

Sustainable Energy & Fuels

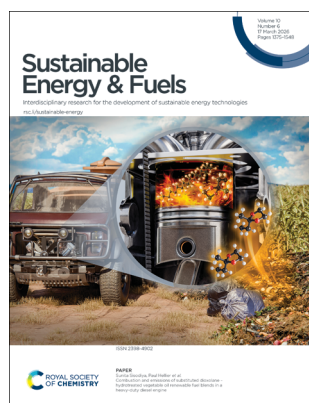
Interdisciplinary research for the development of sustainable energy technologies

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ISSN 2398-4902 CODEN SEFUA7 10(6) 1375–1548 (2026)



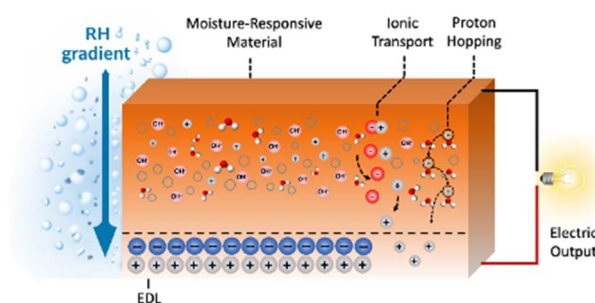
Cover
See Sunita Sisodiya, Paul Hellier *et al.*, pp. 1419–1429.
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REVIEW

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Humidity-driven energy harvesting systems: mechanisms, materials, challenges, and future directions

Soheil Malekghasemi* and Serdar Abaci*

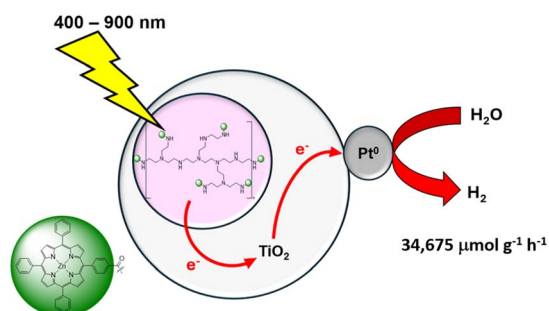


COMMUNICATION

1408

A porphyrin polyethylenimine polymer as an effective photosensitizer for hydrogen evolution

Patrick Loftus, Leila Tabrizi, Michael P. Brandon and Mary T. Pryce*



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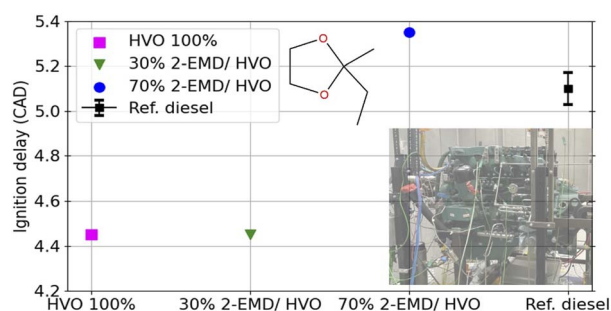
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1419

Combustion and emissions of substituted dioxolane – hydrotreated vegetable oil renewable fuel blends in a heavy-duty diesel engine

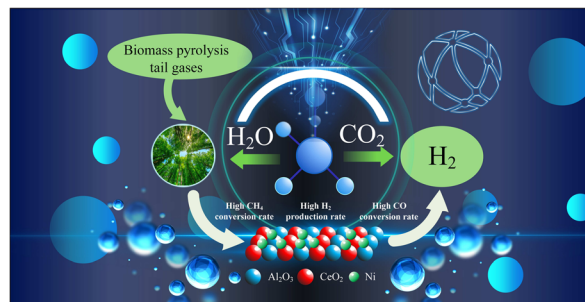
Sunita Sisodiya,* Nicos Ladommatos, Amy Kittoe, Cameron Webb and Paul Hellier*



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Hydrogen generation from simulated biomass pyrolysis tail gas on Ni–CeO₂–Al₂O₃ catalysts

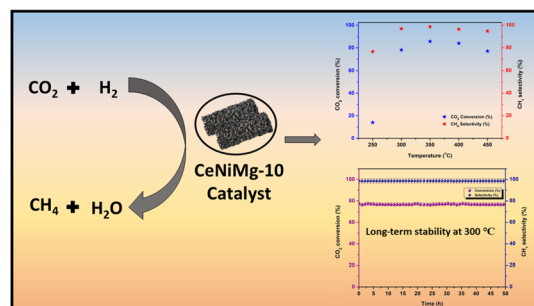
Haiqing Cai, Xueshuang Wu, Jing Yang, Jiashi Zhu, Guiying Li and Changwei Hu*



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Synergistic effect of Ce–Mg promoted Ni catalysts on 3D structured open cell foams for CO₂ hydrogenation to methane

