Nicolas DuprÃ©

List of Publications by Year
in descending order

34 papers	1,954 citations	394421 19 h-index	377865 34 g-index
34 all docs	34 docs citations	34 times ranked	2856 citing authors

#	Article	IF	Citations
1	NMR Studies of Cathode Materials for Lithium-Ion Rechargeable Batteries. Chemical Reviews, 2004, 104, 4493-4512.	47.7	581
2	High-resolution X-ray diffraction, DIFFaX, NMR and first principles study of disorder in the Li2MnO3â€“Li[Ni1/2Mn1/2]O2 solid solution. Journal of Solid State Chemistry, 2005, 178, 2575-2585.	2.9	323
3	Short- and Long-Range Order in the Positive Electrode Material, Li(NiMn)0.5O2:Â A Joint X-ray and Neutron Diffraction, Pair Distribution Function Analysis and NMR Study. Journal of the American Chemical Society, 2005, 127, 7529-7537.	13.7	185
4	Spectroscopic Characterization of the SEI Layer Formed on Lithium Metal Electrodes in Phosphonium Bis(fluorosulfonyl)imide Ionic Liquid Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 6719-6729.	8.0	77
5	Study of Immersion of LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂ Material in Water for Aqueous Processing of Positive Electrode for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 18331-18341.	8.0	71
6	Mechanism of Silicon Electrode Aging upon Cycling in Full Lithiumâ€ion Batteries. ChemSusChem, 2016, 9, 841-848.	6.8	67
7	Aging of the LiFePO4 positive electrode interface in electrolyte. Journal of Power Sources, 2010, 195, 7415-7425.	7.8	58
8	Moisture driven aging mechanism of LiFePO4 subjected to air exposure. Electrochemistry Communications, 2010, 12, 238-241.	4.7	50
9	Detection of surface layers using 7Li MAS NMR. Journal of Materials Chemistry, 2008, 18, 4266.	6.7	45
10	Relationship between surface chemistry and electrochemical behavior of LiNi1/2Mn1/2O2 positive electrode in a lithium-ion battery. Journal of Power Sources, 2011, 196, 4791-4800.	7.8	42
11	More on the reactivity of olivine LiFePO4 nano-particles with atmosphere at moderate temperature. Journal of Power Sources, 2011, 196, 2155-2163.	7.8	39
12	Effect of glutaric anhydride additive on the LiNi0.4Mn1.6O4 electrode/electrolyte interface evolution: A MAS NMR and TEM/EELS study. Journal of Power Sources, 2012, 215, 170-178.	7.8	39
13	High-Capacity Retention of Si Anodes Using a Mixed Lithium/Phosphonium Bis(fluorosulfonyl)imide Ionic Liquid Electrolyte. ACS Energy Letters, 2017, 2, 1804-1809.	17.4	38
14	Evolution of the LiFePO4 positive electrode interface along cycling monitored by MAS NMR. Journal of Power Sources, 2013, 224, 50-58.	7.8	28
15	Characterization of interphases appearing on LiNi0.5Mn0.5O2 using 7Li MAS NMR. Journal of Power Sources, 2009, 189, 557-560.	7.8	26
16	Editorsâ€™ Choiceâ€”Understanding the Superior Cycling Performance of Si Anode in Highly Concentrated Phosphonium-Based Ionic Liquid Electrolyte. Journal of the Electrochemical Society, 2020, 167, 120520.	2.9	23
17	Elucidating the LiFePO4 air aging mechanism to predict its electrochemical performance. Journal of Materials Chemistry, 2011, 21, 18575.	6.7	21
18	Degradation diagnosis of aged Li4Ti5O12/LiFePO4 batteries. Journal of Power Sources, 2014, 267, 744-752.	7.8	21

#	Article	IF	Citations
19	Tuning the Formation and Structure of the Silicon Electrode/Ionic Liquid Electrolyte Interphase in Superconcentrated Ionic Liquids. ACS Applied Materials & Interfaces, 2021, 13, 28281-28294.	8.0	21
20	Influence of the Polyacrylic Acid Binder Neutralization Degree on the Initial Electrochemical Behavior of a Silicon/Graphite Electrode. ACS Applied Materials & Interfaces, 2021, 13, 28304-28323.	8.0	21
21	Characterization of the surface of positive electrodes for Li-ion batteries using 7Li MAS NMR. Ionics, 2008, 14, 203-207.	2.4	20
22	Versatile Si/P System as Efficient Anode for Lithium and Sodium Batteries: Understanding of an Original Electrochemical Mechanism by a Full XRD-NMR Study. ACS Applied Energy Materials, 2018, 1, 3778-3789.	5.1	19
23	Interphase Evolution at Two Promising Electrode Materials for Liâ€Ion Batteries: LiFePO₄ and LiNi_{1/2}Mn_{1/2}O₂. ChemPhysChem, 2014, 15, 1922-1938.	2.1	16
24	Contribution of the oxygen extracted from overlithiated layered oxides at high potential to the formation of the interphase. Journal of Power Sources, 2015, 299, 231-240.	7.8	15
25	Carbonate and Ionic Liquid Mixes as Electrolytes To Modify Interphases and Improve Cell Safety in Silicon-Based Li-Ion Batteries. Chemistry of Materials, 2017, 29, 8132-8146.	6.7	15
26	NMR quantitative analysis of solid electrolyte interphase on aged Li-ion battery electrodes. Electrochimica Acta, 2015, 155, 391-395.	5.2	14
27	Unique control of bulk reactivity by surface phenomena in a positive electrode of lithium battery. Electrochemistry Communications, 2008, 10, 1897-1900.	4.7	12
28	A structural approach of the flux effect on blue phosphor BAM:Eu (BaMgAl10O17:Eu2+). Materials Research Bulletin, 2013, 48, 2960-2968.	5.2	12
29	Effects of Relaxation on Conversion Negative Electrode Materials for Li-Ion Batteries: A Study of TiSnSb Using ¹¹⁹Sn MÃ¶ssbauer and ⁷Li MAS NMR Spectroscopies. Chemistry of Materials, 2016, 28, 4032-4041.	6.7	12
30	Sequential focused ion beam scanning electron microscopy analyses for monitoring cycled-induced morphological evolution in battery composite electrodes. Silicon-graphite electrode as exemplary case. Journal of Power Sources, 2021, 498, 229904.	7.8	12
31	From the Direct Observation of a PAAâ€Based Binder Using STEMâ€VEELS to the Ageing Mechanism of Silicon/Graphite Anode with High Areal Capacity Cycled in an FECâ€Rich and ECâ€Free Electrolyte. Advanced Energy Materials, 2022, 12, 2103348.	19.5	11
32	Further Improving Coulombic Efficiency and Discharge Capacity in LiNiO₂ Material by Activating Sluggish â¼3.5 V Discharge Reaction. ACS Applied Materials & Interfaces, 2021, 13, 23760-23770.	8.0	8
33	Control of LiFePO4 air-aging through the use of electrolyte additive. Electrochemistry Communications, 2014, 38, 138-141.	4.7	7
34	Superior Rate Capability and Cycling Stability in Partially Cation-Disordered Co-Free Li-Rich Layered Materials Enabled by an Initial Activation Process. Chemistry of Materials, 2021, 33, 5115-5126.	6.7	5