

Juan C Garcia

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5225339/publications.pdf>

Version: 2024-02-01

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	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
2	Surface Structure, Morphology, and Stability of $\text{Li}(\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3})\text{O}_2$ Cathode Material. Journal of Physical Chemistry C, 2017, 121, 8290-8299.	1.5	101
3	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
4	Tris(trimethylsilyl) Phosphite (TMSPi) and Triethyl Phosphite (TEPi) as Electrolyte Additives for Lithium Ion Batteries: Mechanistic Insights into Differences during $\text{LiNi}_{0.5}\text{Mn}_{0.3}\text{Co}_{0.2}\text{O}_2$ -Graphite Full Cell Cycling. Journal of the Electrochemical Society, 2017, 164, A1579-A1586.	1.3	59
5	Atomic-Level Understanding of Surface Reconstruction Based on $\text{Li}[\text{Ni}_x\text{Mn}_y\text{Co}_z]\text{O}_2$ Single-Crystal Studies. ACS Applied Energy Materials, 2020, 3, 4799-4811.	2.5	51
6	Revisiting the Mechanism Behind Transition-Metal Dissolution from Delithiated $\text{LiNi}_x\text{Mn}_y\text{Co}_z\text{O}_2$ (NMC) Cathodes. Journal of the Electrochemical Society, 2020, 167, 020513.	1.3	44
7	Anticorrelation between Surface and Subsurface Point Defects and the Impact on the Redox Chemistry of $\text{TiO}_2(110)$. ChemPhysChem, 2015, 16, 313-321.	1.0	41
8	The nature of interfaces and charge trapping sites in photocatalytic mixed-phase TiO_2 from first principles modeling. Journal of Chemical Physics, 2015, 142, 024708.	1.2	40
9	Evaluating electrolyte additives for lithium-ion cells: A new Figure of Merit approach. Journal of Power Sources, 2017, 365, 201-209.	4.0	40
10	Transition-Metal Dissolution from NMC-Family Oxides: A Case Study. ACS Applied Energy Materials, 2020, 3, 2565-2575.	2.5	28
11	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
12	Investigating the Calcination and Sintering of $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ (LLZO) Solid Electrolytes Using Operando Synchrotron X-ray Characterization and Mesoscale Modeling. Chemistry of Materials, 2021, 33, 4337-4352.	3.2	24
13	Ability of $\text{TiO}_2(110)$ surface to be fully hydroxylated and fully reduced. Physical Review B, 2015, 92, .	1.1	21
14	Chemical "Pickling" of Phosphite Additives Mitigates Impedance Rise in Li Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 9811-9824.	1.5	18
15	Strain-Driven Mn-Reorganization in Overlithiated $\text{Li}_x\text{Mn}_2\text{O}_4$ Epitaxial Thin-Film Electrodes. ACS Applied Energy Materials, 2018, 1, 2526-2535.	2.5	18
16	Graphite Lithiation under Fast Charging Conditions: Atomistic Modeling Insights. Journal of Physical Chemistry C, 2020, 124, 8162-8169.	1.5	18
17	Detailing Ionosorption over TiO_2 , ZrO_2 , and HfO_2 from First Principles. Journal of Physical Chemistry C, 2012, 116, 16573-16581.	1.5	17
18	Predicting Morphological Evolution during Coprecipitation of MnCO_3 Battery Cathode Precursors Using Multiscale Simulations Aided by Targeted Synthesis. Chemistry of Materials, 2020, 32, 9126-9139.	3.2	15

#	ARTICLE	IF	CITATIONS
19	Decomposition of Phosphorus-Containing Additives at a Charged NMC Surface through Potentiostatic Holds. <i>Journal of the Electrochemical Society</i> , 2019, 166, A440-A447.	1.3	14
20	Dual-Salt Electrolytes to Effectively Reduce Impedance Rise of High-Nickel Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40502-40512.	4.0	13
21	Harbinger of hysteresis in lithium-rich oxides: Anionic activity or defect chemistry of cation migration. <i>Journal of Power Sources</i> , 2020, 471, 228335.	4.0	10
22	Strain-driven surface reconstruction and cation segregation in layered $\text{Li}(\text{Ni}_{1-x}\text{Mn}_x\text{Co}_y)\text{O}_2$ (NMC) cathode materials. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 24490-24497.	1.3	8
23	Insights from Computational Studies on the Anisotropic Volume Change of Li_xNiO_2 at High States of Charge ($x < 0.25$). <i>Journal of Physical Chemistry C</i> , 2021, 125, 27130-27139.	1.5	3
24	Understanding Lithium Local Environments in $\text{LiMn}_{0.5}\text{Ni}_{0.5}\text{O}_2$ Cathodes: A DFT-Supported ^6Li Solid-State NMR Study. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4276-4285.	1.5	2