

Sustainable Energy & Fuels

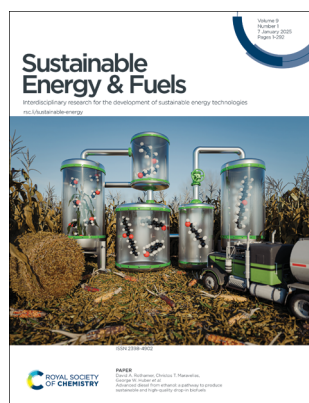
Interdisciplinary research for the development of sustainable energy technologies

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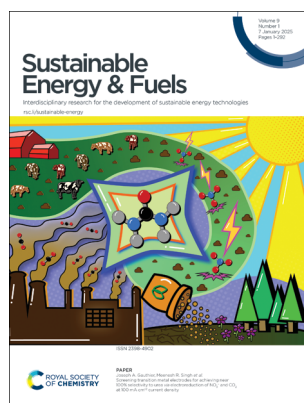
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See David A. Rothamer, Christos T. Maravelias, George W. Huber *et al.*, pp. 98–114. Image reproduced by permission of Xin Zou from *Sustainable Energy Fuels*, 2025, 9, 98.



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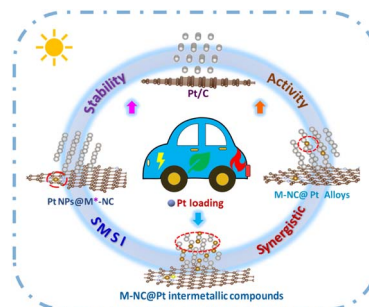
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Recent advances in atomically dispersed M–N–C coupled Pt-based oxygen reduction catalysts

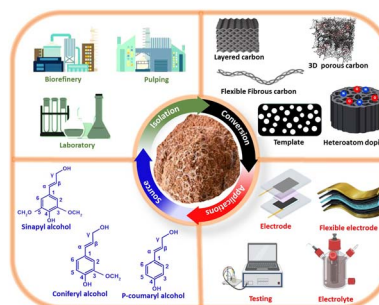
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Lignin as a sustainable precursor for electrodes and electrolytes of emerging supercapacitors

Ridwan T. Ayinla, Islam Elsayed and El Barbary Hassan*



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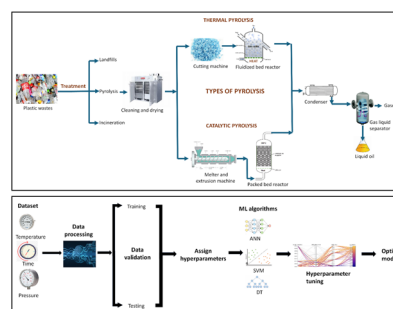
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Advances in plastic to fuel conversion: reactor design, operational optimization, and machine learning integration

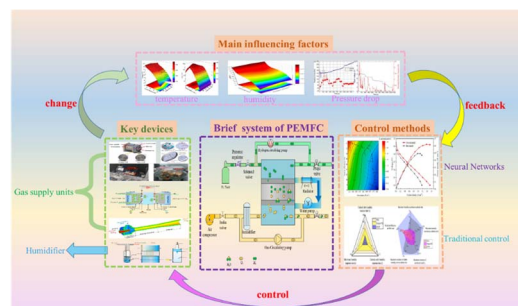
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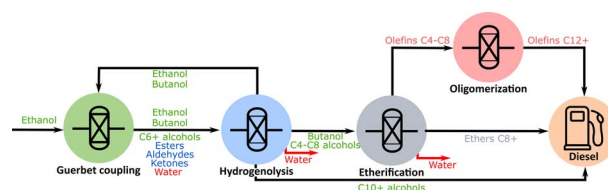


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Advanced diesel from ethanol: a pathway to produce sustainable and high-quality drop-in biofuels

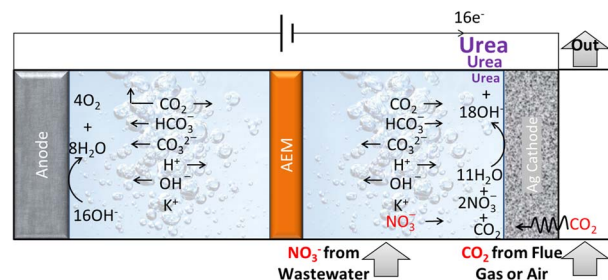
Juan-Manuel Restrepo-Flórez, Javier E. Chavarrio,
Emmanuel Canales, Dustin Witkowski,
Srinath Subramanian, Paolo Cuello-Peñaloza,
David A. Rothamer,* Christos T. Maravelias*
and George W. Huber*



