

EES Batteries

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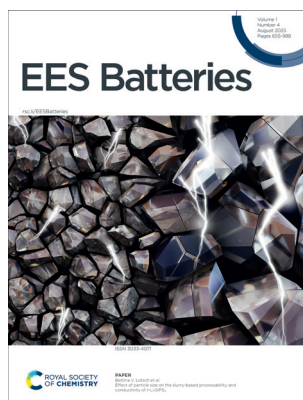
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Cover

See Jeffrey Dick *et al.*, pp. 813–823.

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Inside cover

See Bettina Lotsch *et al.*, pp. 824–832.

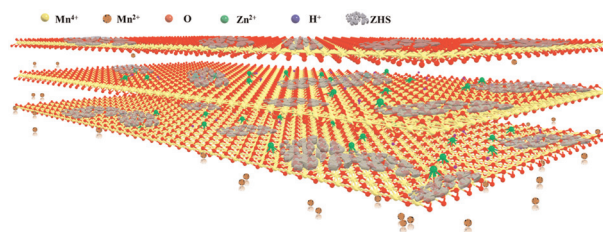
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Approaching convergence in the electrochemical mechanism of aqueous Zn–MnO₂ sustainable batteries

Balaji Sambandam,* Vinod Mathew, Muhammad H. Alfaruqi, Sungjin Kim and Jaekook Kim*

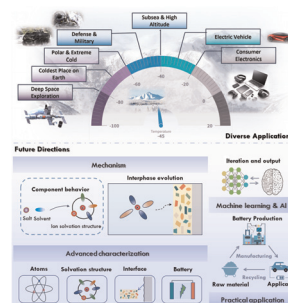


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Electrolyte engineering promoting high-specific-energy lithium batteries in low-temperature environments

Qichao Wang, Junyi Gan, Yao Zhao, Chenyu Yang, Gongle Zhu, Nana Wang,* Chaofeng Zhang, Jianping Yang* and Tengfei Zhou*



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Fundamental questions
Elemental answers

REVIEWS

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Review of interface issues in Li–argyrodite-based solid-state Li–metal batteries

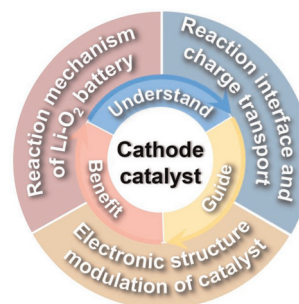
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Mengyao Huang, Kwan San Hui,* Qingchao Liu, Fuming Chen, Sambasivam Sangaraju and Kwun Nam Hui*

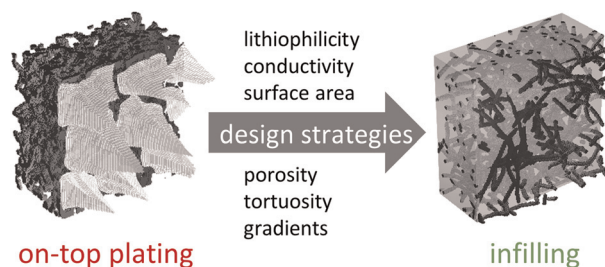


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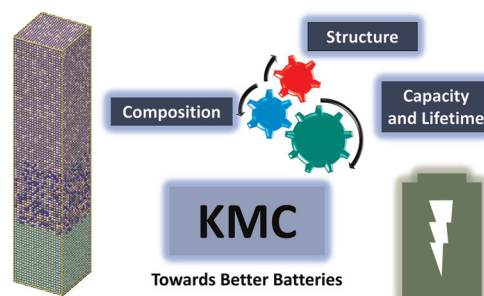
Janina Drews,* Timo Danner and Arnulf Latz



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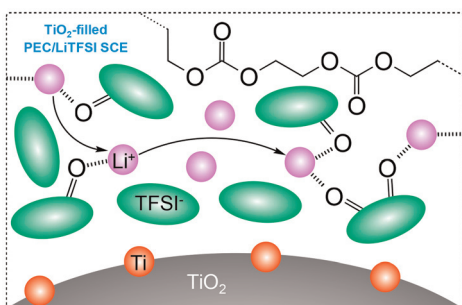
Challenges and opportunities in using Kinetic Monte Carlo for battery research and innovation

