Dennis W Dees

List of Publications by Year
in descending order

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48 papers	3,562 citations	136950 32 h-index	206112 48 g-index
49 all docs	49 docs citations	49 times ranked	4002 citing authors

#	Article	IF	Citations
1	Estimating the Diffusion Coefficient of Lithium in Graphite: Extremely Fast Charging and a Comparison of Data Analysis Techniques. Journal of the Electrochemical Society, 2021, 168, 070506.	2.9	12
2	Pathways towards managing cost and degradation risk of fast charging cells with electrical and thermal controls. Energy and Environmental Science, 2021, 14, 6564-6573.	30.8	16
3	In situ X-ray spatial profiling reveals uneven compression of electrode assemblies and steep lateral gradients in lithium-ion coin cells. Physical Chemistry Chemical Physics, 2020, 22, 21977-21987.	2.8	25
4	Graphite Lithiation under Fast Charging Conditions: Atomistic Modeling Insights. Journal of Physical Chemistry C, 2020, 124, 8162-8169.	3.1	18
5	Apparent Increasing Lithium Diffusion Coefficient with Applied Current in Graphite. Journal of the Electrochemical Society, 2020, 167, 120528.	2.9	34
6	Fast Charging of Li-Ion Cells: Part II. Nonlinear Contributions to Cell and Electrode Polarization. Journal of the Electrochemical Society, 2019, 166, A3305-A3313.	2.9	24
7	Fast Charging of Li-Ion Cells: Part I. Using Li/Cu Reference Electrodes to Probe Individual Electrode Potentials. Journal of the Electrochemical Society, 2019, 166, A996-A1003.	2.9	79
8	Modeling and analysis of solvent removal during Li-ion battery electrode drying. Journal of Power Sources, 2018, 378, 660-670.	7.8	62
9	Investigations of Si Thin Films as Anode of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 3487-3494.	8.0	40
10	Cost of automotive lithium-ion batteries operating at high upper cutoff voltages. Journal of Power Sources, 2018, 403, 56-65.	7.8	51
11	On Leakage Current Measured at High Cell Voltages in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A508-A517.	2.9	44
12	Cost and energy demand of producing nickel manganese cobalt cathode material for lithium ion batteries. Journal of Power Sources, 2017, 342, 733-740.	7.8	129
13	Enhanced representations of lithium-ion batteries in power systems models and their effect on the valuation of energy arbitrage applications. Journal of Power Sources, 2017, 342, 279-291.	7.8	50
14	Energy impact of cathode drying and solvent recovery during lithium-ion battery manufacturing. Journal of Power Sources, 2016, 322, 169-178.	7.8	84
15	Electrode Behavior RE-Visited: Monitoring Potential Windows, Capacity Loss, and Impedance Changes in Li_{1.03}(Ni_{0.5}Co_{0.2}Mn_{0.3})_{0.97}O₂/Silicon-Graphite Full Cells. Journal of the Electrochemical Society, 2016, 163, A875-A887.	2.9	112
16	Study of a dry room in a battery manufacturing plant using a process model. Journal of Power Sources, 2016, 326, 490-497.	7.8	57
17	Nonlinear Conductivities and Electrochemical Performances of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂Electrodes. Journal of the Electrochemical Society, 2016, 163, A2720-A2724.	2.9	8
18	Enabling High-Energy, High-Voltage Lithium-Ion Cells: Standardization of Coin-Cell Assembly, Electrochemical Testing, and Evaluation of Full Cells. Journal of the Electrochemical Society, 2016, 163, A2999-A3009.	2.9	95

