical and Electrochemical Differences in Nonaqueous Liâ€“O₂ and Naâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2014, 5, 1230-1235.	2.1	186
132	Implications of CO₂ Contamination in Rechargeable Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2013, 4, 276-279.	2.1	240
133	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.	2.1	337
134	Oxygen Concentration Control of Dopamine-Induced High Uniformity Surface Coating Chemistry. ACS Applied Materials & Interfaces, 2013, 5, 233-238.	4.0	206
135	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.	1.5	328
136	A bioinspired fouling-resistant surface modification for water purification membranes. Journal of Membrane Science, 2012, 413-414, 82-90.	4.1	295
137	Twin Problems of Interfacial Carbonate Formation in Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry Letters, 2012, 3, 997-1001.	2.1	992
138	Limitations in Rechargeability of Li-O₂ Batteries and Possible Origins. Journal of Physical Chemistry Letters, 2012, 3, 3043-3047.	2.1	387
139	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.	4.1	41
140	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.	4.1	29
141	On the Efficacy of Electrocatalysis in Nonaqueous Liâ€“O₂ Batteries. Journal of the American Chemical Society, 2011, 133, 18038-18041.	6.6	606
142	Electrical conductivity in Li2O2 and its role in determining capacity limitations in non-aqueous Li-O2 batteries. Journal of Chemical Physics, 2011, 135, 214704.	1.2	502
143	Identifying Capacity Limitations in the Li/Oxygen Battery Using Experiments and Modeling. Journal of the Electrochemical Society, 2011, 158, A343.	1.3	254
144	Solventsâ€™ Critical Role in Nonaqueous Lithiumâ€“Oxygen Battery Electrochemistry. Journal of Physical Chemistry Letters, 2011, 2, 1161-1166.	2.1	926

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145	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.	4.1	297
146	Bifunctional hydrogel coatings for water purification membranes: Improved fouling resistance and antimicrobial activity. Journal of Membrane Science, 2011, 372, 285-291.	4.1	88
147	Lithiumâ^'Air Battery: Promise and Challenges. Journal of Physical Chemistry Letters, 2010, 1, 2193-2203.	2.1	2,314
148	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.	1.8	338
149	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
150	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.	1.8	53
151	Preparation and characterization of crosslinked poly(ethylene glycol) diacrylate hydrogels as fouling-resistant membrane coating materials. Journal of Membrane Science, 2009, 330, 180-188.	4.1	145
152	PEG-coated reverse osmosis membranes: Desalination properties and fouling resistance. Journal of Membrane Science, 2009, 340, 92-108.	4.1	260
153	Crosslinked poly(ethylene oxide) fouling resistant coating materials for oil/water separation. Journal of Membrane Science, 2008, 307, 260-267.	4.1	203
154	Effect of Metal Doping on the Initial Pyrolysis Chemistry of Cellulose Chars. Energy & Fuels, 2008, 22, 2816-2825.	2.5	8
155	Reactive Amphiphilic Graft Copolymer Coatings Applied to Poly(vinylidene fluoride) Ultrafiltration Membranes. Macromolecules, 2007, 40, 3624-3630.	2.2	94
156	12-Tungstophosphoric Acid Composites with Sulfonated or Unsulfonated Epoxies for High-Temperature PEMFCs. Journal of the Electrochemical Society, 2005, 152, A98.	1.3	18
157	Detection of reactive intermediates from and characterization of biomass char by laser pyrolysis molecular beam mass spectroscopy. Fuel, 2004, 83, 1483-1494.	3.4	25
158	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.	2.6	27
159	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.	6.6	77
160	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. ACS Energy Letters, 0, , 1399-1404.	8.8	228
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