

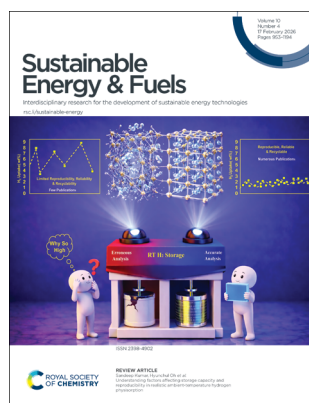
# Sustainable Energy & Fuels

Interdisciplinary research for the development of sustainable energy technologies  
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ISSN 2398-4902 CODEN SEFUA7 10(4) 953–1194 (2026)



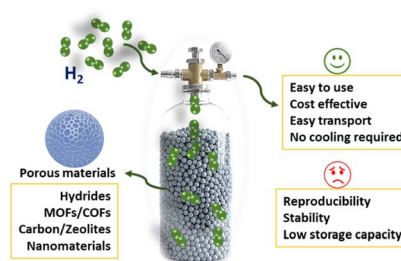
**Cover**  
See Sandeep Kumar, Hyunchul Oh *et al.*, pp. 961–983. Image reproduced by permission of Hyunchul Oh from *Sustainable Energy Fuels*, 2026, 10, 961.

## REVIEWS

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### Understanding factors affecting storage capacity and reproducibility in realistic ambient-temperature hydrogen physisorption

Sandeep Kumar,\* Munkhshur Myekhlai, Subin Lim and Hyunchul Oh\*

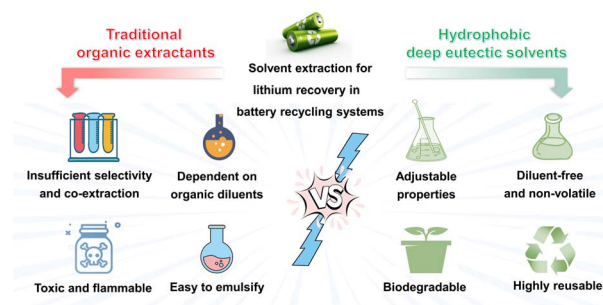


Room temperature hydrogen storage

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### Hydrophobic deep eutectic solvents for sustainable lithium recovery in battery recycling systems

Aedo Matias, Xiaohui Lu, Jie Wang, Chaowu Wang and Qibo Zhang\*



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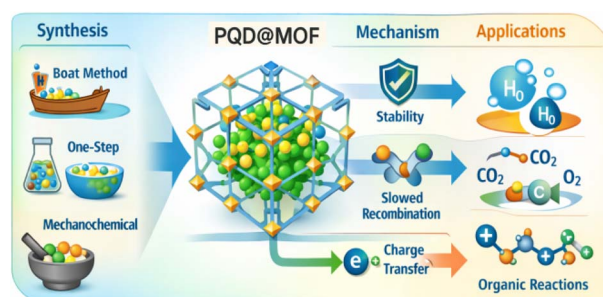


## REVIEWS

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### Perovskite quantum dot@MOF heterostructures: highly efficient and stable visible-light photocatalysts

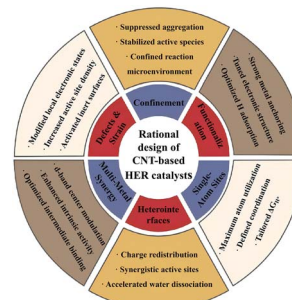
Mohamed Abu Shuheil, Ahmed Aldulaimi, Subhashree Ray, Talal Aziz Qassem, Gunjan Garg, Renu Sharma, Dilbar Urazbaeva, Sabokhat Sadikova and Sharmin Smaeilpour\*



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### Rational design strategies for carbon nanotube-based non-precious metal HER catalysts: a review

