Christopher Johnson

List of Publications by Year
in descending order

58 papers	11,568 citations	101384 36 h-index	155451 55 g-index
62 all docs	62 docs citations	62 times ranked	10707 citing authors

#	Article	IF	Citations
1	Cathode pre-lithiation/sodiation for next-generation batteries. Current Opinion in Electrochemistry, 2022, 31, 100827.	2.5	18
2	Effect of Electrolytes on the Cathode-Electrolyte Interfacial Stability of Fe-Based Layered Cathodes for Sodium-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 030536.	1.3	10
3	Synthesis of high-density olivine LiFePO4 from paleozoic siderite FeCO3 and its electrochemical performance in lithium batteries. APL Materials, 2022, 10, .	2.2	4
4	Sequential Fe Reduction, Involving Two Different Fe⁺ Intermediates, in the Conversion Reaction of Prussian Blue in Lithium-Ion Batteries. Chemistry of Materials, 2022, 34, 4660-4671.	3.2	0
5	Theory-guided experimental design in battery materials research. Science Advances, 2022, 8, eabm2422.	4.7	52
6	Critical Evaluation of Potentiostatic Holds as Accelerated Predictors of Capacity Fade during Calendar Aging. Journal of the Electrochemical Society, 2022, 169, 050531.	1.3	16
7	Unraveling the formation mechanism of NaCoPO4 polymorphs. Journal of Solid State Chemistry, 2021, 293, 121766.	1.4	4
8	New Highâ€Performance Pbâ€Based Nanocomposite Anode Enabled by Wideâ€Range Pb Redox and Zintl Phase Transition. Advanced Functional Materials, 2021, 31, 2005362.	7.8	6
9	Dual functionality of over-lithiated NMC for high energy silicon-based lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 12818-12829.	5.2	16
10	Calendar aging of silicon-containing batteries. Nature Energy, 2021, 6, 866-872.	19.8	137
11	Li2O-Based Cathode Additives Enabling Prelithiation of Si Anodes. Applied Sciences (Switzerland), 2021, 11, 12027.	1.3	12
12	Kinetically Stable Oxide Overlayers on Mo₃P Nanoparticles Enabling Lithiumâ€"Air Batteries with Low Overpotentials and Long Cycle Life. Advanced Materials, 2020, 32, e2004028.	11.1	42
13	Graphite Lithiation under Fast Charging Conditions: Atomistic Modeling Insights. Journal of Physical Chemistry C, 2020, 124, 8162-8169.	1.5	18
14	Beneficial Effect of Li₅FeO₄ Lithium Source for Li-Ion Batteries with a Layered NMC Cathode and Si Anode. Journal of the Electrochemical Society, 2020, 167, 160543.	1.3	27
15	Investigating Surface Structure, Chemistry, and Thickness of NMC Cathodes Blended with LFO using EELS. Microscopy and Microanalysis, 2019, 25, 2180-2181.	0.2	0
16	High-Rate Spinel LiMn₂O₄ (LMO) Following Carbonate Removal and Formation of Li-Rich Interface by ALD Treatment. Journal of Physical Chemistry C, 2019, 123, 23783-23790.	1.5	22
17	Liquid Ammonia Chemical Lithiation: An Approach for High-Energy and High-Voltage Siâ€"Graphite|Li_{1+<i>x</i>}Ni_{0.5}Mn_{1.5}O₄ Li-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5019-5028.	2.5	31
18	A New Emerging Technology: Naâ€Ion Batteries. Small Methods, 2019, 3, 1900184.	4.6	37

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19	Photo-accelerated fast charging of lithium-ion batteries. Nature Communications, 2019, 10, 4946.	5.8	68
20	Capacity fade in high energy silicon-graphite electrodes for lithium-ion batteries. Chemical Communications, 2018, 54, 3586-3589.	2.2	41
21	On Disrupting the Na⁺-Ion/Vacancy Ordering in P2-Type Sodiumâ€“Manganeseâ€“Nickel Oxide Cathodes for Na⁺-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 23251-23260.	1.5	55
22	Mechanism for Al2O3 Atomic Layer Deposition on LiMn2O4 from In Situ Measurements and Ab Initio Calculations. CheM, 2018, 4, 2418-2435.	5.8	47
23	Assessment of Li-Inventory in Cycled Si-Graphite Anodes Using LiFePO₄as a Diagnostic Cathode. Journal of the Electrochemical Society, 2018, 165, A2389-A2396.	1.3	28
24	The quest for manganese-rich electrodes for lithium batteries: strategic design and electrochemical behavior. Sustainable Energy and Fuels, 2018, 2, 1375-1397.	2.5	59
25	Mitigating the initial capacity loss and improving the cycling stability of silicon monoxide using Li5FeO4. Journal of Power Sources, 2018, 400, 549-555.	4.0	43
26	Microwave-Assisted Synthesis of NaCoPO₄ Red-Phase and Initial Characterization as High Voltage Cathode for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4391-4396.	4.0	31
27	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. Nature Energy, 2017, 2, 963-971.	19.8	140
28	A new strategy to mitigate the initial capacity loss of lithium ion batteries. Journal of Power Sources, 2016, 324, 150-157.	4.0	84
29	Long cycle life microporous spherical carbon anodes for sodium-ion batteries derived from furfuryl alcohol. Journal of Materials Chemistry A, 2016, 4, 6271-6275.	5.2	46
30	A High Power Rechargeable Nonaqueous Multivalent Zn/V₂O₅ Battery. Advanced Energy Materials, 2016, 6, 1600826.	10.2	284
31	Dynamic Observation of Tunnel-driven Lithiation Process in Single Crystalline a-MnCh Nanowires. Microscopy and Microanalysis, 2015, 21, 329-330.	0.2	0
32	Nanostructured Layered Cathode for Rechargeable Mg-Ion Batteries. ACS Nano, 2015, 9, 8194-8205.	7.3	181
33	Asynchronous Crystal Cell Expansion during Lithiation of K⁺-Stabilized Î±-MnO₂. Nano Letters, 2015, 15, 2998-3007.	4.5	161
34	Role of Cr³⁺/Cr⁶⁺ redox in chromium-substituted Li₂MnO₃Â·LiNi_{1/2}Mn_{1/2}O₂ layered composite cathodes: electrochemistry and voltage fade. Journal of Materials Chemistry A, 2015, 3, 9915-9924.	5.2	35
35	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe³⁺/Fe⁴⁺ Redox in Î±-NaFeO₂. Chemistry of Materials, 2015, 27, 6755-6764.	3.2	162
36	Rechargeable Seawater Battery and Its Electrochemical Mechanism. ChemElectroChem, 2015, 2, 328-332.	1.7	85

