

Sustainable Energy & Fuels

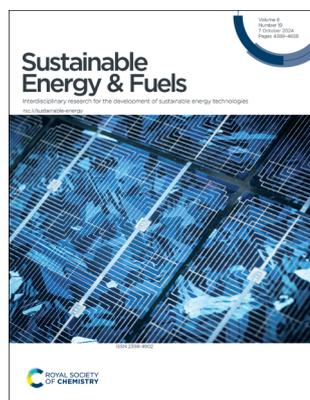
Interdisciplinary research for the development of sustainable energy technologies

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Cover
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EDITORIAL

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Introduction to solar fuels and chemicals: photocatalytic water splitting and CO₂ reduction themed collection

Ryu Abe, Yun Hau Ng, Osamu Ishitani and Kazunari Domen

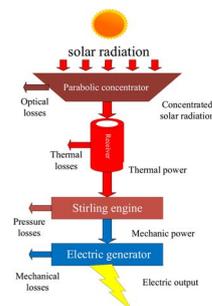


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Characterization of a thermoelectric system based on a solar dish Stirling engine: a review

Lingxuan Kong,* Zhibo Wu, Jiale Jiang, Jing Li and Ning Luo



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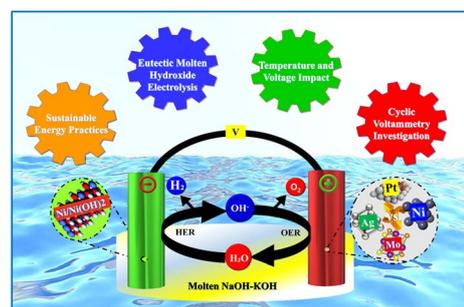
Fundamental questions
Elemental answers

REVIEWS

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Critical insights into eutectic molten hydroxide electrolysis for sustainable green hydrogen production

Farooq Sher,* Imane Ziani, Nawar K. Al-Shara, Alexander Chupin, Nađa Horo, Bohong Wang, Saba Rahman, Bilal Fareed and Monica R. Nemțanu

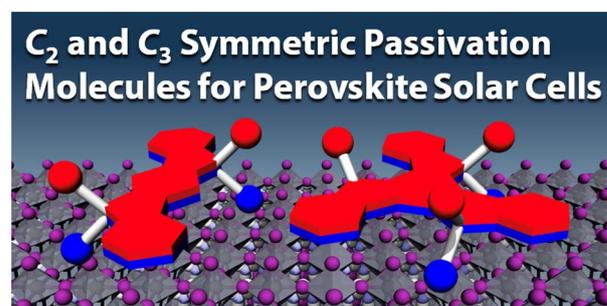


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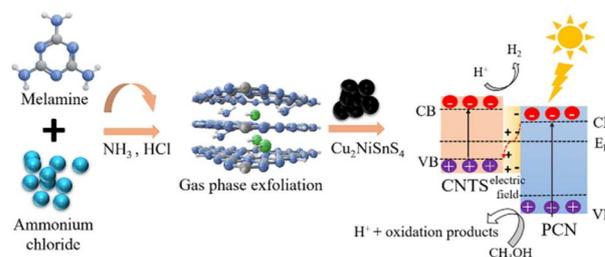
Nanaki Minoi, Fumitaka Ishiwari,* Takuya Omine, Kazuharu Murotani, Ryoosuke Nishikubo and Akinori Saeki*



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Cu₂NiSnS₄/g-C₃N₄ S-scheme photocatalysts: interfacial surface trap states vs. hydrogen production

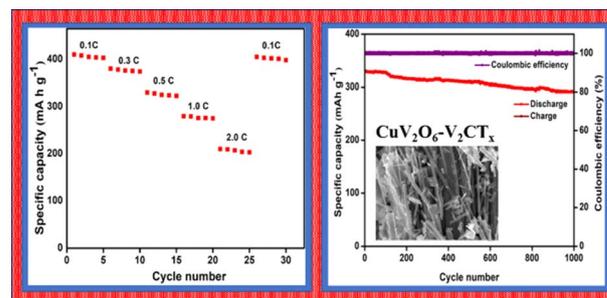
Rugma T. P., Rishi Krishna B. S., K. Priyanga Kangeyan, Neppolian Bernardshaw, Abdullah Saad AlArifi and Sandeep Kumar Lakhera*



