Wesley Dose

List of Publications by Year
in descending order

48 papers	1,409 citations	331670 21 h-index	345221 36 g-index
50 all docs	50 docs citations	50 times ranked	1696 citing authors

#	Article	IF	Citations
1	In Situ and Operando Analyses of Reaction Mechanisms in Vanadium Oxides for Liâ€, Naâ€, Znâ€, and Mgâ€Ions Batteries. Advanced Materials Technologies, 2022, 7, 2100799.	5.8	24
2	Cathode pre-lithiation/sodiation for next-generation batteries. Current Opinion in Electrochemistry, 2022, 31, 100827.	4.8	18
3	Cycle-Induced Interfacial Degradation and Transition-Metal Cross-Over in LiNi_{0.8}Mn_{0.1}Co_{0.1}O₂â€"Graphite Cells. Chemistry of Materials, 2022, 34, 2034-2048.	6.7	28
4	Electrolyte Reactivity at the Charged Ni-Rich Cathode Interface and Degradation in Li-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 13206-13222.	8.0	45
5	Hollow-core optical fibre sensors for operando Raman spectroscopy investigation of Li-ion battery liquid electrolytes. Nature Communications, 2022, 13, 1651.	12.8	61
6	Synthesis of high-density olivine LiFePO4 from paleozoic siderite FeCO3 and its electrochemical performance in lithium batteries. APL Materials, 2022, 10, .	5.1	4
7	Aerosol Jet Printing as a Versatile Sample Preparation Method for <i>Operando</i> Electrochemical TEM Microdevices. Advanced Materials Interfaces, 2022, 9, .	3.7	1
8	Electrochemical and structural evolution of structured V2O5 microspheres during Li-ion intercalation. Journal of Energy Chemistry, 2021, 55, 108-113.	12.9	19
9	Influence of counter ions of ammonium for nitrogen doping and carbon properties in hydrothermal carbonization: characterization and supercapacitor performance. Materials Advances, 2021, 2, 384-397.	5.4	10
10	Ruddlesden Popper 2D perovskites as Li-ion battery electrodes. Materials Advances, 2021, 2, 3370-3377.	5.4	13
11	Dual functionality of over-lithiated NMC for high energy silicon-based lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 12818-12829.	10.3	16
12	The influence of electrochemical cycling protocols on capacity loss in nickel-rich lithium-ion batteries. Journal of Materials Chemistry A, 2021, 9, 23582-23596.	10.3	17
13	Effect of Anode Slippage on Cathode Cutoff Potential and Degradation Mechanisms in Ni-Rich Li-Ion Batteries. Cell Reports Physical Science, 2020, 1, 100253.	5.6	42
14	Photo-rechargeable zinc-ion batteries. Energy and Environmental Science, 2020, 13, 2414-2421.	30.8	135
15	Structural evolution and electrochemistry of the Mn-Rich P2â€" Na2/3Mn0.9Ti0.05Fe0.05O2 positive electrode material. Electrochimica Acta, 2020, 341, 135978.	5.2	13
16	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.	2.9	27
17	Origins of Capacity Fade and Material Degradation in Ni-Rich NMC Li-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 218-218.	0.0	0
18	Investigating Surface Structure, Chemistry, and Thickness of NMC Cathodes Blended with LFO using EELS. Microscopy and Microanalysis, 2019, 25, 2180-2181.	0.4	0

