

Sustainable Energy & Fuels

Interdisciplinary research for the development of sustainable energy technologies

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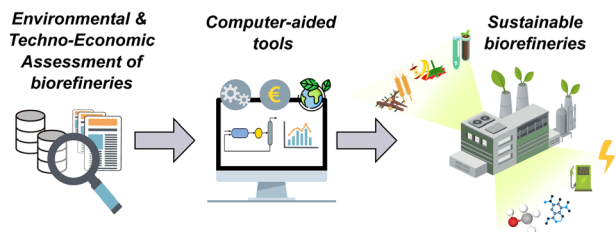
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See Qiyang Zhao, Liejin Guo *et al.*, pp. 4094–4109. Image reproduced by permission of Qiyang Zhao from *Sustainable Energy Fuels*, 2023, 7, 4094.

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Integrated techno-economic and environmental assessment of biorefineries: review and future research directions

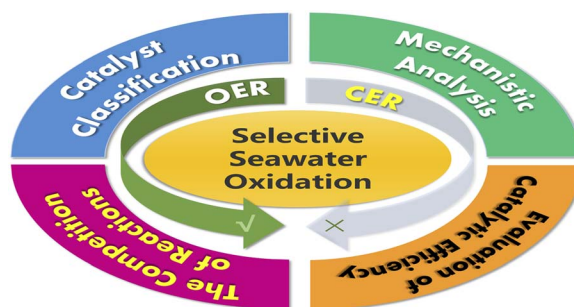
Déborah Pérez-Almada, Ángel Galán-Martín,* María del Mar Contreras and Eulogio Castro



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Non-noble metal catalysts for preventing chlorine evolution reaction in electrolytic seawater splitting

Zhixi Guan, Lin Yang, Lianhui Wu, Daying Guo,* Xi'an Chen* and Shun Wang



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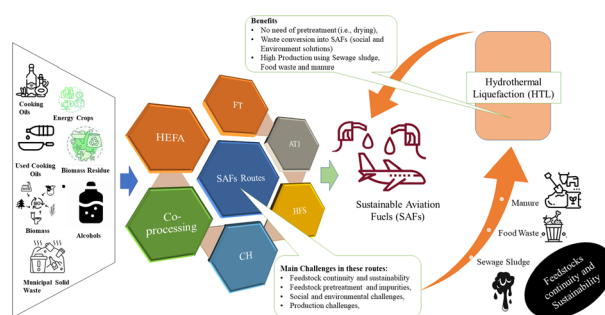


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The future of aviation soars with HTL-based SAFs: exploring potential and overcoming challenges using organic wet feedstocks

Muhammad Usman, Shuo Cheng, Sasipa Boonyubol and Jeffrey S. Cross*

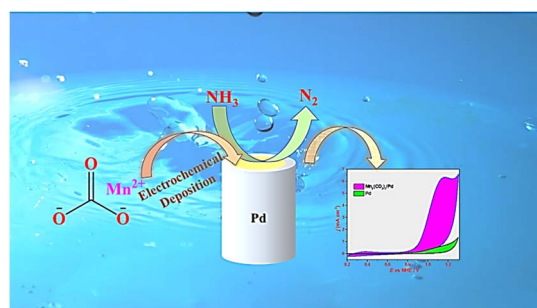


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Manganese carbonate as an efficient electrocatalyst for the conversion of ammonia ($\text{NH}_4^+/\text{NH}_3$) to dinitrogen

Iranna Udachyan, Jayesh T. Bhanushali, Amir Mizrahi, Tomer Zidki and Dan Meyerstein*

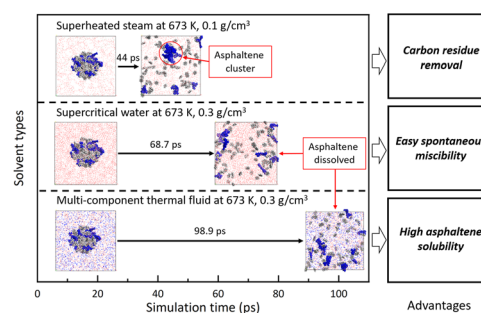


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Molecular dynamics simulation of heavy oil dissolution in supercritical water and multi-component thermal fluid