Xiaomei Wang\*

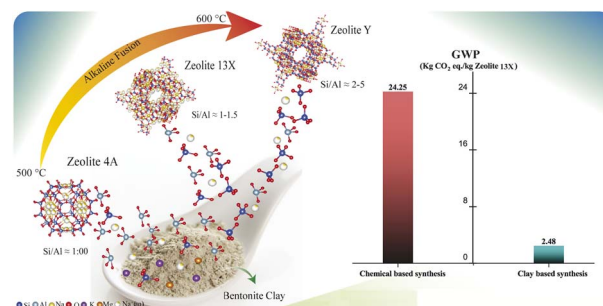


## PAPERS

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### A sustainable multi-zeolite synthetic framework from a single natural clay: CO<sub>2</sub>/H<sub>2</sub>O adsorption performance and life cycle assessment benefits

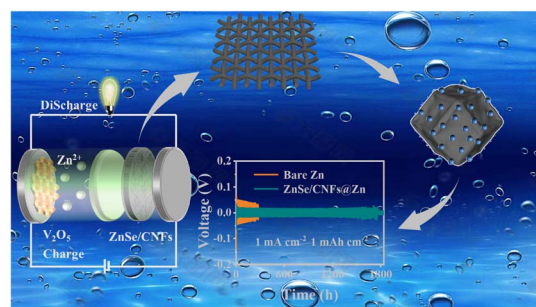
Biruktait Ayele Lemecho,\* Jordi Espín, Pattaraphon Rodlamul, Florian Kiefer, Wendy Lee Queen and Vivek Subramanian\*



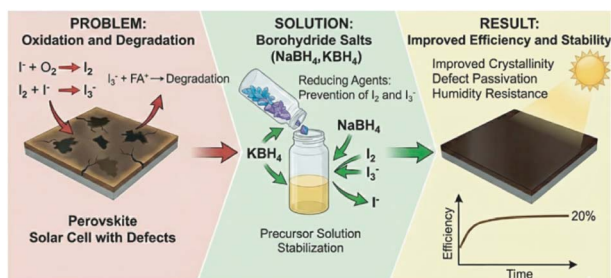
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### ZnSe grown on carbon nanofibers derived from ZIF-8 as a zincophilic layer for zinc metal anodes

Yudong Feng, Zhaoli Liu, Yuying Zheng, Yuanpei Li and Xingwei Sun\*



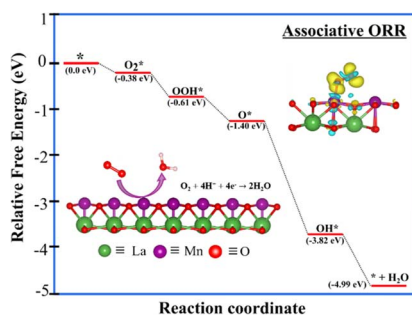
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### The dual role of borohydride salts in enhancing perovskite solar cell performance and stability

Teresa Diaz-Perez, Carina Pareja-Rivera, Jorge Pascual, Hector Juarez S., Sofia Masi,\* Eva M. Barea,\* Silver-Hamill Turren-Cruz\* and Iván Mora-Seró\*

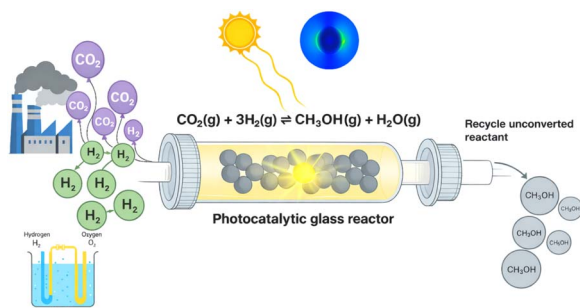
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### Elucidating the O<sub>2</sub> reduction reaction on 2D monolayer LaMnO<sub>3</sub> perovskite

Naveen Sharma and Srimanta Pakhira\*

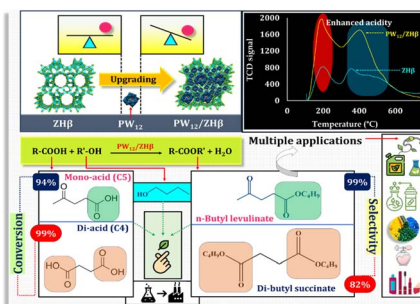
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### Synergistic plasmonic–semiconductor heterointerfaces enabling efficient CO<sub>2</sub> hydrogenation to methanol under visible-light irradiation

