

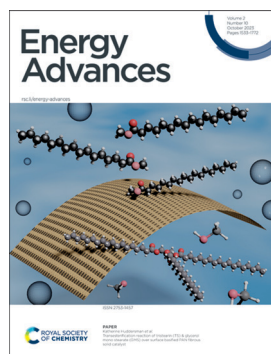
# Energy Advances

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### Inside cover

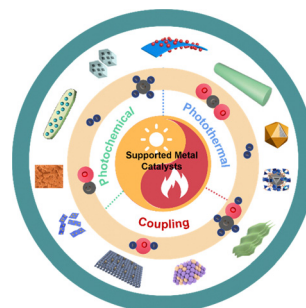
See Milton Chai, Jingwei Hou *et al.*, pp. 1591–1603. Image reproduced by permission of Jingwei Hou from *Energy Adv.*, 2023, 2, 1591.

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### Photothermal catalytic C1 conversion on supported catalysts

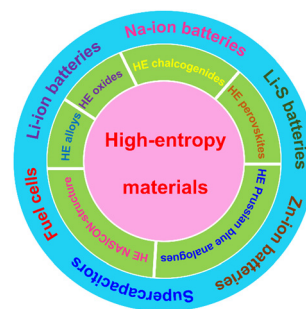
Hui Liu, Liangliang Han, Xiaoguang Duan, Hongqi Sun, Shaobin Wang and Jinqiang Zhang\*



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### High-entropy materials for electrochemical energy storage devices

Jie Qu, Mark A. Buckingham and David J. Lewis\*



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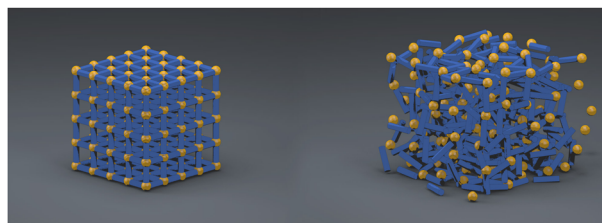


## PERSPECTIVE

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### Amorphous MOFs for next generation supercapacitors and batteries

Wupeng Wang, Milton Chai,\* Rijia Lin, Fangfang Yuan, Lianzhou Wang, Vicki Chen and Jingwei Hou\*

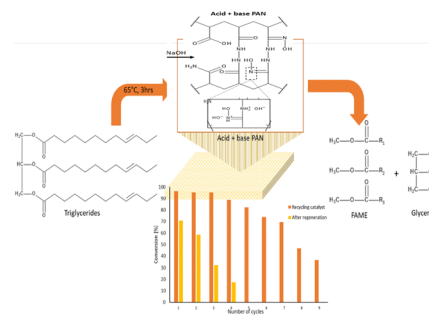


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### Transesterification reaction of tristearin (TS) & glycerol mono stearate (GMS) over surface basified PAN fibrous solid catalyst

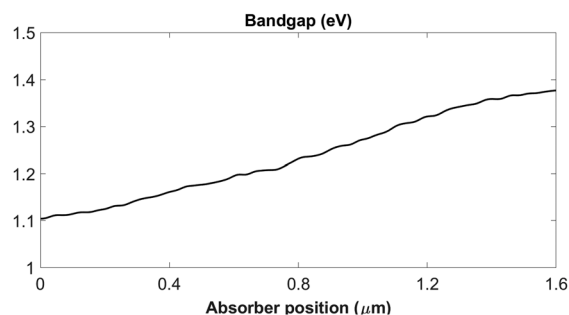
Rawaz A. Ahmed, Sanaa Rashid, Ketan Ruparelia and Katherine Huddersman\*



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### A study of bandgap-graded CZTGe kesterite thin films for solar cell applications

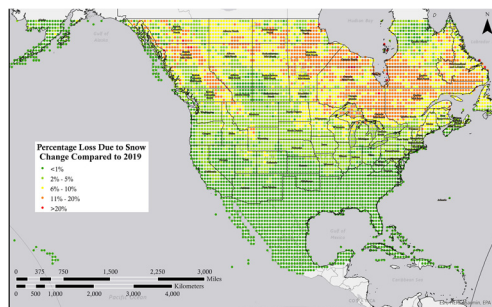
Romain Scaffidi,\* Guy Brammertz, Yibing Wang, Arman Uz Zaman, Keerthi Sasikumar, Jessica de Wild, Denis Flandre and Bart Vermang