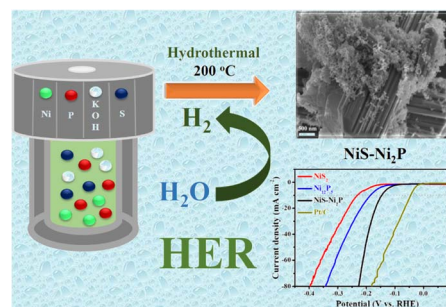
Qiuyang Zhao,* Lichen Zheng, Yu Dong, Hui Jin, Yechun Wang and Liejin Guo*



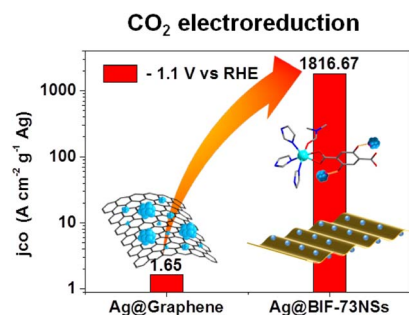
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A phase-engineered nickel sulfide and phosphide ($\text{NiS-Ni}_2\text{P}$) heterostructure for enhanced hydrogen evolution performance supported with DFT analysis

Jiban K. Das, Nachiketa Sahu, Pratap Mane, Brahmananda Chakraborty and J. N. Behera*



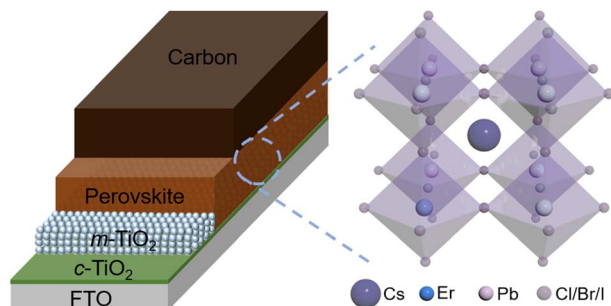
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Hydroxyl reduced silver nanoparticles on ultrathin boron imidazolate framework nanosheets for electrocatalytic CO₂ reduction

Ping Shao, Luocai Yi, Jun-Qiang Chen, Changsheng Cao, Hai-Xia Zhang* and Jian Zhang*

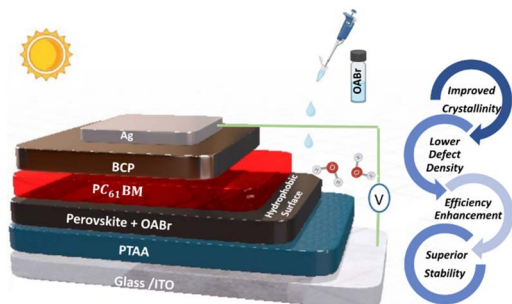
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Erbium-doped CsPbI_{2.5}Br_{0.5} with enhanced crystalline quality and improved carrier lifetime for thermally stable all-inorganic perovskite solar cells

Mengfei Zhu, Lina Qin, Yuren Xia, Yi Hu, Xinmei Song, Daocheng Hong, Yuxi Tian, Zuoxiu Tie* and Zhong Jin*

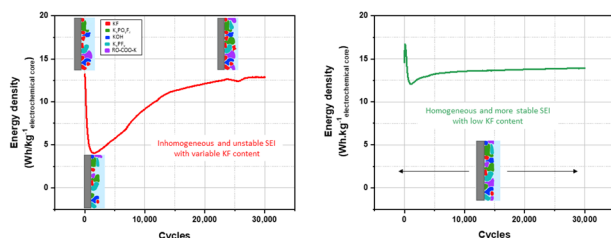
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An efficient approach for controlling the crystallization, strain, and defects of the perovskite film in hybrid perovskite solar cells through antisolvent engineering