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37	Comparative electrochemical sodium insertion/extraction behavior in layered NaxVS2 and NaxTiS2. Electrochimica Acta, 2014, 143, 272-277.	2.6	32
38	Electrodes: Layered P2/O3 Intergrowth Cathode: Toward High Power Na-Ion Batteries (Adv. Energy) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	10.2	5
39	First-Cycle Evolution of Local Structure in Electrochemically Activated Li₂MnO₃. Chemistry of Materials, 2014, 26, 7091-7098.	3.2	80
40	Layered P2/O3 Intergrowth Cathode: Toward High Power Naâ€Ion Batteries. Advanced Energy Materials, 2014, 4, 1400458.	10.2	191
41	Spherical Carbon as a New High-Rate Anode for Sodium-ion Batteries. Electrochimica Acta, 2014, 127, 61-67.	2.6	135
42	Operando Structural Characterization of the Lithium-Substituted Layered Sodium-Ion Cathode Material P2-Na_{0.85}Li_{0.17}Ni_{0.21}Mn_{0.64}O₂by X-ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2014, 161, A1107-A1115.	1.3	36
43	Sodiumâ€Ion Batteries. Advanced Functional Materials, 2013, 23, 947-958.	7.8	3,832
44	Study of Thermal Decomposition of Li_{1â€x}(Ni_{1/3}Mn_{1/3}Co_{1/3})_{0.9}O₂ Using Inâ€Situ Highâ€Energy Xâ€Ray Diffraction. Advanced Energy Materials, 2013, 3, 729-736.	10.2	48
45	Intercalation of Sodium Ions into Hollow Iron Oxide Nanoparticles. Chemistry of Materials, 2013, 25, 245-252.	3.2	104
46	Nanostructured Bilayered Vanadium Oxide Electrodes for Rechargeable Sodium-Ion Batteries. ACS Nano, 2012, 6, 530-538.	7.3	313
47	Layered Na[Ni1/3Fe1/3Mn1/3]O2 cathodes for Na-ion battery application. Electrochemistry Communications, 2012, 18, 66-69.	2.3	384
48	Amorphous TiO₂ Nanotube Anode for Rechargeable Sodium Ion Batteries. Journal of Physical Chemistry Letters, 2011, 2, 2560-2565.	2.1	625
49	Enabling Sodium Batteries Using Lithiumâ€Substituted Sodium Layered Transition Metal Oxide Cathodes. Advanced Energy Materials, 2011, 1, 333-336.	10.2	397
50	High-energy and high-power Li-rich nickel manganese oxide electrode materials. Electrochemistry Communications, 2010, 12, 1618-1621.	2.3	87
51	Structural complexity of layered-spinel composite electrodes for Li-ion batteries. Journal of Materials Research, 2010, 25, 1601-1616.	1.2	34
52	Li₂O Removal from Li₅FeO₄: A Cathode Precursor for Lithium-Ion Batteries. Chemistry of Materials, 2010, 22, 1263-1270.	3.2	81
53	Li2MnO3-stabilized LiMO2 (M = Mn, Ni, Co) electrodes for lithium-ion batteries. Journal of Materials Chemistry, 2007, 17, 3112.	6.7	1,817
54	Advances in manganese-oxide â€˜compositeâ€™ electrodes for lithium-ion batteries. Journal of Materials Chemistry, 2005, 15, 2257.	6.7	1,003

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55	The Electrochemical Stability of Spinel Electrodes Coated with ZrO[sub 2], Al[sub 2]O[sub 3], and SiO[sub 2] from Colloidal Suspensions. Journal of the Electrochemical Society, 2004, 151, A1755.	1.3	132
56	Structural Characterization of Layered LixNi0.5Mn0.5O2(0 <xâ‰ 2) Oxide Electrodes for Li Batteries. Chemistry of Materials, 2003, 15, 2313-2322.	3.2	124
57	The role of Li2MO2 structures (M=metal ion) in the electrochemistry of (x)LiMn0.5Ni0.5O2Â·(1â^'x)Li2TiO3 electrodes for lithium-ion batteries. Electrochemistry Communications, 2002, 4, 492-498.	2.3	98
58	Lithium-Ion Battery Materials as Tunable, â€œRedox Non-Innocentâ€•Catalyst Supports. ACS Catalysis, 0, , 7233-7242.	5.5	6