

Sustainable Energy & Fuels

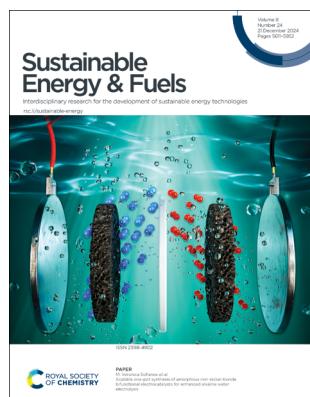
Interdisciplinary research for the development of sustainable energy technologies

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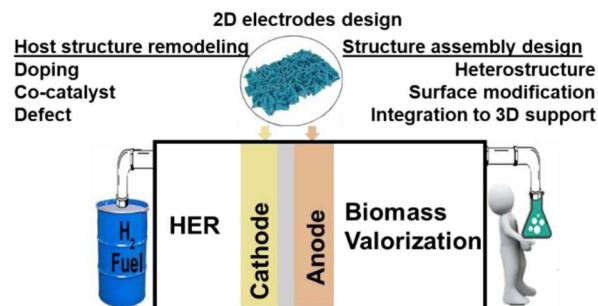
See Bahareh Feizi Mohazzab, Dandan Gao et al., pp. 5620–5637. Image reproduced by permission of Bahareh Feizi Mohazzab and Dandan Gao from *Sustainable Energy Fuels*, 2024, **8**, 5620.

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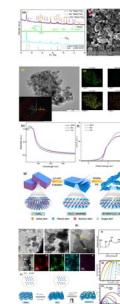
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Representative modeling of MXene-based hybrid nanocomposites for catalytic hydrogen evolution reactions: a comprehensive review

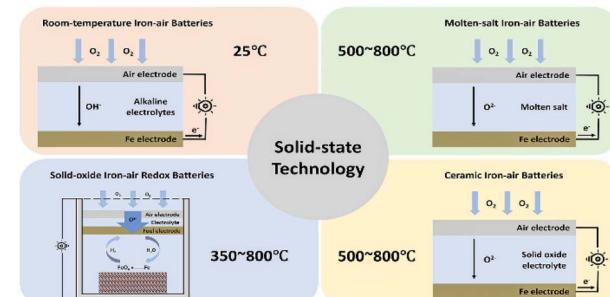
Latiful Kabir, Karna Wijaya, Jianjun Li, Junjuda Unruangsri and Won-Chun Oh*



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Harnessing solid-state technology for next-generation iron–air batteries

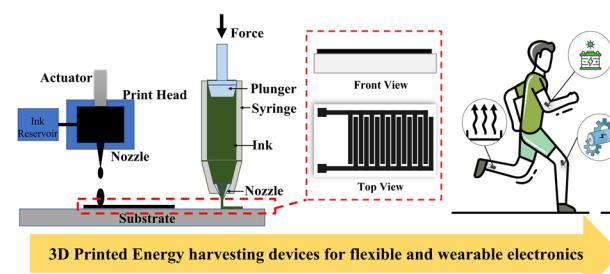
Bingqian Sun, Hao Wang and Cheng Peng*



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3D-printed energy harvesting devices for flexible and wearable electronics

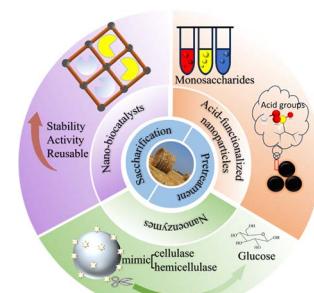
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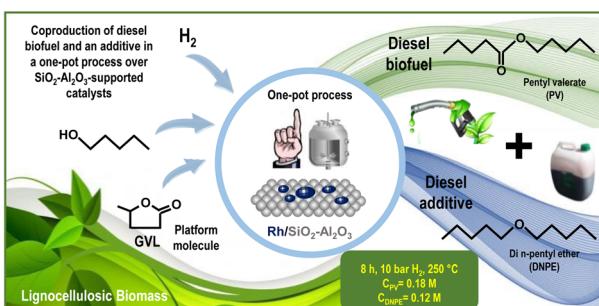
Advanced nanocatalytic strategies for pretreatment and saccharification of lignocellulosic biomass towards green-like processing