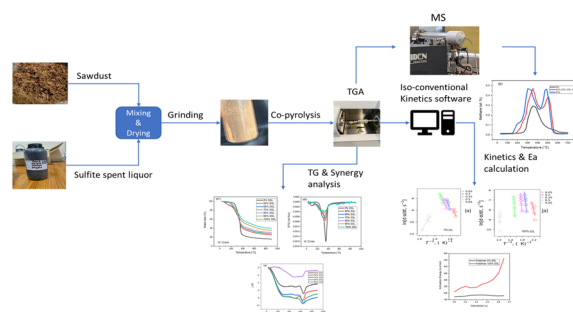
Neha Choudhary* and Patrick Da Costa



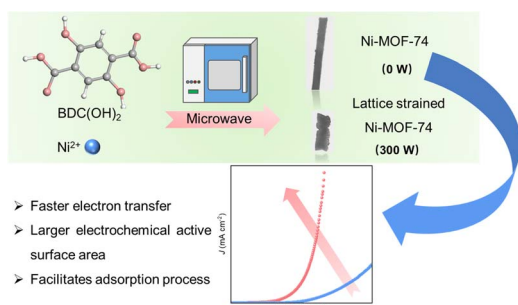
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Optimizing pyrolysis of sawdust and spent sulfite liquor: synergy, activation energy reduction and gas selectivity

Nampe Majoe,* Bilal Patel, Joshua Gorimbo and Isaac Beas



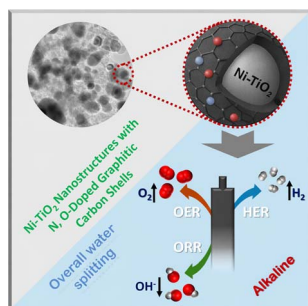
1470



Lattice-strained metal–organic frameworks synthesized *via* microwave assistance promote the oxygen evolution reaction

Caiyao Yan* and Hongfeng Wu

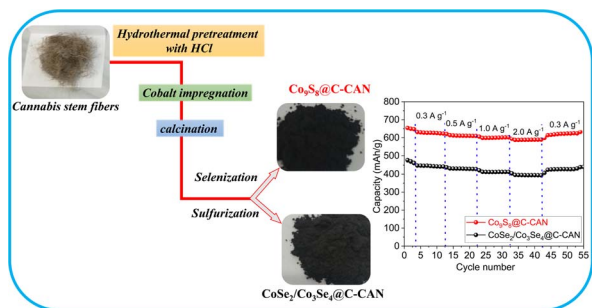
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Bimetallic nanoparticles confined in an N-doped graphitic carbon shell: a high-performance trifunctional catalyst for efficient water splitting

Rajeshree J. Bani, Jyotiranjana Mishra, Sanjay Pratihar, Rajesh Patidar, Divesh N. Srivastava* and Gopala Ram Bhadu*

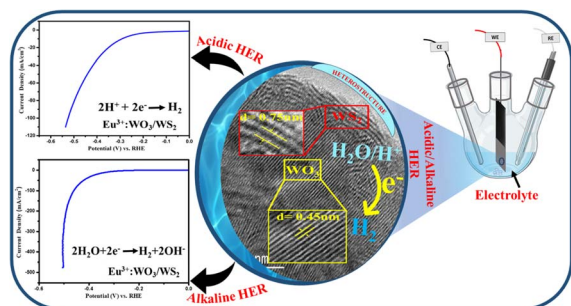
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Engineering hemp-derived carbon–cobalt chalcogenide hybrids toward durable and high-capacity sodium-ion batteries

Nesrin Bugday, Özgenur Dinçer Şahan, Ozgur Duygulu, Ahmet Karadağ and Sedat Yasar*

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Trivalent europium ion doped WO₃/WS₂ semiconductor heterostructure interface for efficient hydrogen evolution reaction under acidic and alkaline dual conditions

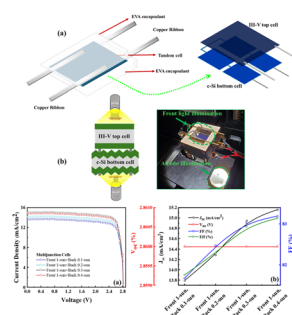
Namrata Pachauri, Viplove Mishra, Avishek Roy, Venkataramanan Mahalingam* and Sri Sivakumar*



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Optimized voltage and current matching in a mechanically stacked bifacial III–V/Si tandem solar module via spectral albedo illumination and energy yield simulation

Rafi Ur Rahman, Alamgeer, Hasnain Yousuf,* Muhammad Quddamah Khokhar, Maha Nur Aida, Shahzada Qamar Hussain, Sangheon Park and Junsin Yi*



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Dual function of phosphate buffer in untreated seawater electrolysis: boosting oxygen evolution reaction efficiency and inhibiting cathode scaling

P. Vignesh Raja and Ijjada Mahesh*