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19	Optimizing Areal Capacities through Understanding the Limitations of Lithium-Ion Electrodes. Journal of the Electrochemical Society, 2016, 163, A138-A149.	2.9	472
20	A Raman-Based Investigation of the Fate of Li₂MnO₃in Lithium- and Manganese-Rich Cathode Materials for Lithium Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A1255-A1264.	2.9	38
21	Electrochemical Modeling and Performance of a Lithium- and Manganese-Rich Layered Transition-Metal Oxide Positive Electrode. Journal of the Electrochemical Society, 2015, 162, A559-A572.	2.9	44
22	Examining the Electrochemical Impedance at Low States of Charge in Lithium- and Manganese-Rich Layered Transition-Metal Oxide Electrodes. Journal of the Electrochemical Society, 2015, 162, A1374-A1381.	2.9	22
23	Physical Theory of Voltage Fade in Lithium- and Manganese-Rich Transition Metal Oxides. Journal of the Electrochemical Society, 2015, 162, A897-A904.	2.9	27
24	Cost savings for manufacturing lithium batteries in a flexible plant. Journal of Power Sources, 2015, 283, 506-516.	7.8	34
25	Insight into the Structural Evolution of a High-Voltage Spinel for Lithium-Ion Batteries. Chemistry of Materials, 2014, 26, 4750-4756.	6.7	23
26	Examining Hysteresis in Composite xLi₂MnO₃Â·(1â€“x)LiMO₂ Cathode Structures. Journal of Physical Chemistry C, 2013, 117, 6525-6536.	3.1	234
27	Investigations on high energy lithium-ion batteries with aqueous binder. Electrochimica Acta, 2013, 114, 1-6.	5.2	49
28	Electrochemical Characterization of Lithium and Manganese Rich Composite Material for Lithium Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A950-A954.	2.9	9
29	Electrochemical Modeling the Impedance of a Lithium-Ion Positive Electrode Single Particle. Journal of the Electrochemical Society, 2013, 160, A478-A486.	2.9	25
30	Insights into the Role of Interphasial Morphology on the Electrochemical Performance of Lithium Electrodes. Journal of the Electrochemical Society, 2012, 159, A873-A886.	2.9	36
31	A Volume Averaged Approach to the Numerical Modeling of Phase-Transition Intercalation Electrodes Presented for Li_xC₆. Journal of the Electrochemical Society, 2012, 159, A2029-A2037.	2.9	86
32	Effects of lithium difluoro(oxalate)borate on the performance of Li-rich composite cathode in Li-ion battery. Electrochemistry Communications, 2012, 24, 78-81.	4.7	53
33	Simplified calculation of the area specific impedance for battery design. Journal of Power Sources, 2011, 196, 2289-2297.	7.8	53
34	High-energy electrode investigation for plug-in hybrid electric vehicles. Journal of Power Sources, 2011, 196, 1537-1540.	7.8	71
35	Olivine electrode engineering impact on the electrochemical performance of lithium-ion batteries. Journal of Materials Research, 2010, 25, 1656-1660.	2.6	16
36	Analysis of the Galvanostatic Intermittent Titration Technique (GITT) as applied to a lithium-ion porous electrode. Journal of Power Sources, 2009, 189, 263-268.	7.8	232

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37	Morphological Transitions on Lithium Metal Anodes. Journal of the Electrochemical Society, 2009, 156, A726.	2.9	136
38	Electrochemical Modeling of Lithium-Ion Positive Electrodes during Hybrid Pulse Power Characterization Tests. Journal of the Electrochemical Society, 2008, 155, A603.	2.9	98
39	Theoretical examination of reference electrodes for lithium-ion cells. Journal of Power Sources, 2007, 174, 1001-1006.	7.8	65
40	Low-temperature study of lithium-ion cells using a LiySn micro-reference electrode. Journal of Power Sources, 2007, 174, 373-379.	7.8	98
41	Alternating Current Impedance Electrochemical Modeling of Lithium-Ion Positive Electrodes. Journal of the Electrochemical Society, 2005, 152, A1409.	2.9	129
42	Application of a lithiumâ€“tin reference electrode to determine electrode contributions to impedance rise in high-power lithium-ion cells. Electrochimica Acta, 2004, 49, 4763-4775.	5.2	158
43	Electrochemical modeling of lithium polymer batteries. Journal of Power Sources, 2002, 110, 310-320.	7.8	126
44	Modeling thermal management of lithium-ion PNGV batteries. Journal of Power Sources, 2002, 110, 349-356.	7.8	182
45	Toward standardizing the measurement of electrochemical properties of solid-state electrolytes in lithium batteries. Journal of Power Sources, 2000, 89, 249-255.	7.8	12
46	Theoretical Analysis of a Blockingâ€Electrode Oxygen Sensor for Combustionâ€Gas Streams. Journal of the Electrochemical Society, 1993, 140, 2001-2010.	2.9	5
47	Mass Transfer at Gas Evolving Surfaces: A Microscopic Study. Journal of the Electrochemical Society, 1987, 134, 1702-1713.	2.9	13
48	Experimental Observations of Freeâ€Convection Mass Transfer to a Horizontal Surface with a Micromosaic Electrode. Journal of the Electrochemical Society, 1987, 134, 369-377.	2.9	18