Javier BareÃ±o

List of Publications by Year
in descending order

56 papers	3,929 citations	172386 29 h-index	168321 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_{1â^'xâ^'y}Mn_xCo_y)O₂ (NMC) cathode materials. Physical Chemistry Chemical Physics, 2020, 22, 24490-24497.	1.3	8
2	Lithiumâ€"sulfur battery with partially fluorinated ether electrolytes: Interplay between capacity, coulombic efficiency and Li anode protection. Journal of Power Sources, 2019, 438, 226939.	4.0	23
3	Nanoscale LiNi0.5Co0.2Mn0.3O2 cathode materials for lithium ion batteries via a polymer-assisted chemical solution method. Applied Materials Today, 2019, 16, 342-350.	2.3	23
4	Insights from incorporating reference electrodes in symmetric lithium-ion cells with layered oxide or graphite electrodes. Journal of Power Sources, 2019, 438, 227033.	4.0	4
5	Meso to Atomic Scale Microstructural Changes During Ageing of NCM Li-ion Battery Materials. Microscopy and Microanalysis, 2019, 25, 764-765.	0.2	0
6	Effect of electrolyte composition on rock salt surface degradation in NMC cathodes during high-voltage potentiostatic holds. Nano Energy, 2019, 55, 216-225.	8.2	88
7	Effect of overcharge on Li(Ni0.5Mn0.3Co0.2)O2 cathodes: NMP-soluble binder. II â€" Chemical changes in the anode. Journal of Power Sources, 2018, 385, 156-164.	4.0	18
8	Chemical â€œPicklingâ€•of Phosphite Additives Mitigates Impedance Rise in Li Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 9811-9824.	1.5	18
9	Effect of overcharge on Li(Ni0.5Mn0.3Co0.2)O2/graphite lithium ion cells with poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10	4.0	29
10	Investigations of Si Thin Films as Anode of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 3487-3494.	4.0	40
11	Effect of overcharge on Li(Ni0.5Mn0.3Co0.2)O2/Graphite lithium ion cells with poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 148-155.	4.0	26
12	Methodology for understanding interactions between electrolyte additives and cathodes: a case of the tris(2,2,2-trifluoroethyl)phosphite additive. Journal of Materials Chemistry A, 2018, 6, 198-211.	5.2	24
13	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
14	Approaching the capacity limit of lithium cobalt oxide in lithium ion batteries via lanthanum and aluminium doping. Nature Energy, 2018, 3, 936-943.	19.8	531
15	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. Journal of the Electrochemical Society, 2017, 164, A1489-A1498.	1.3	133
16	Tris(trimethylsilyl) Phosphite (TMSPi) and Triethyl Phosphite (TEPi) as Electrolyte Additives for Lithium Ion Batteries: Mechanistic Insights into Differences during LiNi_{0.5}Mn_{0.3}Co_{0.2}O₂-Graphite Full Cell Cycling. Journal of the Electrochemical Society, 2017, 164, A1579-A1586.	1.3	59
17	Surface Structure, Morphology, and Stability of Li(Ni_{1/3}Mn_{1/3}Co_{1/3})O₂ Cathode Material. Journal of Physical Chemistry C, 2017, 121, 8290-8299.	1.5	101
18	Auger Electrons as Probes for Composite Micro- and Nanostructured Materials: Application to Solid Electrolyte Interphases in Graphite and Silicon-Graphite Electrodes. Journal of Physical Chemistry C, 2017, 121, 23333-23346.	1.5	20

#	Article	IF	Citations
19	Evaluating electrolyte additives for lithium-ion cells: A new FigureÂof Merit approach. Journal of Power Sources, 2017, 365, 201-209.	4.0	40
20	Capacity Fade and Its Mitigation in Li-Ion Cells with Silicon-Graphite Electrodes. Journal of Physical Chemistry C, 2017, 121, 20640-20649.	1.5	59
21	Cycling Behavior of NCM523/Graphite Lithium-Ion Cells in the 3â€“4.4 V Range: Diagnostic Studies of Full Cells and Harvested Electrodes. Journal of the Electrochemical Society, 2017, 164, A6054-A6065.	1.3	145
22	Microstructural Evolution in Transition-metal-oxide Cathode Materials for Lithium-Ion Batteries. Microscopy and Microanalysis, 2016, 22, 1300-1301.	0.2	2
23	Experimental and theoretical investigations of functionalized boron nitride as electrode materials for Li-ion batteries. RSC Advances, 2016, 6, 27901-27914.	1.7	27
24	Structural Evolution of Reversible Mg Insertion into a Bilayer Structure of V₂O₅Â·<i>n</i>H₂O Xerogel Material. Chemistry of Materials, 2016, 28, 2962-2969.	3.2	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.	1.3	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.	4.0	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.	1.3	11
28	The Effect of Pre-Analysis Washing on the Surface Film of Graphite Electrodes. Electrochimica Acta, 2016, 206, 70-76.	2.6	34
29	On the Localized Nature of the Structural Transformations of Li₂MnO₃ Following Electrochemical Cycling. Advanced Energy Materials, 2015, 5, 1501252.	10.2	63
30	Effects of cycling temperatures on the voltage fade phenomenon in 0.5Li2MnO3Â·0.5LiNi0.375Mn0.375Co0.25O2 cathodes. Journal of Power Sources, 2015, 280, 155-158.	4.0	17
31	Effect of composition on the voltage fade phenomenon in lithium-, manganese-rich xLiMnO3Â·(1âˆ’x)LiNiaMnbCocO2: A combinatorial synthesis approach. Journal of Power Sources, 2015, 294, 711-718.	4.0	9
32	Pristine-state structure of lithium-ion-battery cathode material Li_{1.2}Mn_{0.4}Co_{0.4}O₂ derived from NMR bond pathway analysis. Journal of Materials Chemistry A, 2015, 3, 11471-11477.	5.2	17
33	Physical Theory of Voltage Fade in Lithium- and Manganese-Rich Transition Metal Oxides. Journal of the Electrochemical Society, 2015, 162, A897-A904.	1.3	27
34	Exploring Electrochemistry and Interface Characteristics of Lithium-Ion Cells with Li_{1.2}Ni_{0.15}Mn_{0.55}Co_{0.1}O₂Positive and Li₄Ti₅O₁₂Negative Electrodes. Journal of the Electrochemical Society, 2015, 162, A7049-A7059.	1.3	28
35	Unexpected Voltage Fade in LMR-NMC Oxides Cycled below the â€œActivationâ€•Plateau. Journal of the Electrochemical Society, 2015, 162, A155-A161.	1.3	21
36	Post-Test Analysis of Battery Materials: Another Part of the Question. ECS Transactions, 2014, 61, 145-154.	0.3	0