Mohammed Bin Jassar,* Theodorus De Bruin, Carlos Nieto-Draghi and Stephan N. Steinmann*



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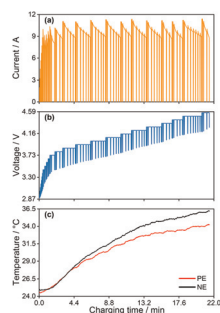
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Molecular dynamics of the coordination effect and ionic transport in TiO₂-filled poly(ethylene carbonate)-based electrolytes

Wei Tan, Kento Kimura and Yoichi Tominaga*

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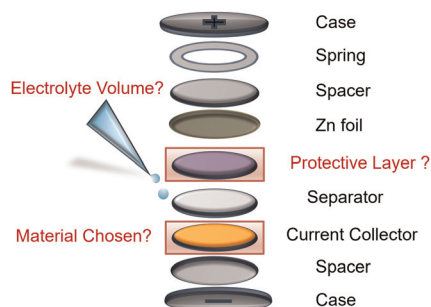


Reverse Ragone vs. Direct Ragone plots: a comparative study for ultra-fast charging lithium-ion batteries

Shiqi Li and Rachid Yazami*

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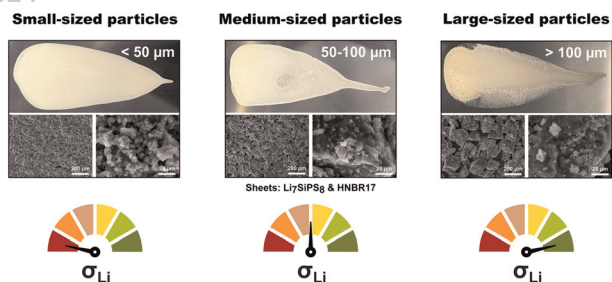
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Saptarshi Paul, James H. Nguyen, Michael L. Harrigan, Ashutosh Rana, Andy Berbille and Jeffrey E. Dick*

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Effect of particle size on the slurry-based processability and conductivity of t-Li₇SiPS₈

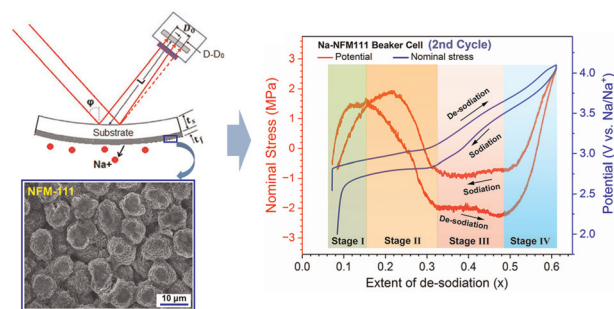
Duc Hien Nguyen, Lars Grunenberg, Igor Moudrakovski, Kathrin Küster and Bettina V. Lotsch*



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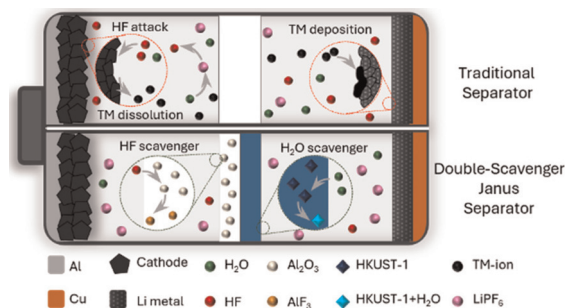
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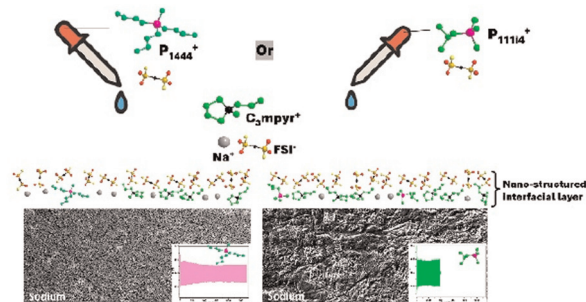
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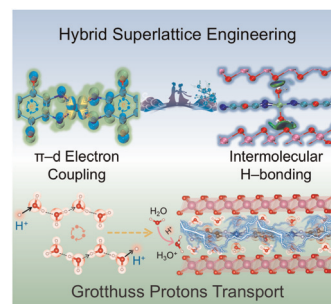
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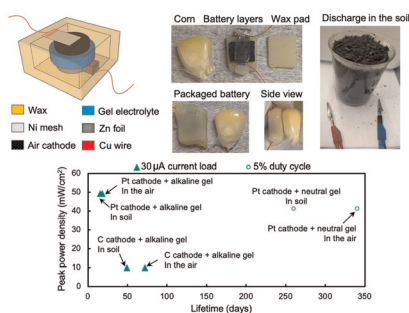
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Hybrid superlattice cathodes unlocking diffusion-barrier-free proton storage for high-rate Zn- MnO_2 batteries

