

# Energy Advances

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## IN THIS ISSUE

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### Cover

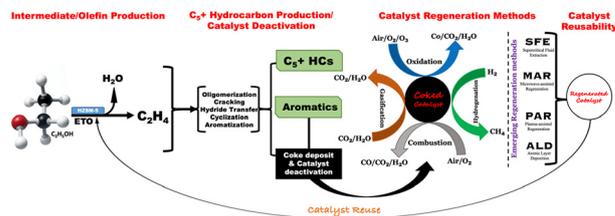
See Stefanie Arnold and Volker Presser, pp. 1114-1129. Image reproduced by permission of Uwe Bellhäuser and Volker Presser from *Energy Adv.*, 2025, 4, 1114.

## REVIEW

1075

### Unlocking catalytic longevity: a critical review of catalyst deactivation pathways and regeneration technologies

Ifeanyi Michael Smarte Anekwe\* and Yusuf Makarfi Isa

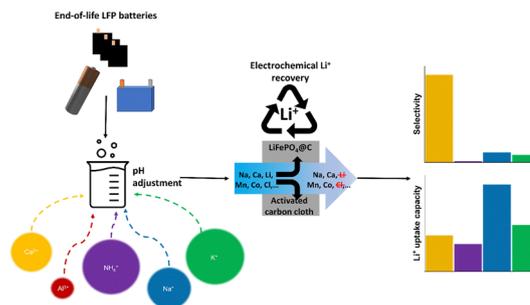


## PAPERS

1114

### Competing ion effects and electrolyte optimization for electrochemical lithium extraction from spent lithium iron phosphate battery cathodes

Stefanie Arnold and Volker Presser\*



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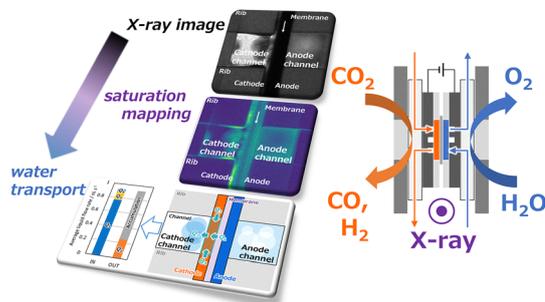
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### Operando analysis of water transport in zero-gap CO<sub>2</sub> electrolysis cells

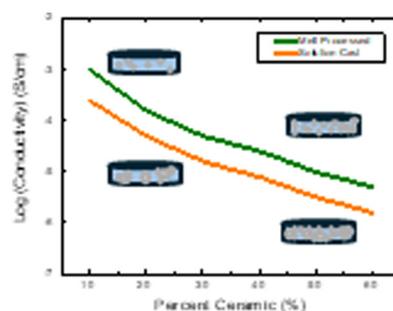
Masakazu Yamagiwa,\* Naoya Fujiwara, Yusuke Kofuji and Ryota Kitagawa



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### The impact of solvent exposure during preparation on the performance of poly(ethylene) oxide–Li<sub>1.5</sub>Al<sub>0.5</sub>Ge<sub>1.5</sub>(PO<sub>4</sub>)<sub>3</sub> hybrid electrolytes

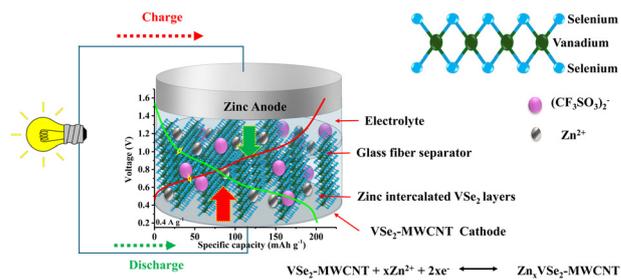
Gabrielle Foran,\* Cédric Barcha, Caroline St-Antoine, Arnaud Prébé and Mickael Dollé



1154

### 2D layered VSe<sub>2</sub> with high pseudocapacitive Zn-ion storage as a cathode for high-power zinc-ion batteries

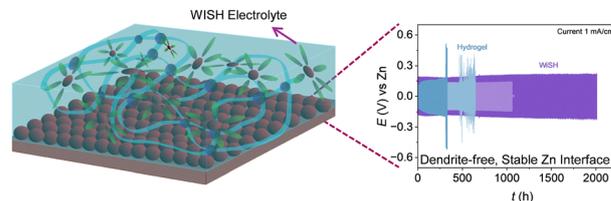
Saddam Hussain, Mayanmi Zimik, Meghali Devi, Md Kasif and Ranjith Thangavel\*



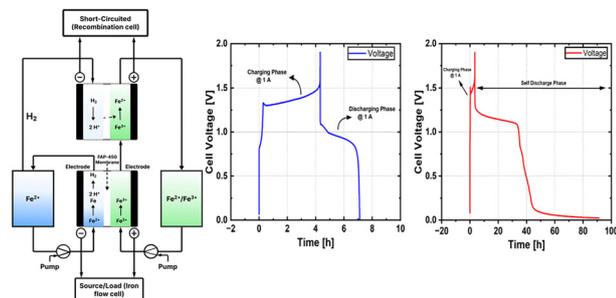
1167

### Water-in-salt hydrogel electrolyte for dendrite-free Zn deposition

Varsha Joseph, Nara Kim, Sae Young Lee, Reverant Crispin, Tae Hyun Park\* and Ziyauddin Khan\*



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## A multi-parameter analysis of iron/iron redox flow batteries: effects of operating conditions on electrochemical performance

Challuri Sai Venkata Akhil Kumar,\* Jens Tübke, Karsten Pinkwart and Jens Noack