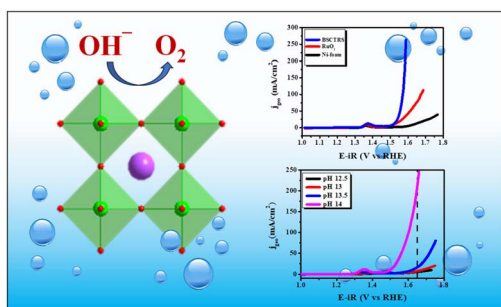
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Screening transition metal electrodes for achieving near 100% selectivity to urea via electroreduction of NO_3^- and CO_2 at 100 mA cm^{-2} current density

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Ksenija D. Glusac, Joseph A. Gauthier*
and Meenesh R. Singh*



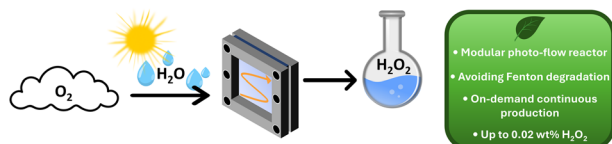
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Harnessing lattice oxygens in a high-entropy perovskite oxide for enhanced oxygen evolution reaction

Sujan Sen and Tapas Kumar Mandal*

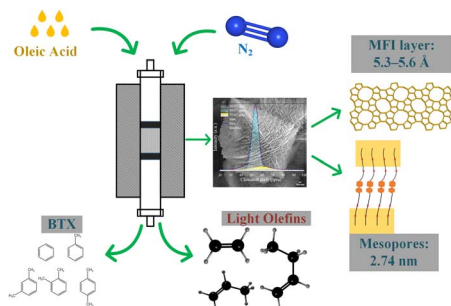
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Photochemical on-demand production of hydrogen peroxide in a modular flow reactor

Thomas Freese, Jelmer T. Meijer, Matteo Miola, Paolo P. Pescarmona and Ben L. Feringa*

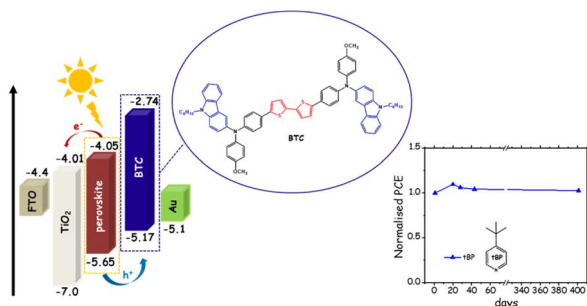
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Paavo Mäkinen, Daniele Conelli, G. Krishnamurthy Grandhi, Gian Paolo Suranna, Paola Vivo* and Roberto Grisario*

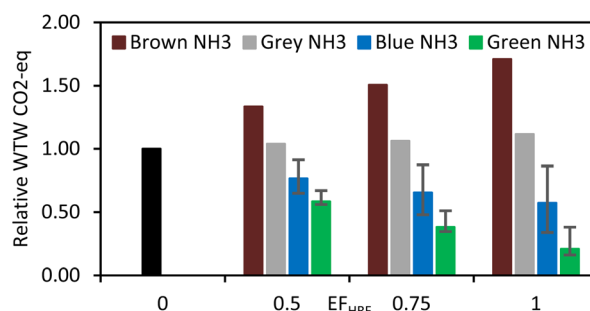


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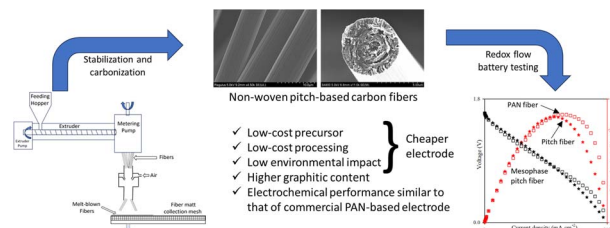
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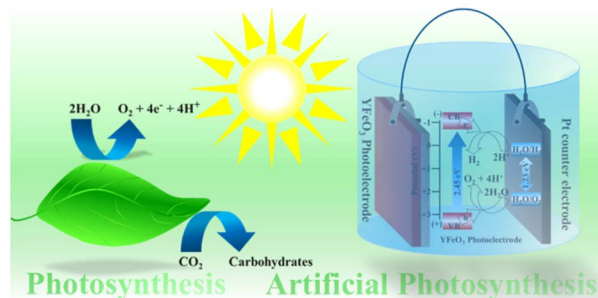
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YFO photocathode fabricated via spray pyrolysis for unassisted solar water splitting for generation of hydrogen fuel