Nikolaos Tzoganakis, Konstantinos Chatzimanolis, Emmanuel Spiliarotis, George Veisakis, Dimitris Tsikritzis* and Emmanuel Kymakis

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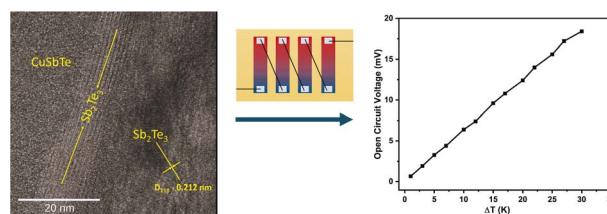
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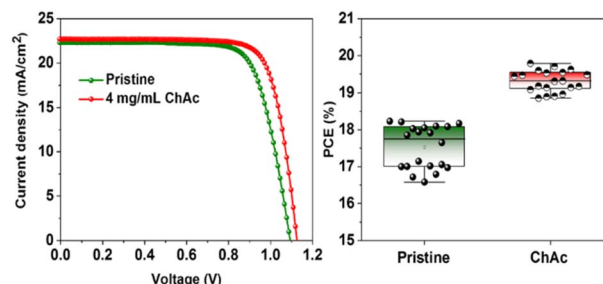
Amit Tanwar, Rajvinder Kaur, N. Padmanathan* and Kafil M. Razeeb*



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Interface passivation using choline acetate for efficient and stable planar perovskite solar cells

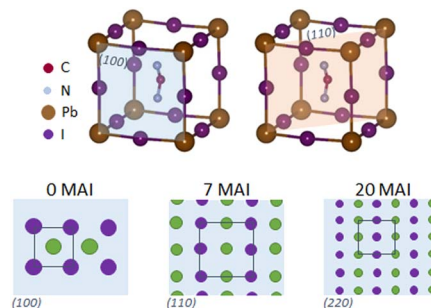
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Revealing the impact of the host-salt non-stoichiometry on the performance of perovskite solar cells

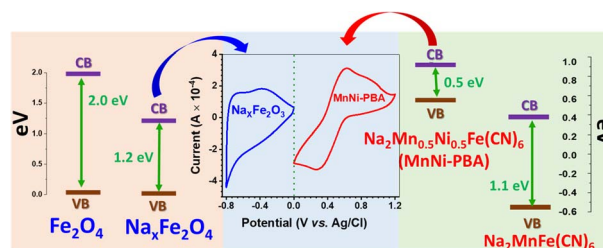
Amit Kumar, Bhanu Pratap Dhamaniya, Shailendra Kumar Gupta, Priyanka Chhillar, Kartiki Chandratre, Sandeep Kumar Pathak and Supravat Karak*



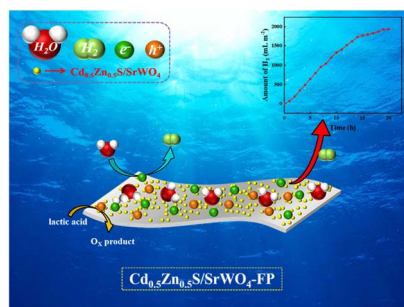
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Low cost & quasi solid state $\text{Na}_2\text{Mn}_{0.5}\text{Ni}_{0.5}\text{Fe}(\text{CN})_6//\text{Na}_x\text{Fe}_2\text{O}_3$ hybrid Na-ion batteries for solar energy storage

Pappu Naskar, Shubhrajyoti Mondal, Biplab Biswas, Sourav Laha* and Anjan Banerjee*



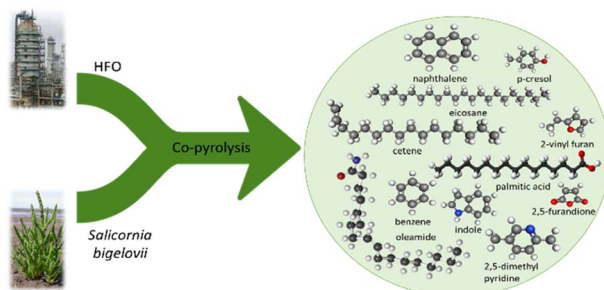
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Hui Liu, Luyao Xin, Lixia Qin, Taiyang Zhang, Xiangqing Li and Shi-Zhao Kang*

