

Javier Bareño

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7770149/publications.pdf>

Version: 2024-02-01

56
papers

3,929
citations

172457

29
h-index

168389

53
g-index

57
all docs

57
docs citations

57
times ranked

5536
citing authors

#	ARTICLE	IF	CITATIONS
1	Strain-driven surface reconstruction and cation segregation in layered Li(Ni _{1-x} Mn _x Co _y)O ₂ (NMC) cathode materials. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24490-24497.	2.8	8
2	Lithium-sulfur battery with partially fluorinated ether electrolytes: Interplay between capacity, coulombic efficiency and Li anode protection. <i>Journal of Power Sources</i> , 2019, 438, 226939.	7.8	23
3	Nanoscale LiNi _{0.5} Co _{0.2} Mn _{0.3} O ₂ cathode materials for lithium ion batteries via a polymer-assisted chemical solution method. <i>Applied Materials Today</i> , 2019, 16, 342-350.	4.3	23
4	Insights from incorporating reference electrodes in symmetric lithium-ion cells with layered oxide or graphite electrodes. <i>Journal of Power Sources</i> , 2019, 438, 227033.	7.8	4
5	Meso to Atomic Scale Microstructural Changes During Ageing of NCM Li-ion Battery Materials. <i>Microscopy and Microanalysis</i> , 2019, 25, 764-765.	0.4	0
6	Effect of electrolyte composition on rock salt surface degradation in NMC cathodes during high-voltage potentiostatic holds. <i>Nano Energy</i> , 2019, 55, 216-225.	16.0	88
7	Effect of overcharge on Li(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ cathodes: NMP-soluble binder. II Chemical changes in the anode. <i>Journal of Power Sources</i> , 2018, 385, 156-164.	7.8	18
8	Chemical "Pickling" of Phosphite Additives Mitigates Impedance Rise in Li Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9811-9824.	3.1	18
9	Effect of overcharge on Li(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ /graphite lithium ion cells with poly(vinylidene fluoride) electrolyte. <i>Journal of Power Sources</i> , 2018, 385, 156-164.	7.8	18
10	Investigations of Si Thin Films as Anode of Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3487-3494.	8.0	40
11	Effect of overcharge on Li(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ /Graphite lithium ion cells with poly(vinylidene fluoride) electrolyte. <i>Journal of Power Sources</i> , 2018, 385, 148-155.	7.8	26
12	Methodology for understanding interactions between electrolyte additives and cathodes: a case of the tris(2,2,2-trifluoroethyl)phosphite additive. <i>Journal of Materials Chemistry A</i> , 2018, 6, 198-211.	10.3	24
13	On Disrupting the Na ⁺ -ion/Vacancy Ordering in P2-Type Sodium-Manganese-Nickel Oxide Cathodes for Na ⁺ -ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 23251-23260.	3.1	55
14	Approaching the capacity limit of lithium cobalt oxide in lithium ion batteries via lanthanum and aluminium doping. <i>Nature Energy</i> , 2018, 3, 936-943.	39.5	531
15	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1489-A1498.	2.9	133
16	Tris(trimethylsilyl) Phosphite (TMSPi) and Triethyl Phosphite (TEPi) as Electrolyte Additives for Lithium Ion Batteries: Mechanistic Insights into Differences during Li(Ni _{0.5} Mn _{0.3} Co _{0.2})O ₂ -Graphite Full Cell Cycling. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1579-A1586.	2.9	59
17	Surface Structure, Morphology, and Stability of Li(Ni _{1/3} Mn _{1/3} Co _{1/3})O ₂ Cathode Material. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8290-8299.	3.1	101
18	Auger Electrons as Probes for Composite Micro- and Nanostructured Materials: Application to Solid Electrolyte Interphases in Graphite and Silicon-Graphite Electrodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23333-23346.	3.1	20