#	Article	IF	Citations
37	Probing Thermally Induced Decomposition of Delithiated Li_{1.2â€“<i>x</i>}Ni_{0.15}Mn_{0.55}Co_{0.1}O₂ by in Situ High-Energy X-ray Diffraction. ACS Applied Materials & Interfaces, 2014, 6, 12692-12697.	4.0	47
38	Differentiating allotropic LiCoO2/Li2Co2O4: A structural and electrochemical study. Journal of Power Sources, 2014, 271, 97-103.	4.0	24
39	Formation of Li2MnO3 investigated by in situ synchrotron probes. Journal of Power Sources, 2014, 266, 341-346.	4.0	20
40	Compatibility of lithium salts with solvent of the non-aqueous electrolyte in Liâ€“O2 batteries. Physical Chemistry Chemical Physics, 2013, 15, 5572.	1.3	76
41	Role of Polysulfides in Selfâ€Healing Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2013, 3, 833-838.	10.2	170
42	Observation of Microstructural Evolution in Li Battery Cathode Oxide Particles by In Situ Electron Microscopy. Advanced Energy Materials, 2013, 3, 1098-1103.	10.2	336
43	Lithium And Transition Metal Ordering In Overlithiated Layered Oxides For Lithium-Ion Batteries. Microscopy and Microanalysis, 2012, 18, 1318-1319.	0.2	0
44	Long-Range and Local Structure in the Layered Oxide Li_{1.2}Co_{0.4}Mn_{0.4}O₂. Chemistry of Materials, 2011, 23, 2039-2050.	3.2	171
45	Analytical electron microscopy of Li1.2Co0.4Mn0.4O2 for lithium-ion batteries. Solid State Ionics, 2011, 182, 98-107.	1.3	65
46	Local Structure of Layered Oxide Electrode Materials for Lithiumâ€Ion Batteries. Advanced Materials, 2010, 22, 1122-1127.	11.1	152
47	Wurtzite structure Sc1âˆ’xAlxN solid solution films grown by reactive magnetron sputter epitaxy: Structural characterization and first-principles calculations. Journal of Applied Physics, 2010, 107, .	1.1	122
48	Cubic Sc1âˆ’xAlxN solid solution thin films deposited by reactive magnetron sputter epitaxy onto ScN(111). Journal of Applied Physics, 2009, 105, .	1.1	58
49	Growth of Semiconducting Graphene on Palladium. Nano Letters, 2009, 9, 3985-3990.	4.5	307
50	Local structure and composition studies of Li1.2Ni0.2Mn0.6O2 by analytical electron microscopy. Journal of Power Sources, 2008, 178, 422-433.	4.0	141
51	Phosphorus incorporation during Si(001):P gas-source molecular beam epitaxy: Effects on growth kinetics and surface morphology. Journal of Applied Physics, 2008, 103, 123530.	1.1	19
52	Interface structure in superhard TiN-SiN nanolaminates and nanocomposites: Film growth experiments andab initiocalculations. Physical Review B, 2007, 75, .	1.1	142
53	Growth and physical properties of epitaxial metastable Hf1âˆ’xAlxN alloys deposited on MgO(001) by ultrahigh vacuum reactive magnetron sputtering. Surface and Coatings Technology, 2007, 202, 809-814.	2.2	21
54	Hard BCxNy thin films grown by dual ion beam sputtering. Thin Solid Films, 2006, 515, 207-211.	0.8	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.	0.8	7
56	Low-energy electron microscopy studies of interlayer mass transport kinetics on TiN(111). Surface Science, 2004, 560, 53-62.	0.8	32