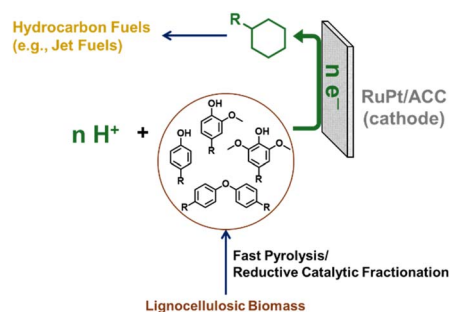
Bandar Y. Alfaifi, Hameed Ullah,* Xin Jiang* and Asif Ali Tahir*



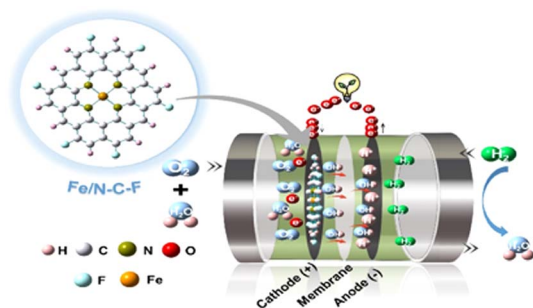
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Electrocatalytic conversion of biomass-derived oxygenated aromatics to cycloalkanes

Meheryar R. Kasad, James E. Jackson and Christopher M. Saffron*



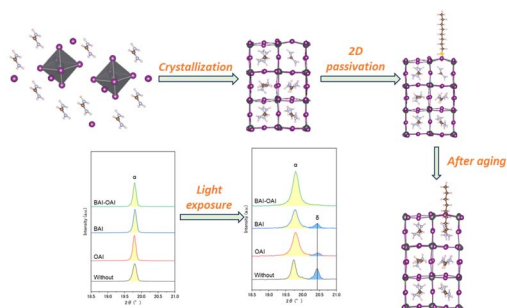
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Fluorine-rich Schiff base ligand derived Fe/N–C–F and Co/N–C–F catalysts for the oxygen reduction reaction: synthesis, experimental validation, and DFT insights

Sumanta Kumar Das, Shaik Gouse Peera, Aiswarya Kesh, Prabakaran Varathan and Akhila Kumar Sahu*

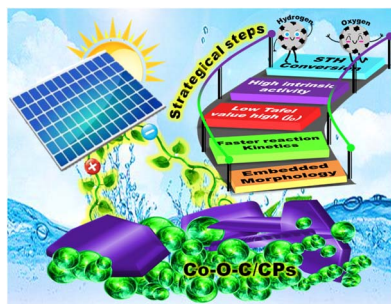
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Santa Mondal, Naoto Eguchi, Naoyuki Nishimura, Yoyo Hinuma, Kohei Yamamoto, Atsushi Kogo, Takuro N. Murakami* and Hiroyuki Kanda*

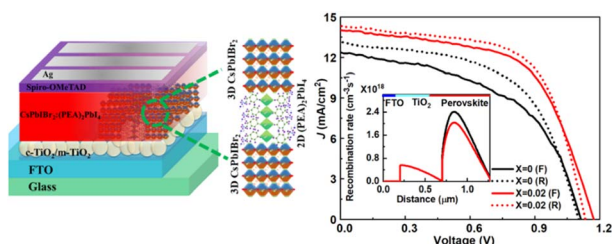
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Tapas Das, Faisal Farooq, Parul Garg, Sakal Singla, Asim Guchhait* and Ashok Bera*



Cobalt-doped vanadium nitride composite carbon hollow spheres for enhanced lithium–sulfur battery performance: overcoming sulfur dissolution and the shuttle effect

Jiangnan Zhang, Yanshuang Meng* and Fuliang Zhu*

