

# Energy Advances

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## IN THIS ISSUE

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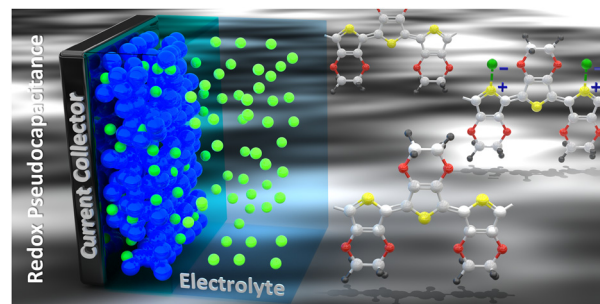
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## REVIEWS

2668

### Fabrication methods, pseudocapacitance characteristics, and integration of conjugated conducting polymers in electrochemical energy storage devices

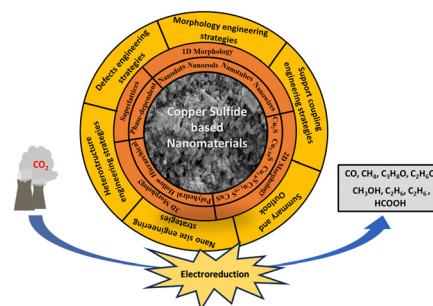
Meysam Heydari Gharahcheshmeh\* and  
Kafil Chowdhury



2704

### Controlled synthesis of copper sulfide-based catalysts for electrochemical reduction of CO<sub>2</sub> to formic acid and beyond: a review

Anirban Mukherjee, Maryam Abdinejad,\*  
Susanta Sinha Mahapatra and Bidhan Chandra Ruidas\*



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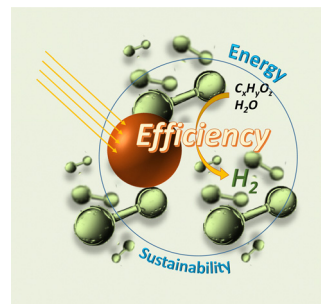
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## PERSPECTIVE

2738

## Efficiency in photocatalytic production of hydrogen: energetic and sustainability implications

Rocío Sayago-Carro, Luis José Jiménez-Chavarriga, Esperanza Fernández-García, Anna Kubacka\* and Marcos Fernández-García\*

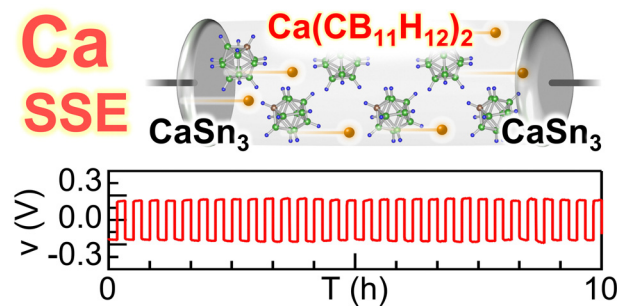


## COMMUNICATION

2758

## Investigating the ion conductivity and synthesis conditions of calcium monocarborane solid-state electrolytes

Takara Shinohara, Kazuaki Kisu,\* Shigeyuki Takagi and Shin-ichi Orimo\*

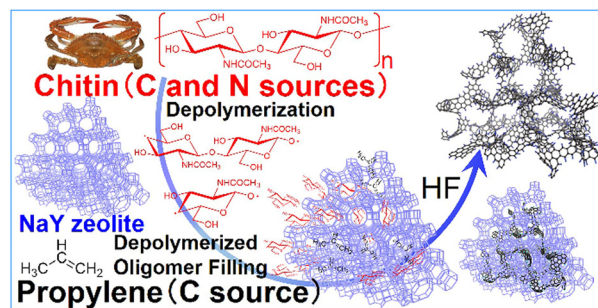


## PAPERS

2764

## Synthesis of N-doped zeolite-templated carbons via depolymerized oligomer filling: applications in EDLC electrodes

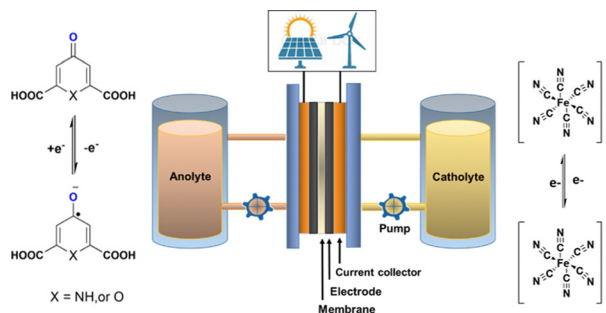
Hiroyuki Itoi,\* Chika Matsuoka, Ginga Saeki, Hiroyuki Iwata, Shinichiroh Iwamura, Keigo Wakabayashi, Takeharu Yoshii, Hiroto Nishihara and Yoshimi Ohzawa