Yumin Chen, Da Zhang, Chengmin Hu, Pingxuan Liu, Xiaozhe Yang, Hui Duan, Ling Miao, Yaokang Lv, Ziyang Song,* Lihua Gan* and Mingxian Liu*



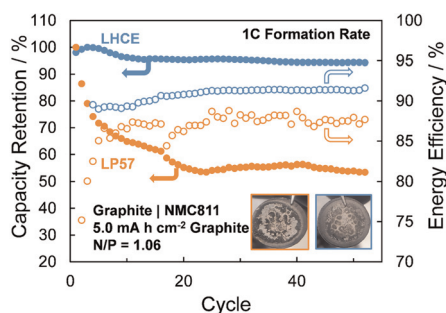
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Small-scale, long-duration, and biodegradable zinc-air batteries

Jingwen Zhang* and Mark G. Allen

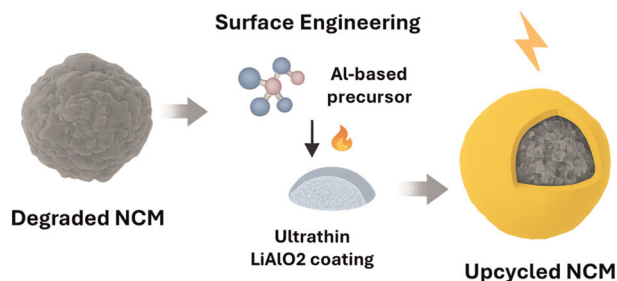
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Enabling fast formation for lithium-ion batteries with a localized high-concentration electrolyte

Seamus Ober and Arumugam Manthiram*

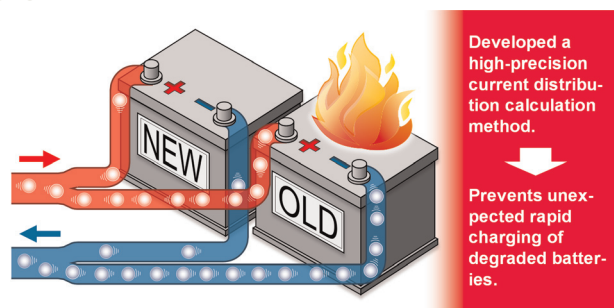
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Direct upcycling of degraded NCM via low-temperature surface engineering for high performance lithium-ion batteries

Yu Wang and Chris Yuan*

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Current distribution simulation of parallel-connected modules using degraded lithium-ion battery cells

Jusuke Shimura,* Kanta Onodera, Hikari Watanabe, Isao Shitanda and Masayuki Itagaki

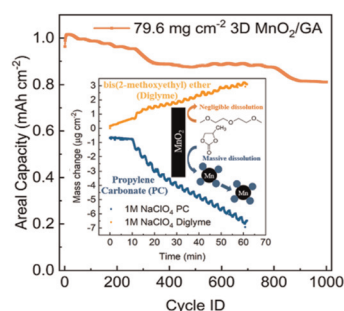


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Stable cycling of high-mass loaded MnO_2 electrodes for sodium-ion batteries

