Energy Advances

rsc.li/energy-advances

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

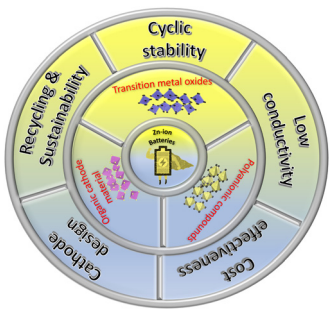
IN THIS ISSUE

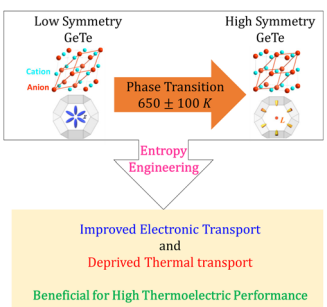
ISSN 2753–1457 CODEN EANDBJ 3(4) 667–918 (2024)

Cover
See Yutaka Moritomo *et al.*, pp. 784–789. Image reproduced by permission of Yutaka Moritomo from *Energy Adv.*, 2024, **3**, 784.

Inside cover
See R. Ajay Rakkesh *et al.*, pp. 676–688. Image reproduced by permission of Ajay Rakkesh Rajendran from *Energy Adv.*, 2024, **3**, 676.

REVIEWS





ROYAL SOCIETY OF CHEMISTRY

EES Catalysis

GOLD OPEN ACCESS

Exceptional research on energy and environmental catalysis

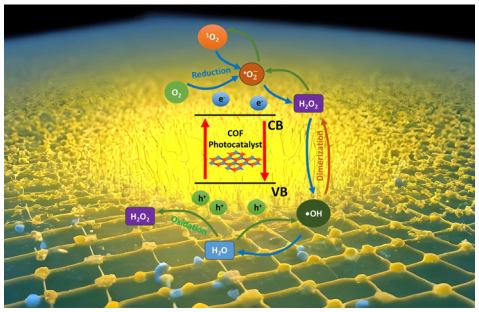
Open to everyone. Impactful for all

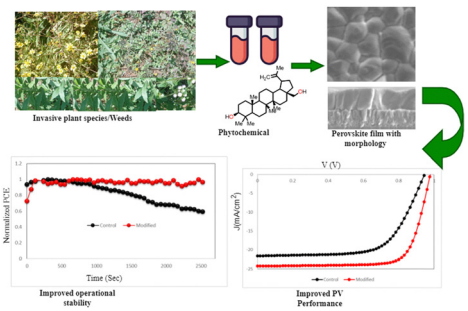
rsc.li/EESCatalysis

Fundamental questions
Elemental answers

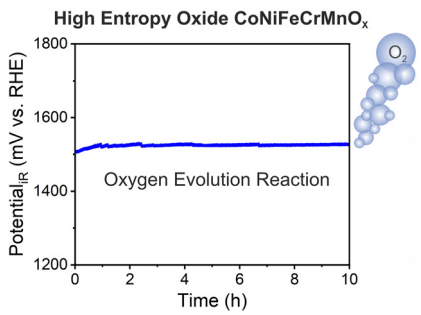
Registered charity number: 207890

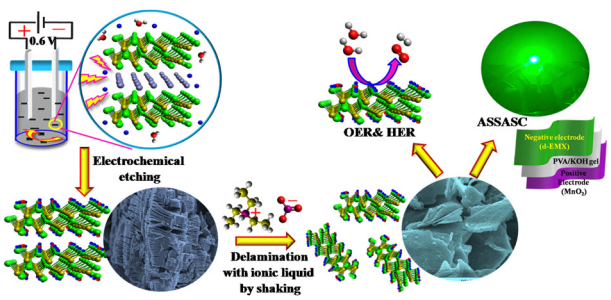
REVIEWS



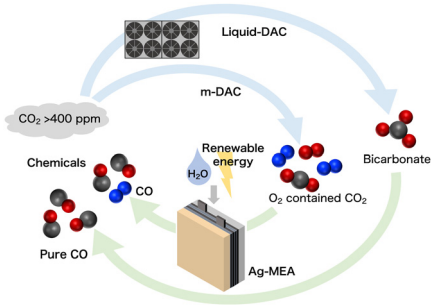


COMMUNICATIONS





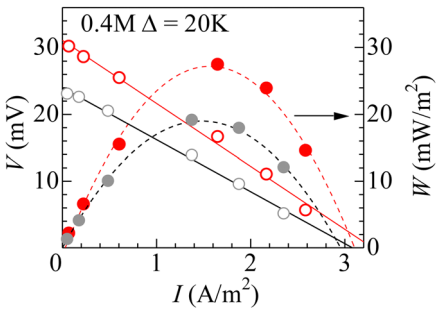
COMMUNICATIONS



A membrane electrode assembly-type cell designed for selective CO production from bicarbonate electrolyte and air containing CO_2 mixed gas

