Muhammad Mominur Rahman

List of Publications by Year
in descending order

23	821	623188 14	676716 22
papers	citations	h-index	g-index

23	23	23	1105
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Resolving Charge Distribution for Compositionally Heterogeneous Battery Cathode Materials. Nano Letters, 2022, 22, 1278-1286.	4.5	7
2	Mapping Lattice Distortions in LiNi_{0.5}Mn_{1.5}O₄ Cathode Materials. ACS Energy Letters, 2022, 7, 690-695.	8.8	14
3	Mechanistic Insights into the Interplay between Ion Intercalation and Water Electrolysis in Aqueous Batteries. ACS Applied Materials & Interfaces, 2022, 14, 12130-12139.	4.0	1
4	Probing Dopant Redistribution, Phase Propagation, and Local Chemical Changes in the Synthesis of Layered Oxide Battery Cathodes. Advanced Energy Materials, 2021, 11, .	10.2	28
5	Oxygen Redox Chemistry in Rechargeable Li-Ion and Na-Ion Batteries. Matter, 2021, 4, 490-527.	5.0	47
6	Reversible Mn/Cr dual redox in cation-disordered Li-excess cathode materials for stable lithium ion batteries. Acta Materialia, 2021, 212, 116935.	3.8	16
7	Facile synthesis of TiO2/Chitosan nanohybrid for adsorption-assisted rapid photodegradation of an azo dye in water. Reaction Kinetics, Mechanisms and Catalysis, 2021, 133, 1121.	0.8	12
8	Chemical Modulation of Local Transition Metal Environment Enables Reversible Oxygen Redox in Mn-Based Layered Cathodes. ACS Energy Letters, 2021, 6, 2882-2890.	8.8	15
9	Charge distribution guided by grain crystallographic orientations in polycrystalline battery materials. Nature Communications, 2020, 11, 83.	5.8	129
10	A kaolinite/$$hbox {TiO}_{2}$$/ZnO-based novel ternary composite for photocatalytic degradation of anionic azo dyes. Bulletin of Materials Science, 2020, 43, 1.	0.8	14
11	Defect and structural evolution under high-energy ion irradiation informs battery materials design for extreme environments. Nature Communications, 2020, 11, 4548.	5.8	28
12	Bulk and surface structural changes in high nickel cathodes subjected to fast charging conditions. Chemical Communications, 2020, 56, 6973-6976.	2.2	11
13	Effects of solvent formulations in electrolytes on fast charging of Li-ion cells. Electrochimica Acta, 2020, 353, 136453.	2.6	23
14	An Ordered P2/P3 Composite Layered Oxide Cathode with Long Cycle Life in Sodium-Ion Batteries. , 2019, 1, 573-581.		33
15	Targeted Surface Doping with Reversible Local Environment Improves Oxygen Stability at the Electrochemical Interfaces of Nickel-Rich Cathode Materials. ACS Applied Materials & Interfaces, 2019, 11, 37885-37891.	4.0	33
16	Water-Processable P2-Na_{0.67}Ni_{0.22}Cu_{0.11}Mn_{0.56}Ti_{0.11}O₂ Cathode Material for Sodium Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A251-A257.	3.1	22
17	Fabrication of Nanostructured Kaolinite Doped Composite Films from Silicone Rubber with Enhanced Properties. Journal of Composites Science, 2019, 3, 50.	1.4	1
18	Surface Characterization of Li-Substituted Compositionally Heterogeneous NaLi_{0.045}Cu_{0.185}Fe_{0.265}Mn_{0.505}O₂ Sodium-Ion Cathode Material. Journal of Physical Chemistry C, 2019, 123, 11428-11435.	1.5	13

#	Article	IF	Citations
19	Dopant Distribution in Co-Free High-Energy Layered Cathode Materials. Chemistry of Materials, 2019, 31, 9769-9776.	3.2	110
20	Surface transformation by a â€œcocktailâ€•solvent enables stable cathode materials for sodium ion batteries. Journal of Materials Chemistry A, 2018, 6, 2758-2766.	5.2	28
21	Chemomechanical behaviors of layered cathode materials in alkali metal ion batteries. Journal of Materials Chemistry A, 2018, 6, 21859-21884.	5.2	139
22	Empowering multicomponent cathode materials for sodium ion batteries by exploring three-dimensional compositional heterogeneities. Energy and Environmental Science, 2018, 11, 2496-2508.	15.6	45
23	Accelerated Evolution of Surface Chemistry Determined by Temperature and Cycling History in Nickel-Rich Layered Cathode Materials. ACS Applied Materials & Interfaces, 2018, 10, 23842-23850.	4.0	52