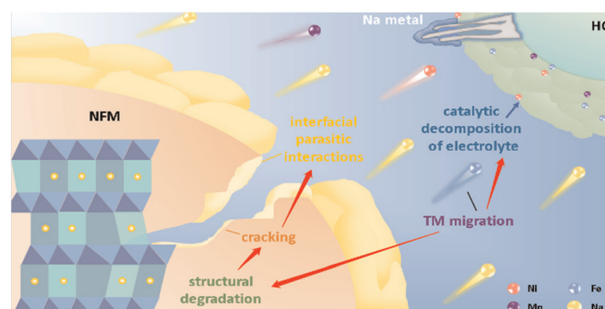
Yunkai Luo, Bintao Hu, Swetha Chandrasekaran, Megan C. Freyman, Dun Lin, Yat Li, Marcus Worsley and Bruce Dunn*



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High-voltage cycling degradation mechanisms of the $\text{NaNi}_{1/3}\text{Fe}_{1/3}\text{Mn}_{1/3}\text{O}_2$ cathode in sodium-ion pouch cells

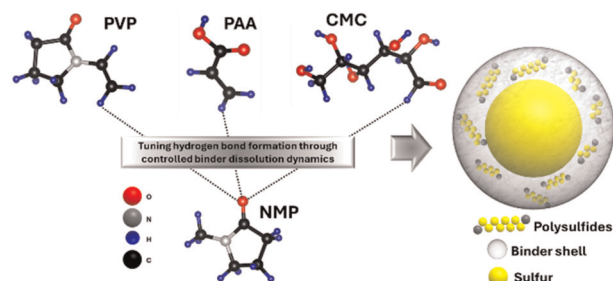
Shini Lin, Wei Li, Huiya Yang, Minghui Chen, Honghao Xie, Yuan Qin, Jing Zeng,* Peng Zhang* and Jinbao Zhao*



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Understanding the effects of binder dissolution dynamics on the chemistry and performance of lithium–sulfur batteries

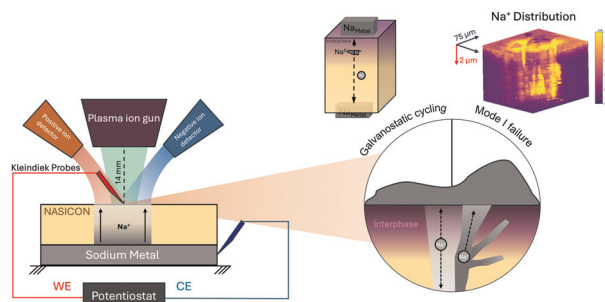
Saheed A. Lateef, John Chmiola, Fabio Albano, William E. Mustain and Golareh Jalilvand*



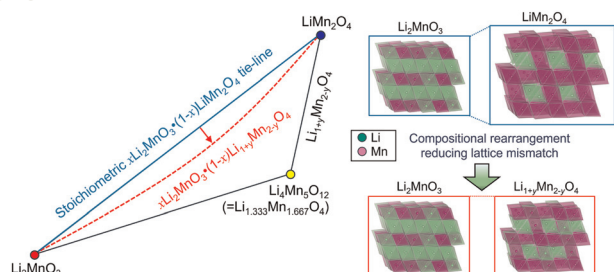
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Probing dynamic degradation and mass transport in solid-state sodium-ion batteries using operando simultaneous dual-polarity SIMS

Sivakkumaran Sukumaran,* Richard J. Chater, Sarah Fearn, Graham Cooke, Noel Smith and Stephen J. Skinner*



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Intrinsic mechanisms for structural coherency and electrochemical excellence in layered-spinel Li–Mn–O cathodes

Jihyeon Gim, Jinhypu Han, Hacksung Kim,* Qianqian Li, Jinsong Wu, Vinayak P. Dravid and Eungje Lee*

CORRECTION

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Correction: Water activity and electrocrystallization modulated by a high-Lewis-basicity co-solvent for reversible Zn anodes

Qiang Zhang, Hefei Fan, Jianxin Gao and Erdong Wang*