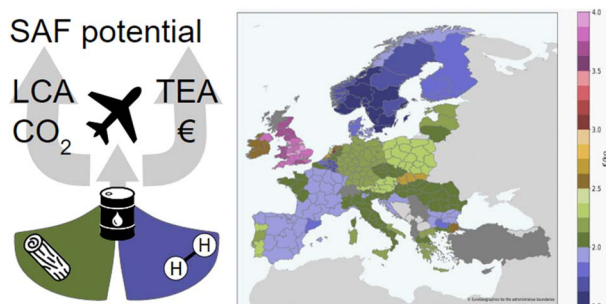
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Interactions in co-pyrolysis of *Salicornia bigelovii* and heavy fuel oil

Jinan Aljaziri,* Ribhu Gautam* and S. Mani Sarathy

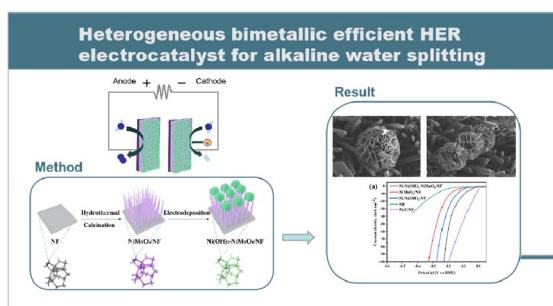
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Sustainable aviation fuel from forestry residue and hydrogen – a techno-economic and environmental analysis for an immediate deployment of the PBtL process in Europe

Felix Habermeyer,* Veatriki Papantoni, Urte Brand-Daniels and Ralph-Uwe Dietrich

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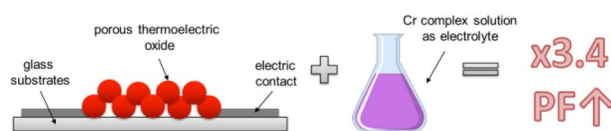
Jianzhi Wang, Jie Yang, Yanjun Yu, Yanan Xue, Yu Luo, Ziyi Guo, Hongliang Yu, Hui Li* and Faquan Yu*



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Power factor improvement in a solid–liquid thermoelectric system formed by Sb:SnO₂ in contact with a chromium complex solution

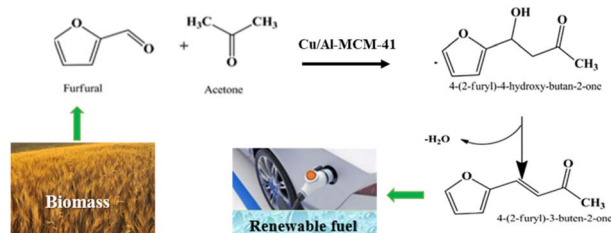
S. Castro-Ruiz, L. Márquez-García, M. Solís-de la Fuente, B. Beltrán-Pitarch, A. Mota-Babiloni, F. Vidan, P. Íñigo-Rabinal, G. Guisado-Barrios and J. García-Cañadas*



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Renewable fuel intermediates from furfural over copper-loaded mesoporous aldol condensation catalysts

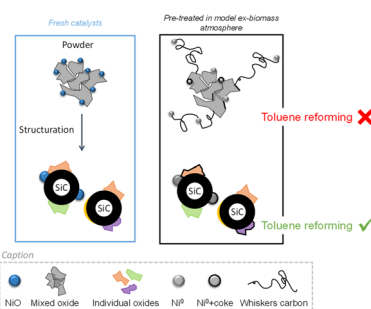
Priyanga Gandhi, Biswajit Saha, Sundaramurthy Vedachalam and Ajay K. Dalai*