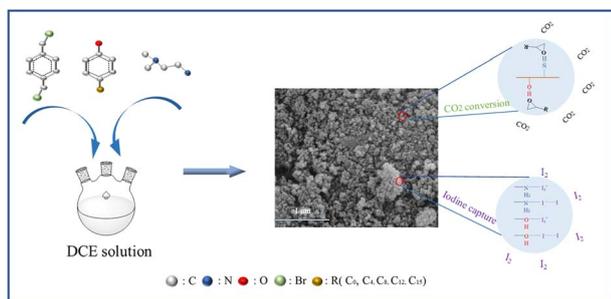
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A heterogeneous CuV₂O₆@2D-V₂CT_x MXene nanohybrid as a cathode material for high-capacity and stable aqueous Zn-ion batteries

Lena S, Senthilkumar Ramasamy, Saradh Prasad Rajendra, Mohamad S. AlSalhi, Rajamohan Rajaram and Subramania A.*



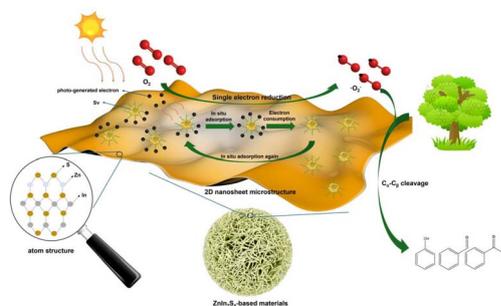
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Synthesis of "all-in-one" hypercrosslinked organic polymers: experimental and kinetic models for CO₂ chemical fixation and iodine adsorption

Xuanbo Liu, Yongjing Hao, Xiuli Yan, Yuhang Zhang, Xionglei Wang, Zheng Zhu, Jiajia Yang, Shuangshuo Li, Tao Chang* and Shenjun Qin*

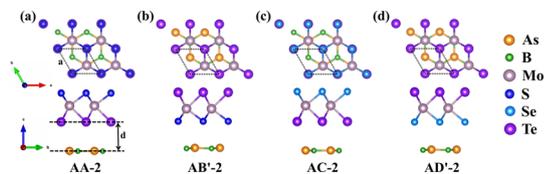
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Sulfur vacancy induced radical generation in ZnIn₂S₄ for lignin photocatalytic C_α-C_β cleavage

Jifang Zhang, Jinde Sun, Chengcheng Suo, Wei Li, Sha Luo, Bing Tian, Chunhui Ma* and Shouxin Liu*

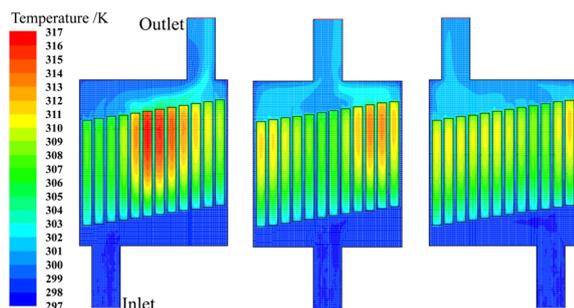
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Yuliang Mao* and Zhiwei Zhang

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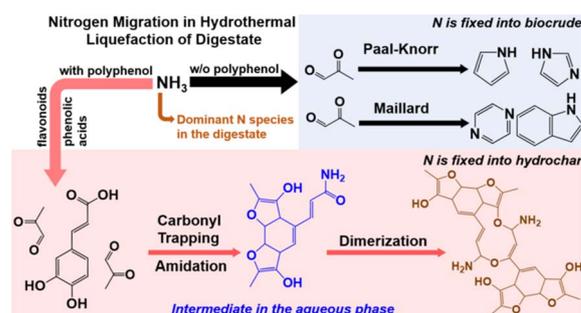
ZhongXing Ji and Chao Zhang*



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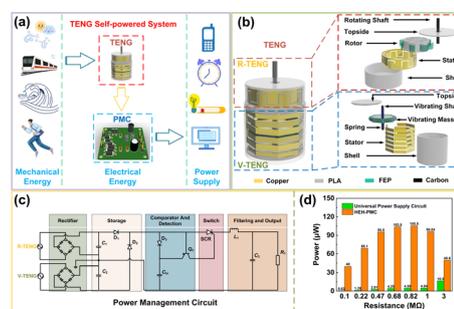
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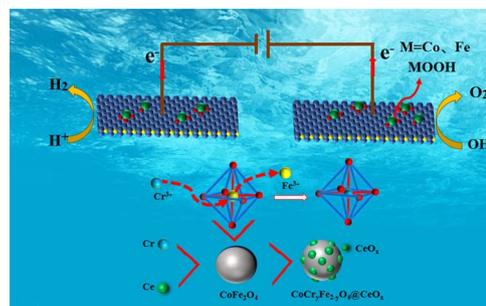
Xin Yu, Mingxing Cui, Wendong Qi, Xinrui Li, Yuhang Xing, Xiaolei Lu, Shitong Yang, Jing Zhao^{*} and Changhong Jiang^{*}



