Juan C Garcia

List of Publications by Year
in descending order

24 papers	799 citations	471371 17 h-index	610775 24 g-index
25 all docs	25 docs citations	25 times ranked	1278 citing authors

#	Article	IF	Citations
1	Understanding Lithium Local Environments in LiMn_{0.5}Ni_{0.5}O₂ Cathodes: A DFT-Supported ⁶Li Solid-State NMR Study. Journal of Physical Chemistry C, 2022, 126, 4276-4285.	1.5	2
2	Investigating the Calcination and Sintering of Li₇La₃Zr₂O₁₂ (LLZO) Solid Electrolytes Using Operando Synchrotron X-ray Characterization and Mesoscale Modeling. Chemistry of Materials, 2021, 33, 4337-4352.	3.2	24
3	Dual-Salt Electrolytes to Effectively Reduce Impedance Rise of High-Nickel Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 40502-40512.	4.0	13
4	Insights from Computational Studies on the Anisotropic Volume Change of Li_{<i>x</i>}NiO₂ at High States of Charge (<i>x</i> < 0.25). Journal of Physical Chemistry C, 2021, 125, 27130-27139.	1.5	3
5	Strain-driven surface reconstruction and cation segregation in layered Li(Ni_{1âˆ’xâˆ’y}Mn_xCo_y)O₂ (NMC) cathode materials. Physical Chemistry Chemical Physics, 2020, 22, 24490-24497.	1.3	8
6	Predicting Morphological Evolution during Coprecipitation of MnCO₃ Battery Cathode Precursors Using Multiscale Simulations Aided by Targeted Synthesis. Chemistry of Materials, 2020, 32, 9126-9139.	3.2	15
7	Atomic-Level Understanding of Surface Reconstruction Based on Li[Ni<i>_x</i>Mn<i>_y</i>Co_{1â€“<i>x</i>â€“<i>y</i>}]O₂ Single-Crystal Studies. ACS Applied Energy Materials, 2020, 3, 4799-4811.	2.5	51
8	Graphite Lithiation under Fast Charging Conditions: Atomistic Modeling Insights. Journal of Physical Chemistry C, 2020, 124, 8162-8169.	1.5	18
9	Harbinger of hysteresis in lithium-rich oxides: Anionic activity or defect chemistry of cation migration. Journal of Power Sources, 2020, 471, 228335.	4.0	10
10	Transition-Metal Dissolution from NMC-Family Oxides: A Case Study. ACS Applied Energy Materials, 2020, 3, 2565-2575.	2.5	28
11	Revisiting the Mechanism Behind Transition-Metal Dissolution from Delithiated LiNi_xMn_yCo_zO₂ (NMC) Cathodes. Journal of the Electrochemical Society, 2020, 167, 020513.	1.3	44
12	Decomposition of Phosphorus-Containing Additives at a Charged NMC Surface through Potentiostatic Holds. Journal of the Electrochemical Society, 2019, 166, A440-A447.	1.3	14
13	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
14	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
15	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
16	Strain-Driven Mn-Reorganization in Overlithiated Li_{<i>x</i>}Mn₂O₄ Epitaxial Thin-Film Electrodes. ACS Applied Energy Materials, 2018, 1, 2526-2535.	2.5	18
17	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
18	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

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19	From Coating to Dopant: How the Transition Metal Composition Affects Alumina Coatings on Ni-Rich Cathodes. ACS Applied Materials & Interfaces, 2017, 9, 41291-41302.	4.0	102
20	Evaluating electrolyte additives for lithium-ion cells: A new FigureÂof Merit approach. Journal of Power Sources, 2017, 365, 201-209.	4.0	40
21	Ability ofTiO2(110)surface to be fully hydroxylated and fully reduced. Physical Review B, 2015, 92, .	1.1	21
22	Anticorrelation between Surface and Subsurface Point Defects and the Impact on the Redox Chemistry of TiO₂(110). ChemPhysChem, 2015, 16, 313-321.	1.0	41
23	The nature of interfaces and charge trapping sites in photocatalytic mixed-phase TiO2 from first principles modeling. Journal of Chemical Physics, 2015, 142, 024708.	1.2	40
24	Detailing Ionosorption over TiO2, ZrO2, and HfO2 from First Principles. Journal of Physical Chemistry C, 2012, 116, 16573-16581.	1.5	17