#	ARTICLE	IF	CITATIONS
19	Evaluating electrolyte additives for lithium-ion cells: A new Figure of Merit approach. Journal of Power Sources, 2017, 365, 201-209.	7.8	40
20	Capacity Fade and Its Mitigation in Li-Ion Cells with Silicon-Graphite Electrodes. Journal of Physical Chemistry C, 2017, 121, 20640-20649.	3.1	59
21	Cycling Behavior of NCM523/Graphite Lithium-Ion Cells in the 3.4 V Range: Diagnostic Studies of Full Cells and Harvested Electrodes. Journal of the Electrochemical Society, 2017, 164, A6054-A6065.	2.9	145
22	Microstructural Evolution in Transition-metal-oxide Cathode Materials for Lithium-Ion Batteries. Microscopy and Microanalysis, 2016, 22, 1300-1301.	0.4	2
23	Experimental and theoretical investigations of functionalized boron nitride as electrode materials for Li-ion batteries. RSC Advances, 2016, 6, 27901-27914.	3.6	27
24	Structural Evolution of Reversible Mg Insertion into a Bilayer Structure of $V_2O_5 \cdot nH_2O$ Xerogel Material. Chemistry of Materials, 2016, 28, 2962-2969.	6.7	97
25	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
26	The effect of charging rate on the graphite electrode of commercial lithium-ion cells: A post-mortem study. Journal of Power Sources, 2016, 335, 189-196.	7.8	82
27	Stability of Li- and Mn-Rich Layered-Oxide Cathodes within the First-Charge Voltage Plateau. Journal of the Electrochemical Society, 2016, 163, A1784-A1789.	2.9	11
28	The Effect of Pre-Analysis Washing on the Surface Film of Graphite Electrodes. Electrochimica Acta, 2016, 206, 70-76.	5.2	34
29	On the Localized Nature of the Structural Transformations of Li_2MnO_3 Following Electrochemical Cycling. Advanced Energy Materials, 2015, 5, 1501252.	19.5	63
30	Effects of cycling temperatures on the voltage fade phenomenon in $0.5Li_2MnO_3 \cdot 0.5LiNi_0.375Mn_0.375Co_0.25O_2$ cathodes. Journal of Power Sources, 2015, 280, 155-158.	7.8	17
31	Effect of composition on the voltage fade phenomenon in lithium-, manganese-rich $xLiMnO_3 \cdot (1-x)LiNi_aMn_bCo_cO_2$: A combinatorial synthesis approach. Journal of Power Sources, 2015, 294, 711-718.	7.8	9
32	Pristine-state structure of lithium-ion-battery cathode material $Li_{1.2}Mn_{0.4}Co_{0.4}O_2$ derived from NMR bond pathway analysis. Journal of Materials Chemistry A, 2015, 3, 11471-11477.	10.3	17
33	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
34	Exploring Electrochemistry and Interface Characteristics of Lithium-Ion Cells with $Li_{1.2}Ni_{0.15}Mn_{0.55}Co_{0.1}O_2$ Positive and $Li_4Ti_5O_{12}$ Negative Electrodes. Journal of the Electrochemical Society, 2015, 162, A7049-A7059.	2.9	28
35	Unexpected Voltage Fade in LMR-NMC Oxides Cycled below the "Activation" Plateau. Journal of the Electrochemical Society, 2015, 162, A155-A161.	2.9	21
36	Post-Test Analysis of Battery Materials: Another Part of the Question. ECS Transactions, 2014, 61, 145-154.	0.5	0