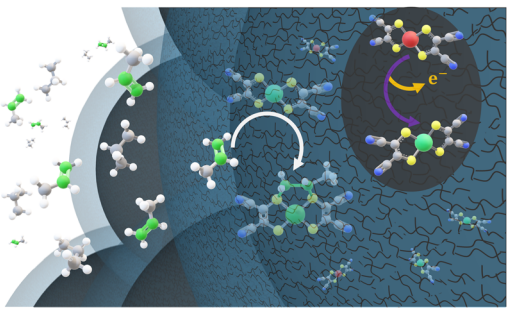
Akina Yoshizawa, Manabu Higashi, Akihiko Anzai and Miho Yamauchi*

PAPERS



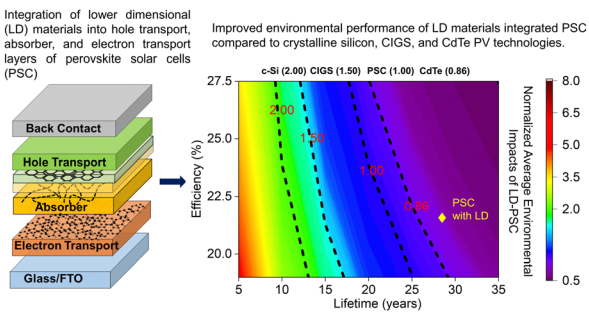
Precipitation enhancement of liquid thermoelectric conversion with $Fe(ClO_4)_2/Fe(ClO_4)_3$ dissolved in DMF

Akihiro Wake, Dai Inoue and Yutaka Moritomo*



Electrochemically modulated separation of olefin–paraffin gas mixtures in membrane electrode assemblies

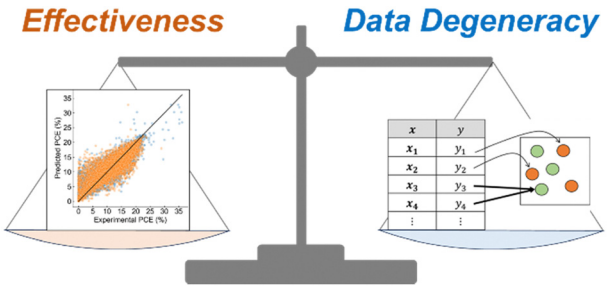
Toshihiro Akashige, Adlai B. Katzenberg, Daniel M. Frey, Debdyuti Mukherjee, César A. Urbina Blanco, Brian Chen, Yoshiyuki Okamoto and Miguel A. Modestino*

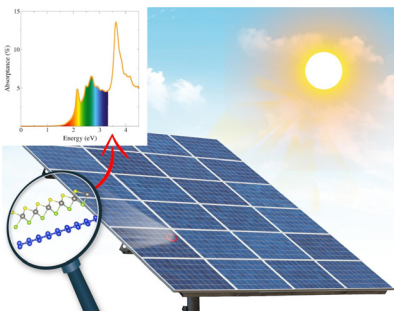


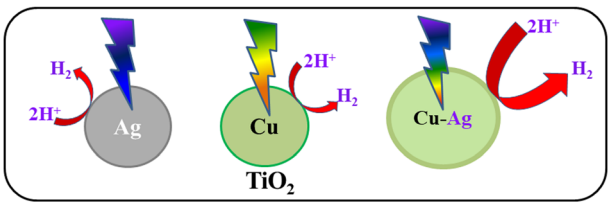
Life cycle assessment of low-dimensional materials for perovskite photovoltaic cells