Rui Guo, Huan Long, Erzheng Su, Fuliang Cao and Jiahong Wang*



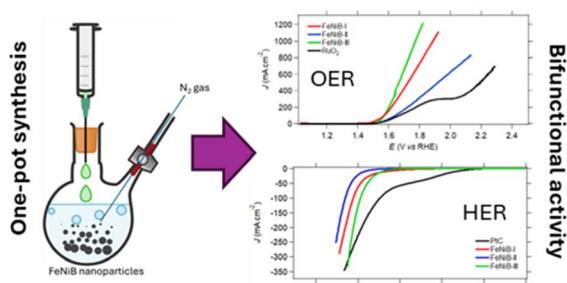
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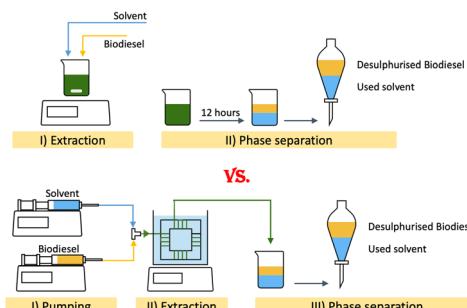


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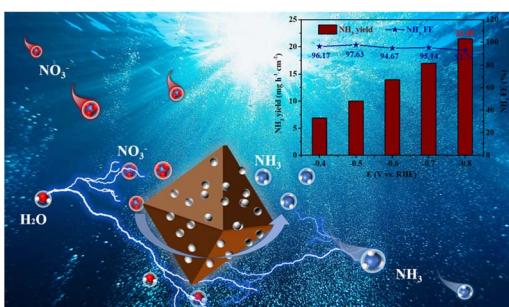
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Concurrent production of diesel valeric biofuel and a fuel additive in a one-pot process over $\text{SiO}_2\text{-Al}_2\text{O}_3$ -supported catalysts: influence of the Si/Al ratio

Francisco Agustín Martínez, Darío Jobino Segobia
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Scalable one-pot synthesis of amorphous iron-nickel-boride bifunctional electrocatalysts for enhanced alkaline water electrolysis

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FeNi bimetallic oxides derived from MOFs as precursors promote efficient electrochemical synthesis of ammonia

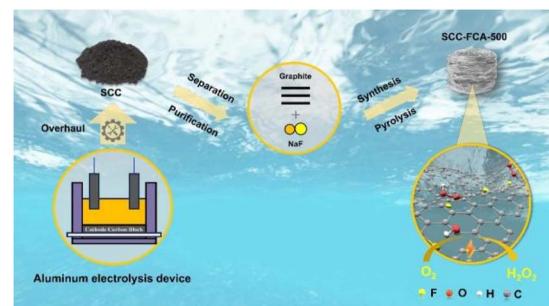
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A fluorine doped carbon aerogel prepared from the spent cathode carbon of aluminum electrolysis towards electrocatalytic synthesis of H_2O_2

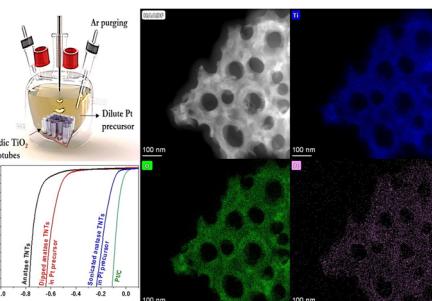
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***In situ* Pt single-atom trapping on TiO_2 nanotubes via ultrasonication: a one-pot approach to produce active electrodes for electrocatalytic H_2 evolution**

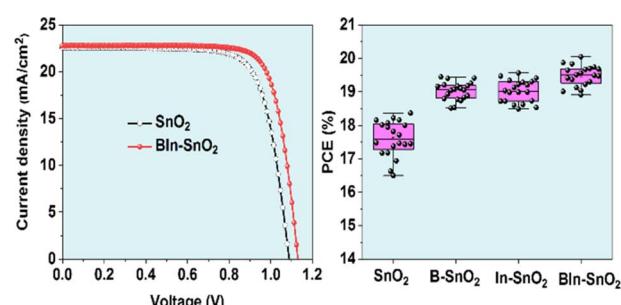
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Effects of co-doping the SnO_2 electron transport layer with boron and indium on the photovoltaic performance of planar perovskite solar cells

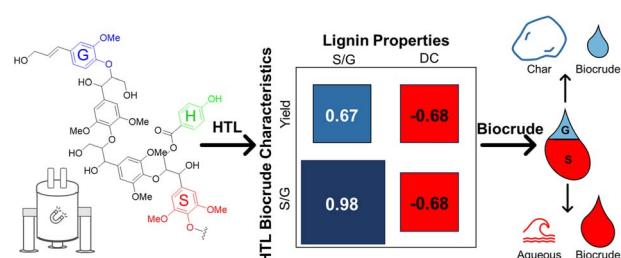
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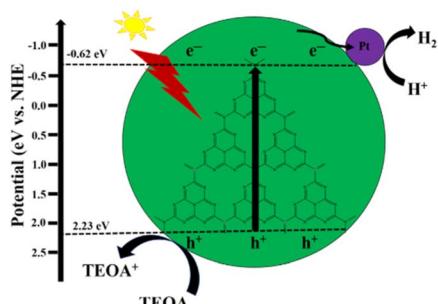
Structure-reactivity relationships governing hydrothermal liquefaction of lignin from co-solvent enhanced lignocellulosic fractionation (CELF)