#	ARTICLE	IF	CITATIONS
37	Probing Thermally Induced Decomposition of Delithiated $\text{Li}_{1.2}\text{Ni}_{0.15}\text{Mn}_{0.55}\text{Co}_{0.1}\text{O}_2$ by in Situ High-Energy X-ray Diffraction. ACS Applied Materials & Interfaces, 2014, 6, 12692-12697.	8.0	47
38	Differentiating allotropic $\text{LiCoO}_2/\text{Li}_2\text{Co}_2\text{O}_4$: A structural and electrochemical study. Journal of Power Sources, 2014, 271, 97-103.	7.8	24
39	Formation of Li_2MnO_3 investigated by in situ synchrotron probes. Journal of Power Sources, 2014, 266, 341-346.	7.8	20
40	Compatibility of lithium salts with solvent of the non-aqueous electrolyte in LiO_2 batteries. Physical Chemistry Chemical Physics, 2013, 15, 5572.	2.8	76
41	Role of Polysulfides in Self-Healing Lithium-Sulfur Batteries. Advanced Energy Materials, 2013, 3, 833-838.	19.5	170
42	Observation of Microstructural Evolution in Li Battery Cathode Oxide Particles by In Situ Electron Microscopy. Advanced Energy Materials, 2013, 3, 1098-1103.	19.5	336
43	Lithium And Transition Metal Ordering In Overlithiated Layered Oxides For Lithium-Ion Batteries. Microscopy and Microanalysis, 2012, 18, 1318-1319.	0.4	0
44	Long-Range and Local Structure in the Layered Oxide $\text{Li}_{1.2}\text{Co}_{0.4}\text{Mn}_{0.4}\text{O}_2$. Chemistry of Materials, 2011, 23, 2039-2050.	6.7	171
45	Analytical electron microscopy of $\text{Li}_{1.2}\text{Co}_{0.4}\text{Mn}_{0.4}\text{O}_2$ for lithium-ion batteries. Solid State Ionics, 2011, 182, 98-107.	2.7	65
46	Local Structure of Layered Oxide Electrode Materials for Lithium-Ion Batteries. Advanced Materials, 2010, 22, 1122-1127.	21.0	152
47	Wurtzite structure $\text{Sc}_{1-x}\text{Al}_x\text{N}$ solid solution films grown by reactive magnetron sputter epitaxy: Structural characterization and first-principles calculations. Journal of Applied Physics, 2010, 107, .	2.5	122
48	Cubic $\text{Sc}_{1-x}\text{Al}_x\text{N}$ solid solution thin films deposited by reactive magnetron sputter epitaxy onto $\text{ScN}(111)$. Journal of Applied Physics, 2009, 105, .	2.5	58
49	Growth of Semiconducting Graphene on Palladium. Nano Letters, 2009, 9, 3985-3990.	9.1	307
50	Local structure and composition studies of $\text{Li}_{1.2}\text{Ni}_{0.2}\text{Mn}_{0.6}\text{O}_2$ by analytical electron microscopy. Journal of Power Sources, 2008, 178, 422-433.	7.8	141
51	Phosphorus incorporation during $\text{Si}(001):\text{P}$ gas-source molecular beam epitaxy: Effects on growth kinetics and surface morphology. Journal of Applied Physics, 2008, 103, 123530.	2.5	19
52	Interface structure in superhard TiN-SiN nanolaminates and nanocomposites: Film growth experiments and ab initio calculations. Physical Review B, 2007, 75, .	3.2	142
53	Growth and physical properties of epitaxial metastable $\text{Hf}_{1-x}\text{Al}_x\text{N}$ alloys deposited on $\text{MgO}(001)$ by ultrahigh vacuum reactive magnetron sputtering. Surface and Coatings Technology, 2007, 202, 809-814.	4.8	21
54	Hard BCxNy thin films grown by dual ion beam sputtering. Thin Solid Films, 2006, 515, 207-211.	1.8	45

#	ARTICLE	IF	CITATIONS
55	Orientation-dependent mobilities from analyses of two-dimensional TiN(111) island decay kinetics. Thin Solid Films, 2006, 510, 339-345.	1.8	7
56	Low-energy electron microscopy studies of interlayer mass transport kinetics on TiN(111). Surface Science, 2004, 560, 53-62.	1.9	32