

Boosting Rechargeable Batteries R&D by Multiscale

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Multiscale Investigation on Electrolyte Systems of [(Solvent + Additive) + LiPF ₆] for Application in Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 21913-21930.	1.5	17
2	A Versatile and Efficient Voxelization-Based Meshing Algorithm of Multiple Phases. <i>ACS Omega</i> , 2019, 4, 11141-11144.	1.6	22
3	Electrochemical Characterization and Solid Electrolyte Interface Modeling of LiNi _{0.5} Mn _{1.5} O ₄ -Graphite Cells. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2255-A2263.	1.3	1
4	Progress in 3D electrode microstructure modelling for fuel cells and batteries: transport and electrochemical performance. <i>Progress in Energy</i> , 2019, 1, 012003.	4.6	21
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6	The effect of different organic solvents and anion salts on sodium ion storage in cylindrical carbon nanopores. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22722-22731.	1.3	11
7	Automatically Identifying Electrode Reaction Mechanisms Using Deep Neural Networks. <i>Analytical Chemistry</i> , 2019, 91, 12220-12227.	3.2	32
8	A general model for the impedance of batteries and supercapacitors: The non-linear distribution of diffusion times. <i>Electrochimica Acta</i> , 2019, 324, 134853.	2.6	35
9	Thermodynamically Consistent and Computationally Efficient OD Lithium Intercalation Model of a Phase Separating Cathode Particle. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3242-A3249.	1.3	9
10	A perspective on inverse design of battery interphases using multi-scale modelling, experiments and generative deep learning. <i>Energy Storage Materials</i> , 2019, 21, 446-456.	9.5	79
11	Tracking variabilities in the simulation of Lithium Ion Battery electrode fabrication and its impact on electrochemical performance. <i>Electrochimica Acta</i> , 2019, 312, 168-178.	2.6	48
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13	Probing the interfacial chemistry of solid-state lithium batteries. <i>Solid State Ionics</i> , 2019, 343, 115068.	1.3	33
14	Artificial Intelligence Investigation of NMC Cathode Manufacturing Parameters Interdependencies. <i>Batteries and Supercaps</i> , 2020, 3, 60-67.	2.4	93
15	An advanced all-solid-state Li-ion battery model. <i>Electrochimica Acta</i> , 2020, 330, 135147.	2.6	46
16	Multifunctional inorganic nanomaterials for energy applications. <i>Nanoscale</i> , 2020, 12, 14-42.	2.8	89
17	Effect of Temperature on The Kinetics of Electrochemical Insertion of Li-Ions into a Graphite Electrode Studied by Kinetic Monte Carlo. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013533.	1.3	25
18	Chemical product design – recent advances and perspectives. <i>Current Opinion in Chemical Engineering</i> , 2020, 27, 22-34.	3.8	60

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20	Lithium-ion batteries â€“ Current state of the art and anticipated developments. <i>Journal of Power Sources</i> , 2020, 479, 228708.	4.0	401
21	Diffusion of ions and solvent in propylene carbonate solutions for lithium-ion battery applications. <i>Journal of Molecular Liquids</i> , 2020, 320, 114351.	2.3	14
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32	Entering the Augmented Era: Immersive and Interactive Virtual Reality for Battery Education and Research**. <i>Batteries and Supercaps</i> , 2020, 3, 1147-1164.	2.4	6
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40	How Molecular Chiralities of Bis(mandelato)borate Anions Affect Their Binding Structures With Alkali Metal Ions and Microstructural Properties in Tetraalkylphosphonium Ionic Liquids. <i>Frontiers in Chemistry</i> , 2020, 8, 65.	1.8	2
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80	Applying Machine Learning to Rechargeable Batteries: From the Microscale to the Macroscale. <i>Angewandte Chemie</i> , 2021, 133, 24558-24570.	1.6	11
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83	Artificial Intelligence Applied to Battery Research: Hype or Reality?. <i>Chemical Reviews</i> , 2022, 122, 10899-10969.	23.0	153
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