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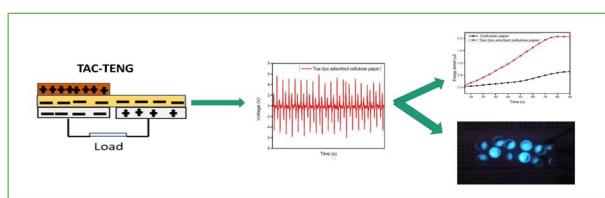
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Improved charge separation and transport with L-aspartic acid derived carbon-doped $\text{g-C}_3\text{N}_4$ for efficient visible-light photocatalytic H_2 production

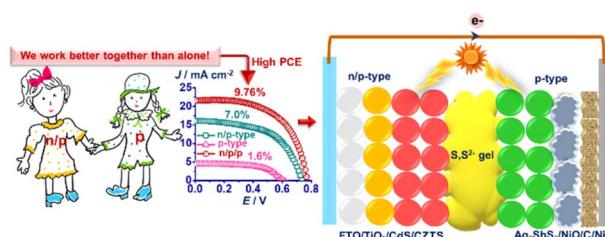
Ikram Ullah, Ning Qin, Pei Zhao,* Jing-Han Li, Shuai Chen and An-Wu Xu*

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Catechin-induced cellulose: a new material for harvesting triboelectricity

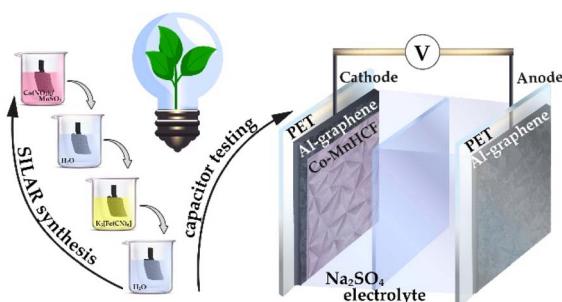
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Tuning recombination and charge separation in a n/p/p heterojunction solar cell with CZTS, Ag_3SbS_3 and a carbon interlayer

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Flexible laser-induced graphene-based electrodes modified with cobalt-manganese hexacyanoferrate as cathode materials for asymmetric supercapacitors

Evgeniia Khairullina,* Alexandra Levshakova, Maxim Fatkullin, Maxim Tenevich, Alexandr Shmalko, Maxim Panov, Alina Manshina, Artem Lobinsky, Raul D. Rodriguez and Maria Kaneva*

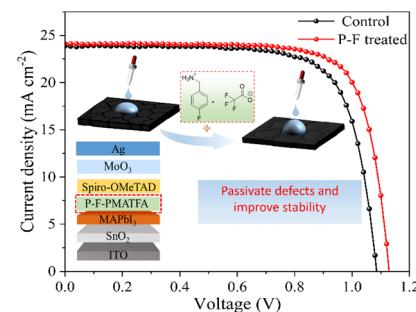


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Efficient and stable perovskite solar cells via surface defect passivation using 4-fluorobenzamine trifluoroacetate

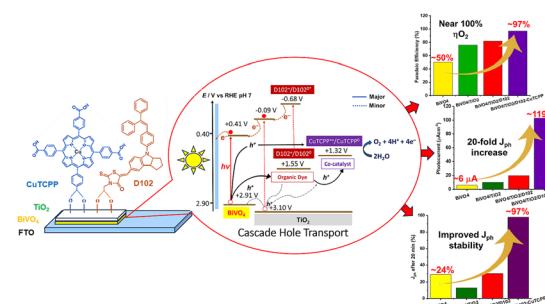
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Jiyuan Chen, Xuelu Wang and Yefeng Yao*



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Light-driven water oxidation by a $\text{BiVO}_4/\text{TiO}_2$ photoanode modified with D102 organic dye and copper(II) meso-tetra(4-carboxyphenyl)porphyrin

Andi Mauliana, Muhammad Iqbal Syauqi, Zico Alaia Akbar, Uji Pratomo, Jacob Yan Mulyana* and Tribidasari A. Ivandini*



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Thermoelectrically polarized amorphous silica promotes sustainable carbon dioxide conversion into valuable chemical products

Marc Arnau, Isabel Teixidó, Jordi Sans,* Pau Turon* and Carlos Alemán*