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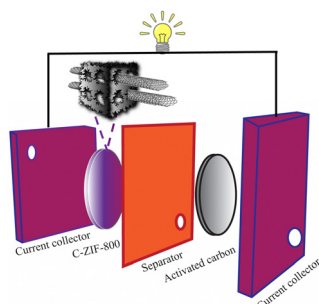
### The impact of snow losses on solar photovoltaic systems in North America in the future

Ryan A. Williams, Daniel J. Lizzadro-McPherson and Joshua M. Pearce\*



## PAPERS

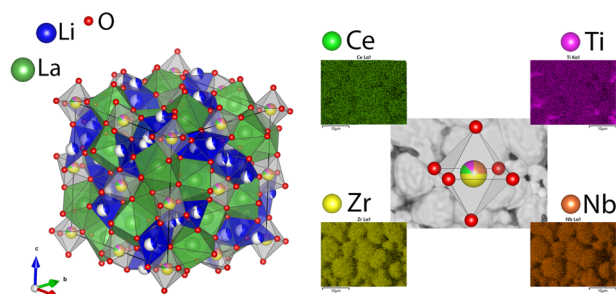
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### High-performance asymmetric supercapacitor device with nickel–cobalt bimetallic sites encapsulated in multilayered nanotubes

Rahul Patil, Lingaraj Pradhan, Babasaheb M. Matsagar, Omnarayan Agrawal, Kevin C.-W. Wu, Bikash Kumar Jena\* and Saikat Dutta\*

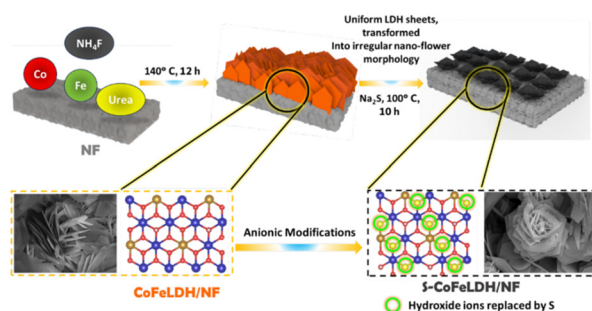
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### Rapid sintering of $\text{Li}_{6.5}\text{La}_3\text{Zr}_1\text{Nb}_{0.5}\text{Ce}_{0.25}\text{Ti}_{0.25}\text{O}_{12}$ for high density lithium garnet electrolytes with current induced *in situ* interfacial resistance reduction

M. P. Stockham,\* B. Dong, M. S. James, P. Zhu, E. Kendrick and P. R. Slater\*

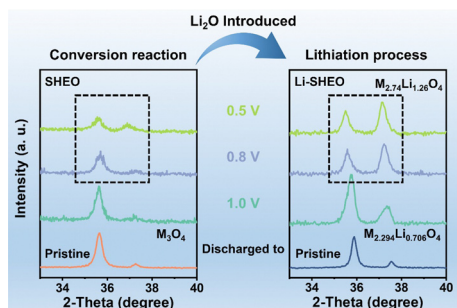
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### A 3D-hierarchical flower like architecture of anion induced layered double hydroxides for competing anodic reactions

Krishankant, Aashi, Baljeet Kaur, Jatin Sharma, Chandan Bera and Vivek Bagchi\*

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### Understanding the lithiation mechanism of $\text{Li}_2\text{O}$ -doped spinel high-entropy oxides as anode materials for Li-ion batteries

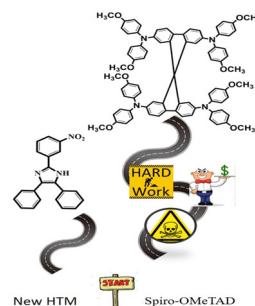
Guozhe Ma, Yu Zheng, Fanbo Meng and Renzong Hu\*



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## Design and development of a low-cost imidazole-based hole transporting material for perovskite solar cells

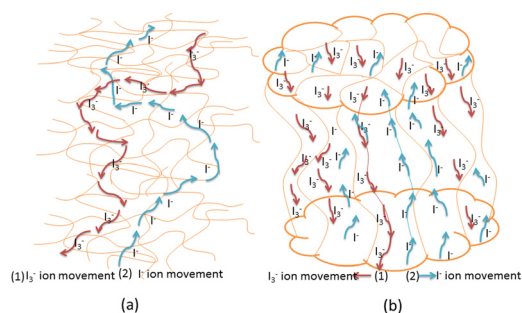
Fatemeh Sadeghi, Babak Pashaei, Babak Nemati Bideh, Negin Sabahi, Hashem Shahroosvand\* and Mohammad Khaja Nazeeruddin\*



