

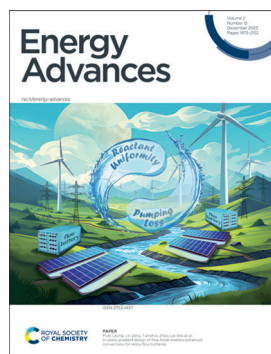
# Energy Advances

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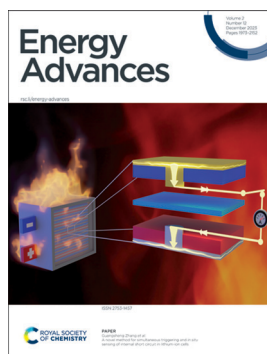
## IN THIS ISSUE

ISSN 2753-1457 CODEN EANDBJ 2(12) 1973-2152 (2023)



### Cover

See Puiki Leung, Lin Zeng, Tianshou Zhao, Lei Wei *et al.*, pp. 2006–2017. Image reproduced by permission of Lei Wei from *Energy Adv.*, 2023, 2, 2006.



### Inside cover

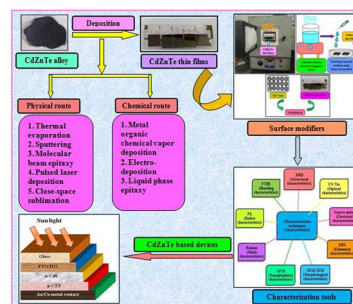
See Guangsheng Zhang *et al.*, pp. 2018–2028. Image reproduced by permission of Guangsheng Zhang from *Energy Adv.*, 2023, 2, 2018. We would like to acknowledge that Madeline Liu supported in making the image and that the software Blender was used in making the image.

## REVIEW

1980

### CdZnTe thin films as proficient absorber layer candidates in solar cell devices: a review

Ritika Sharma, Sakshi Chuhadiya, Kamlesh, Himanshu and M. S. Dhaka\*

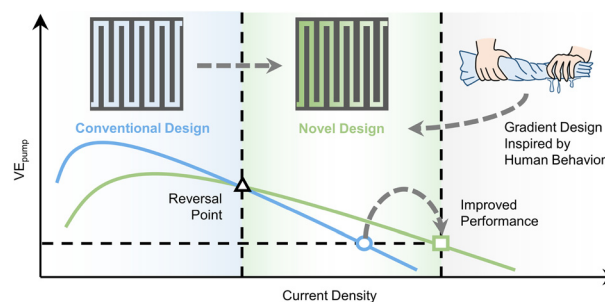


## PAPERS

2006

### In-plane gradient design of flow fields enables enhanced convections for redox flow batteries

Lyuming Pan, Jianyu Xie, Jincong Guo, Dongbo Wei, Honghao Qi, Haoyao Rao, Puiki Leung,\* Lin Zeng,\* Tianshou Zhao\* and Lei Wei\*



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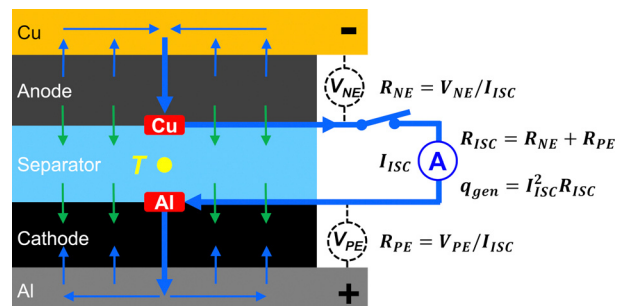
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2018

### A novel method for simultaneous triggering and *in situ* sensing of internal short circuit in lithium-ion cells

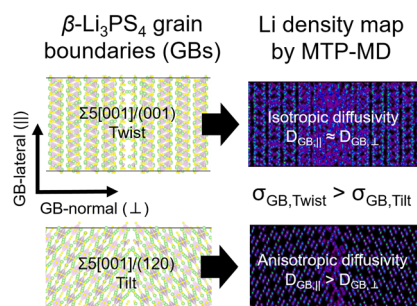
Mary K. Long, Siyi Liu and Guangsheng Zhang\*



2029

### Lithium dynamics at grain boundaries of $\beta$ - $\text{Li}_3\text{PS}_4$ solid electrolyte

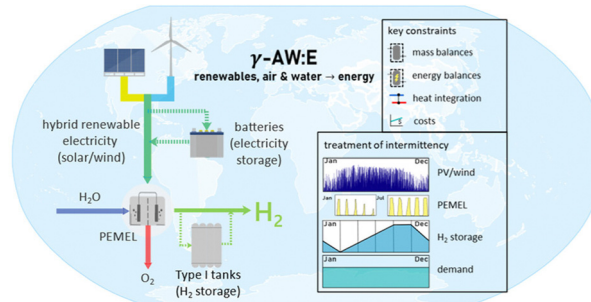
Randy Jalem, Manas Likhit Holekevi Chandrappa, Ji Qi, Yoshitaka Tateyama and Shyue Ping Ong\*



2042

### Quantifying global costs of reliable green hydrogen

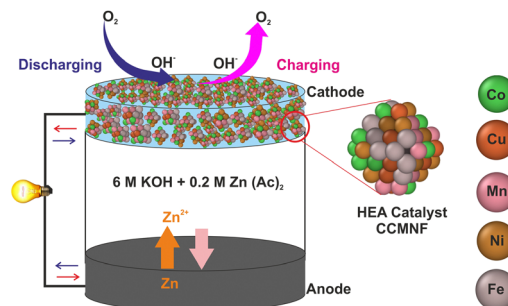
D. Freire Ordóñez, C. Ganzer, T. Halfdanarson, A. González Garay, P. Patrizio, A. Bardow, G. Guillén-Gosálbez, N. Shah and N. Mac Dowell\*