Abdul Malek, Anh-Tuan Hoang, Md. Tarekul Islam, Mohammad A. Hasnat, Tarikul Islam\* and Aminul Islam\*

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### Upgrading the Brønsted acidity of zeolite Hβ via phosphotungstates: engineering a high-performance catalytic platform for the production of energy-efficient biofuel additives

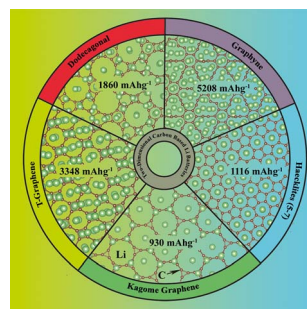
Margi Joshi and Anjali Patel\*



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## Engineering two-dimensional carbon anodes for enhanced lithium battery performance

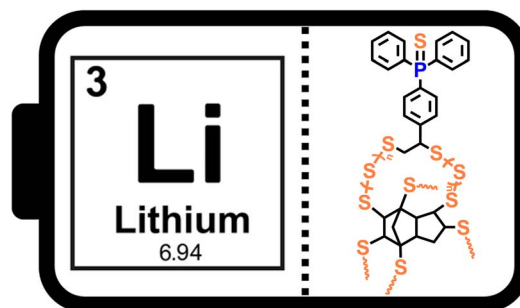
Fuat Bilican, Fatih Ersan\* and Sevgi Ozdemir Kart\*



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## Phosphorous containing inverse vulcanised sulfur polymers as Li–sulfur positive electrodes

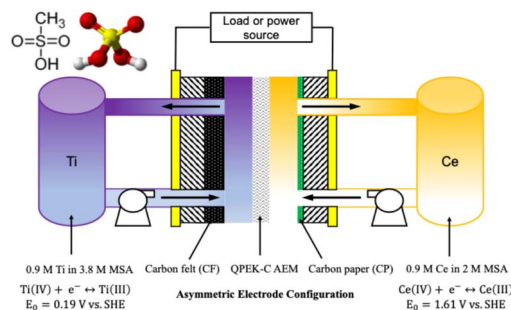
Haoran Wang, Pan Yang, Alex R. Neale, Liam J. Dodd, Peiyao Yan, Bowen Zhang, Laurence J. Hardwick\* and Tom Hasell\*



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## Asymmetric electrode configurations enhance operating power density and energy efficiency of an aqueous, electrode-decoupled titanium–cerium redox flow battery

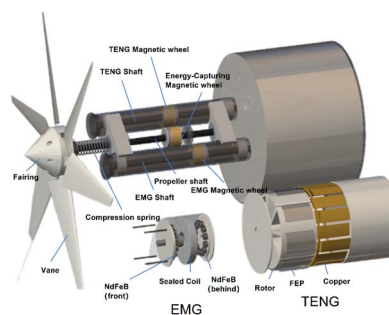
Jing Xie, Shrihari Sankarasubramanian and Vijay Ramani\*

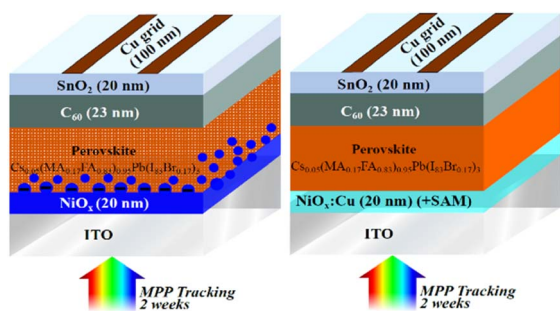


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## Switchable tribo-electromagnetic composite generator based on magnetic–spring dynamic coupling for low-velocity flow energy harvesting

Da Che, Xiao Zhang,\* Guanzheng Xu, Yanhui Wang, Futian Geng, Siyu Zhang, Fei Zhong and Wanqiang Zhu\*





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Ivona Kafedjiska,\* Vincent M. Le Corre, Hans Köbler, Igal Levine, Rutger Schlatmann and Iver Lauer mann