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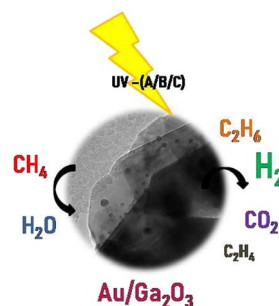
Lole Jurado,* Michaël Martin Romo y Morales, Sébastien Thomas and Anne-Cécile Roger



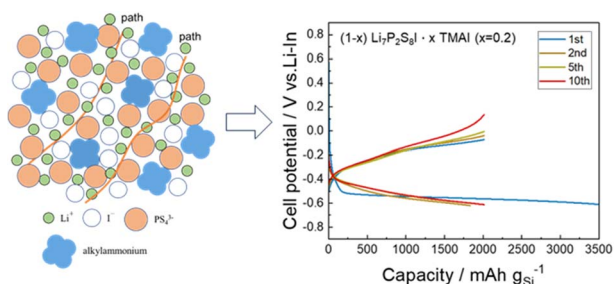
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Methane conversion coupled with hydrogen production from water using Au/Ga₂O₃ photocatalysts prepared by different methods

Eliane R. Januario,* Saulo A. Carminati, Aryane Tofanello, Bruno L. da Silva, Patricia F. Silvaino, Arthur P. Machado, Jorge M. Vaz and Estevam V. Spinacé



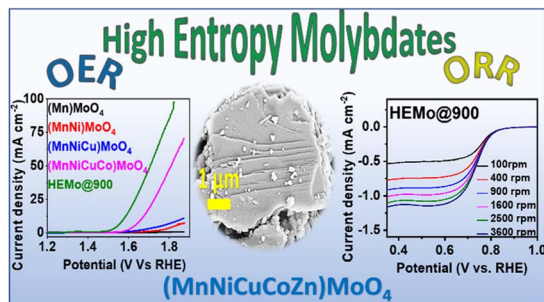
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Inorganic–organic hybrid solid electrolytes in the tetramethylammonium iodide–LiI–Li₂S–P₂S₅ system for all-solid-state lithium batteries

Tong Fang, Hikaru Tokiwa, Akira Miura and Kiyoharu Tadanaga*

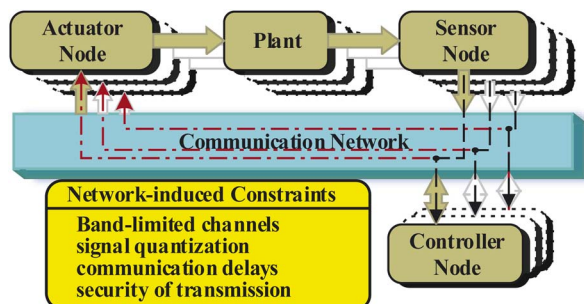
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Achieving favourable oxygen electrocatalytic activity with compositionally complex metal molybdates

Hemanth Kumar Beere, Pranav Kulkarni, Uday Narayan Maiti, R. Geetha Balakrishna, Priyam Mukherjee, Hyun Young Jung, Ketaki Samanta and Debasis Ghosh*

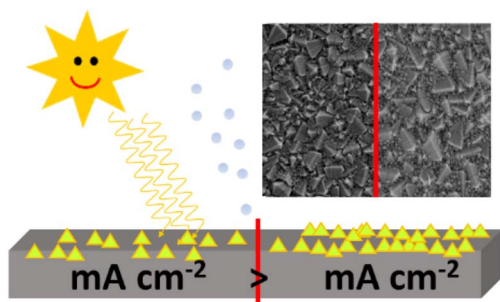
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Dynamic event-triggered H_{∞} quantized load frequency control for interconnected wind power systems under stochastic delay deception attack

Hanmei Zhou, Qishui Zhong,* Shaoyu Hu, Jin Yang, Kaibo Shi and Shouming Zhong

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Seed layer formation determines photocurrent response of hydrothermally-grown WO₃ photoanodes

Mirco Ade, Lion Schumacher and Roland Marschall*