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19	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.	3.1	22
20	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.	5.1	31
21	Photo-accelerated fast charging of lithium-ion batteries. Nature Communications, 2019, 10, 4946.	12.8	68
22	Capacity fade in high energy silicon-graphite electrodes for lithium-ion batteries. Chemical Communications, 2018, 54, 3586-3589.	4.1	41
23	High voltage structural evolution and enhanced Na-ion diffusion in P2-Na_{2/3}Ni_{1/3â^'x}Mg_xMn_{2/3}O₂ (0 â‰ <i>x</i>) Tj ETQq1 1 0.7843 Environmental Science, 2018, 11, 1470-1479.	30.8	148
24	Rate and Composition Dependence on the Structuralâ€"Electrochemical Relationships in P2â€"Na_{2/3}Fe_{1â€"<i>y</i>}Mn_{<i>y</i>}O₂ Positive Electrodes for Sodium-Ion Batteries. Chemistry of Materials, 2018, 30, 7503-7510.	6.7	21
25	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.	3.1	55
26	Assessment of Li-Inventory in Cycled Si-Graphite Anodes Using LiFePO₄as a Diagnostic Cathode. Journal of the Electrochemical Society, 2018, 165, A2389-A2396.	2.9	28
27	Mitigating the initial capacity loss and improving the cycling stability of silicon monoxide using Li5FeO4. Journal of Power Sources, 2018, 400, 549-555.	7.8	43
28	Nitrogen doped heat treated and activated hydrothermal carbon: NEXAFS examination of the carbon surface at different temperatures. Carbon, 2018, 128, 179-190.	10.3	34
29	Synchrotron based NEXAFS study on nitrogen doped hydrothermal carbon: Insights into surface functionalities and formation mechanisms. Carbon, 2017, 114, 566-578.	10.3	72
30	Structureâ€"Electrochemical Evolution of a Mn-Rich P2 Na_{2/3}Fe_{0.2}Mn_{0.8}O₂ Na-Ion Battery Cathode. Chemistry of Materials, 2017, 29, 7416-7423.	6.7	58
31	Crystallographic Evolution of P2 Na_{2/3}Fe_{0.4}Mn_{0.6}O₂ Electrodes during Electrochemical Cycling. Chemistry of Materials, 2016, 28, 6342-6354.	6.7	69
32	In-Situ Investigation of the Electrodeposition of Manganese Dioxide Using Small Angle X-Ray Scattering. Journal of the Electrochemical Society, 2015, 162, A1809-A1815.	2.9	3
33	Using in situ synchrotron x-ray diffraction to study lithium- and sodium-ion batteries: A case study with an unconventional battery electrode (Gd₂TiO₅). Journal of Materials Research, 2015, 30, 381-389.	2.6	12
34	Mechanistic and structural investigation of LixMnO2 cathodes during cycling in Li-ion batteries. Electrochimica Acta, 2014, 137, 736-743.	5.2	4
35	Discharge mechanism of the heat treated electrolytic manganese dioxide cathode in a primary Li/MnO2 battery: An in-situ and ex-situ synchrotron X-ray diffraction study. Journal of Power Sources, 2014, 258, 155-163.	7.8	18
36	Kinetics of the Thermally-Induced Structural Rearrangement of Î³-MnO₂. Journal of Physical Chemistry C, 2014, 118, 24257-24265.	3.1	14

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37	Optimising heat treatment environment and atmosphere of electrolytic manganese dioxide for primary Li/MnO 2 batteries. Journal of Power Sources, 2014, 247, 852-857.	7.8	27
38	Heat treated electrolytic manganese dioxide for primary Li/MnO2 batteries: Effect of manganese dioxide properties on electrochemical performance. Electrochimica Acta, 2013, 105, 305-313.	5.2	19
39	Optimizing Li/MnO2 batteries: Relating manganese dioxide properties and electrochemical performance. Journal of Power Sources, 2013, 221, 261-265.	7.8	21
40	Preparation and Electrochemical Performance of Li_xMnO₂Materials by a Reduction and Lithiation Method. Journal of the Electrochemical Society, 2013, 160, A1358-A1363.	2.9	2
41	Thermal expansion of manganese dioxide using high-temperature<i>in situ</i>X-ray diffraction. Journal of Applied Crystallography, 2013, 46, 1283-1288.	4.5	9
42	Thermal Lithiation of Manganese Dioxide: Effect of Low Lithium Concentration (x â‰ 0.3 in) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 T Electrochemical Society, 2012, 159, A904-A908.	2.9	8
43	Characterisation of chemically lithiated heat-treated electrolytic manganese dioxide. Materials Research Bulletin, 2012, 47, 1827-1834.	5.2	17
44	Manganese dioxide structural effects on its thermal decomposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1169-1177.	3.5	42
45	Kinetic analysis of Î³-MnO2 thermal treatment. Journal of Thermal Analysis and Calorimetry, 2011, 105, 113-122.	3.6	17
46	Thermal Treatment Effects on Manganese Dioxide Structure, Morphology and Electrochemical Performance. Journal of the Electrochemical Society, 2011, 158, A905.	2.9	17
47	Heat Treated Electrolytic Manganese Dioxide for Li/MnO2 Batteries: Effect of Precursor Properties. Journal of the Electrochemical Society, 2011, 158, A1036.	2.9	15
48	A Combined Lithium Intercalation and Plating Mechanism Using Conductive Carbonâ€Fiber Electrodes. Batteries and Supercaps, 0, , .	4.7	1