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## A novel poly(acrylonitrile)/poly(ethylene glycol)-based polymer gel electrolyte for high efficiency dye sensitized solar cells

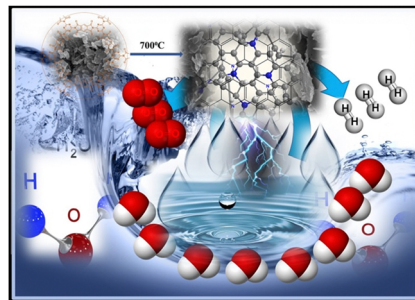
Madhu Mohan Varishetty,\* Murakami Kenji, Nazia Tarannum, Srinivasa Rao Damaraju and Madhavi Jonnalagadda



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## Generation of covalent organic framework-derived porous N-doped carbon nanosheets for highly efficient electrocatalytic hydrogen evolution

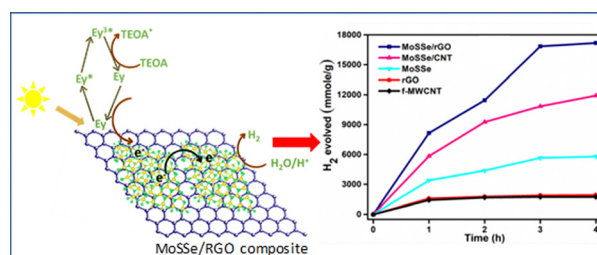
Sayan Halder, Anup Kumar Pradhan, Soumen Khan and Chanchal Chakraborty\*



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## Molybdenum sulfo-selenide nanocomposites with carbon nanotubes and reduced graphene oxide for photocatalytic hydrogen evolution reaction

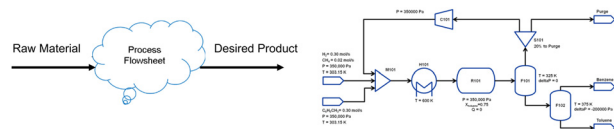
Namsheer K, K. Pramoda,\* Kothanahally S. Sharath Kumar, Sithara Radhakrishnan and Chandra Sekhar Rout\*





## PAPERS

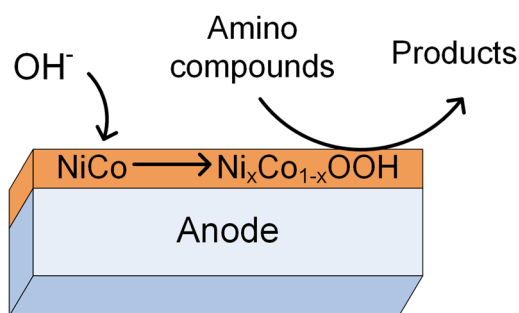
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### A coupled reinforcement learning and IDAES process modeling framework for automated conceptual design of energy and chemical systems

Dewei Wang,\* Jie Bao,\* Miguel A. Zamarripa-Perez, Brandon Paul, Yunxiang Chen, Peiyuan Gao, Tong Ma, Alexander A. Noring, Arun K. S. Iyengar, Daniel T. Schwartz, Erica E. Eggleton, Qizhi He, Andrew Liu, Olga A. Marina, Brian Koeppel and Zhijie Xu

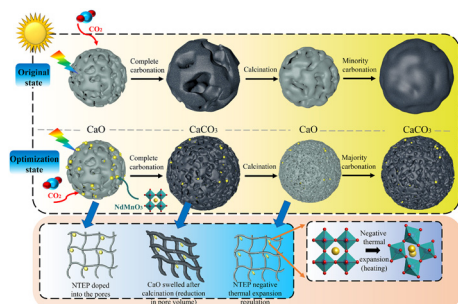
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### Electrocatalytic behavior of amino compound oxidation on NiCo catalyst and energy conversion

Wei Xu,\* Zhaozhao Yan, Chunhong Liu, Xu Yang, Hua Yu, Hongchao Chang, Jiarong Zang, Guangyao Xu, Linmin Du and Binbin Yu\*

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### Long-stable solar energy capture and storage via negative thermal expansion regulated calcium-based particles

Jingrui Liu, Yimin Xuan,\* Liang Teng, Chen Sun, Qibin Zhu and Xianglei Liu

## CORRECTION

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### Correction: Understanding the lithiation mechanism of Li<sub>2</sub>O-doped spinel high-entropy oxides as anode materials for Li-ion batteries

Guozheng Ma, Yu Zheng, Fanbo Meng and Renzong Hu\*