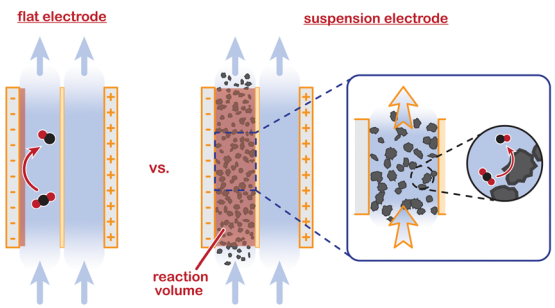
Achyuth Ravilla, Carlo A. R. Perini, Juan-Pablo Correa-Baena, Anita W. Y. Ho-Baillie and Ilke Celik*

PAPERS



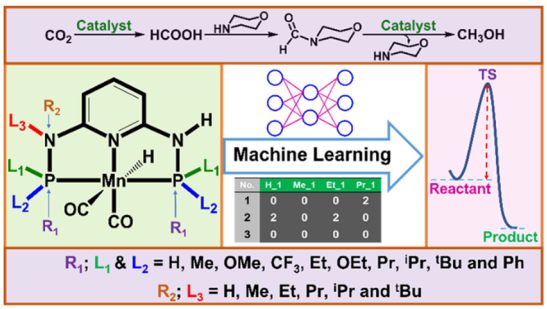






PAPERS

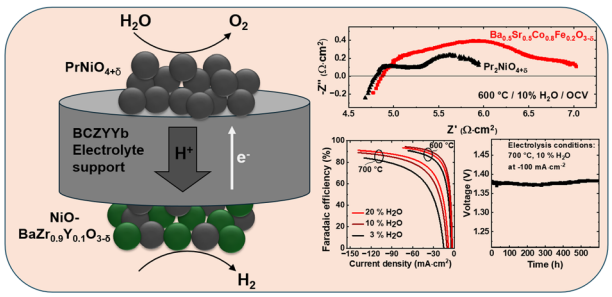
854



Machine learning-based screening of Mn-PNP catalysts for the CO_2 reduction reaction using a region-wise ligand-encoded feature matrix

Amitabha Das, Diptendu Roy, Shyama Charan Mandal and Biswarup Pathak*

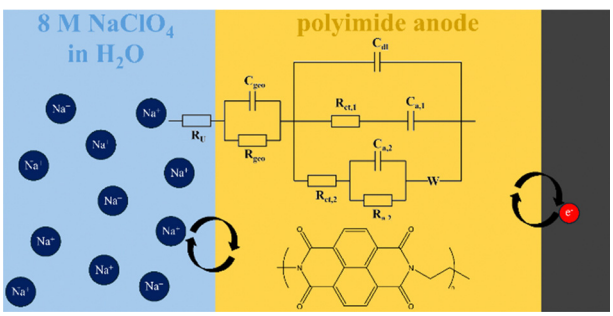
861



A highly stable $Pr_2NiO_{4+\delta}$ oxygen electrode in electrolyte supported protonic ceramic electrolysis cells (PCECs) for hydrogen production with high faradaic efficiency

Leon Schley, Vaibhav Vibhu,* Lucy Nohl, Izaak C. Vinke, L. G. J. (Bert) de Haart and Rüdiger-A. Eichel

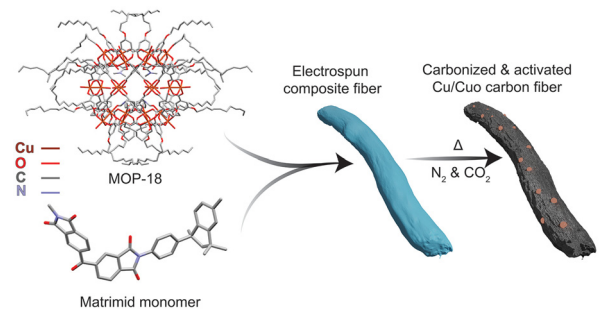
874



Identifying the charge storage mechanism in polyimide anodes for Na-ion aqueous batteries by impedance spectroscopy

Raphael L. Streng, Sergei Vagin, Yuejie Guo, Bernhard Rieger and Aliaksandr S. Bandarenka*

883



Carbon fiber composite electrodes derived from metal organic polyhedra-18 and matrimid for hybrid supercapacitors

Syed Fahad Bin Haque, Yafen Tian, Daniel W. Tague, Kenneth J. Balkus Jr. and John P. Ferraris*

PAPERS