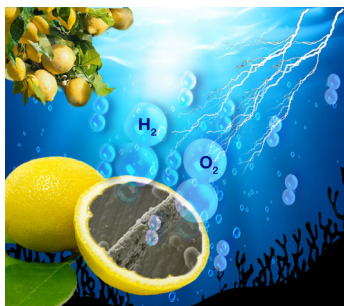
2778

## Tautomerism and nucleophilic addition influence the performance of aqueous organic redox flow batteries of chelidamic acid and chelidonic acid

Surya Prakash, Alagar Ramar, Fu-Ming Wang,\* Keyalew Wagari Guji, Citra Deliana Dewi Sundari and Laurien Merinda



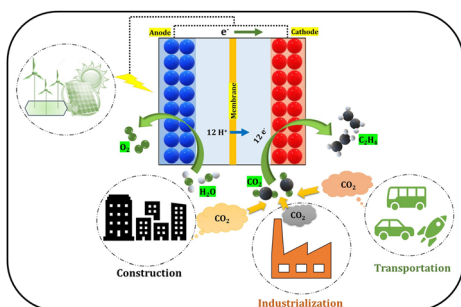
2790



### Ag–NiP deposited green carbon channel embedded NiP panels for sustainable water splitting

Revathy B. Nair, A. Anantha Krishnan, Aneesh Kumar M. A., Sivaraj Rajendran, Sreehari Harikumar, Vidhya C., M. Ameen Sha, Thomas Mathew, Sajith Kurian\* and P. S. Arun\*

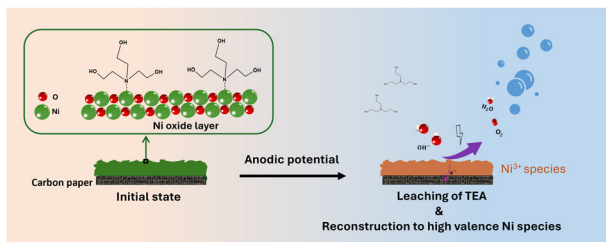
2801



### Boosting ethylene yield via a synergistic 2D/0D nanostructured VCu layered double hydroxide/TiO<sub>2</sub> catalyst in electrochemical CO<sub>2</sub> reduction

Sneha S. Lavate and Rohit Srivastava\*

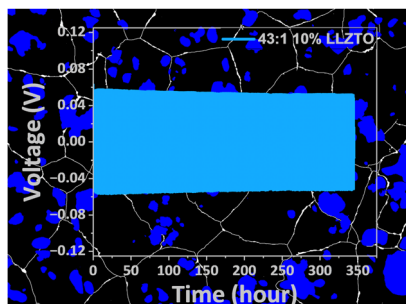
2812



### Triethanolamine-assisted surface reconstruction of nickel oxide for efficient oxygen evolution reaction

Jiayun Zhang, Ruth Knibbe\* and Ian Gentle\*

2820



### Competing effects of low salt ratio on electrochemical performance and compressive modulus of PEO–LiTFSI/LLZTO composite electrolytes

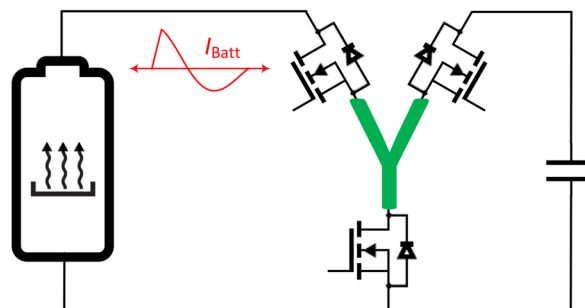
Jiaxin Zhang, Valeria Perez, ThomasJae Garcia, Dan-il Yoon, David Wagner, Yanika Schneider, Min Hwan Lee, Sang-Joon John Lee\* and Dahyun Oh\*



2828

### A high frequency alternating current heater using the advantages of a damped oscillation circuit for low voltage Li-ion batteries

Joachim Oehl,\* Andreas Gleiter, Daniel Manka, Alexander Fill and Kai Peter Birke



2842

### Effective electrochemical water oxidation to H<sub>2</sub>O<sub>2</sub> based on a bimetallic Fe/Co metal–organic framework

Kunpeng Liu, Xu Wang, Nan Wang,\* Ruiyong Zhang,\* Meinan Yang, Baorong Hou and Wolfgang Sand