2055

### Understanding the evolution of catalytically active multi-metal sites in a bifunctional high-entropy alloy electrocatalyst for zinc–air battery application

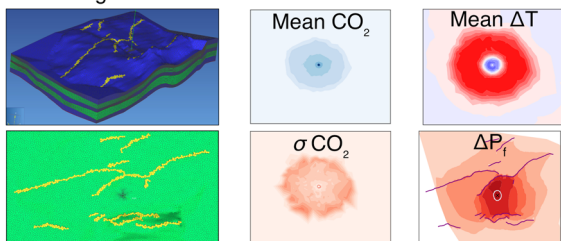
Chetna Madan, Saumya R. Jha, Nirmal Kumar Katiyar, Arkaj Singh, Rahul Mitra, Chandra Sekhar Tiwary,\* Krishanu Biswas\* and Aditi Halder\*



2069

Offshore CO<sub>2</sub> Storage

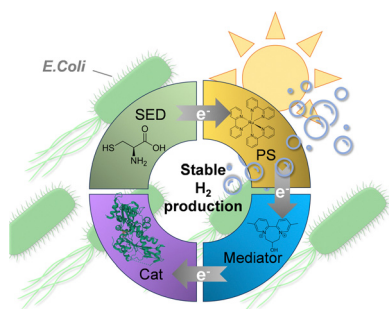
Geologic Model



## Assessing reservoir performance for geologic carbon sequestration in offshore saline reservoirs

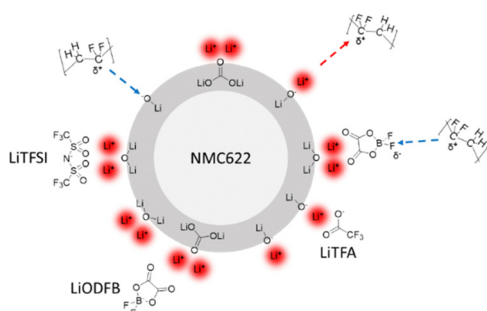
Lars Koehn,\* Brian W. Romans and Ryan M. Pollyea

2085

*E. coli*-based semi-artificial photosynthesis: biocompatibility of redox mediators and electron donors in [FeFe] hydrogenase driven hydrogen evolution

Mira T. Gamache, Larissa Kurth, Dawit T. Filmon, Nicolas Plumeré and Gustav Berggren\*

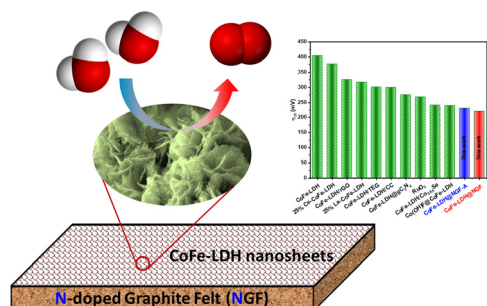
2093



## Electrochemical investigation of fluorine-containing Li-salts as slurry cathode additives for tunable rheology in super high solid content NMP slurries

Francesco Colombo,\* Marcus Müller, Andreas Weber, Noah Keim, Fabian Jeschull, Werner Bauer and Helmut Ehrenberg

2109



## Cobalt-iron layered double hydroxide nanosheet-wrapped nitrogen-doped graphite felt as an oxygen-evolving electrode

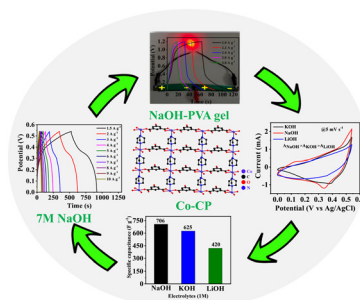
Noor Fatima Shahid, Ahsan Jamal, Gulfam-ul Haq, Maham Javed, Muhammad Saifullah and Mohsin Ali Raza Anjum\*



2119

### Exploring the feasibility of a two-dimensional layered cobalt-based coordination polymer for supercapacitor applications: effect of electrolytic cations

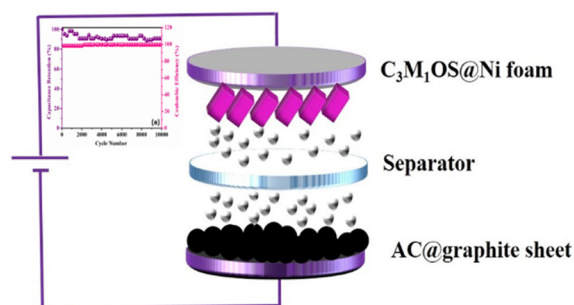
Rakesh Deka, Shashank Rathi and Shaikh M. Mobin\*



2129

### Compositionally variant bimetallic Cu–Mn oxysulfide electrodes with meritorious supercapacitive performance and high energy density

Heba M. El Sharkawy, Abdussalam M. Elbanna, Ghada E. Khedr and Nageh K. Allam\*



2140

### Efficient procedure for biodiesel synthesis from waste oil and *t*-butylation of resorcinol using a porous microtube polymer-based solid acid

Zhijin Guo and Xuezheng Liang\*