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Cr-doped CoFe_2O_4 nanorod array modified by oxygen vacancy-rich cerium oxide as an efficient bifunctional total water splitting catalyst

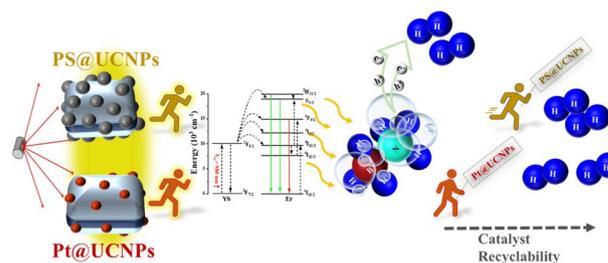
Yulin Duan, Zhengang Guo^{*}, Hua-nan Zhang, Tingting Wang and Jifan Zhang



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Near-infrared driven photocatalytic hydrogen production from ammonia borane hydrolysis using heterostructure-upconverted nanoparticles

Bushra Maryam, Muhammad Asim^{*}, Hamna Qayyum, Lun Pan, Ji-Jun Zou^{*} and Xianhua Liu^{*}



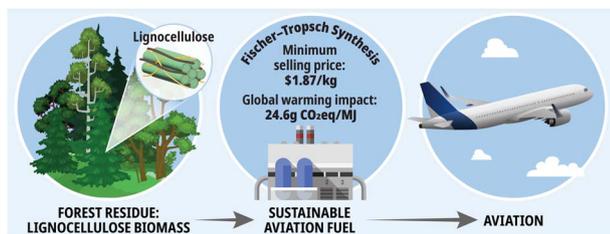
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Unlocking the value of food waste: sustainable production of ethylene glycol over low-cost Ni–W catalysts supported on glucose-derived carbons

Lucília Sousa Ribeiro,* Rafael Gomes Morais, José Joaquim de Melo Órfão and Manuel Fernando Ribeiro Pereira

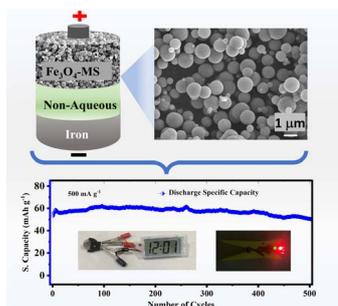
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Techno-economic and environmental impacts assessments of sustainable aviation fuel production from forest residues

J. P. Ahire,* R. Bergman, T. Runge, S. H. Mousavi-Awwal, D. Bhattacharyya, T. Brown and J. Wang

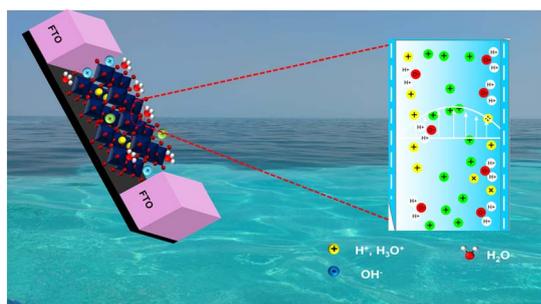
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Ultrafast charging/discharging and highly stable non-aqueous iron-ion batteries using iron oxide (Fe_3O_4) microspheres as an efficient cathode material

Jitendra Kumar Yadav, Bharti Rani, Priyanka Saini, Anant Prakash Pandey and Ambesh Dixit*

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Moisture-induced ionovoltaiic electricity generation using lead free 2-dimensional $\text{Cs}_3\text{SbBiBr}_9$ perovskite

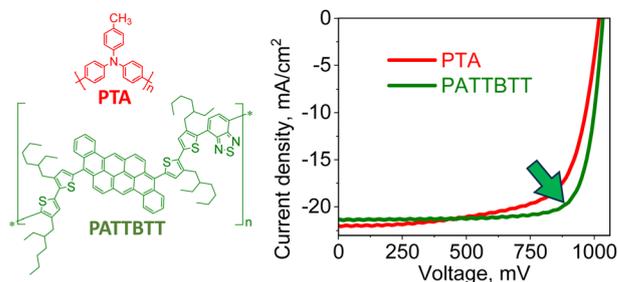
Ashna K. Pramod and Sudip K. Batabyal*



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A new type of pyranthrene-based copolymer as a promising hole-transport material for perovskite solar cells

Azat F. Akbulatov,* Ekaterina A. Khakina, Nikita A. Emelianov, Olga A. Kraevaya, Lyubov A. Frolova and Pavel A. Troshin



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Oxidative esterification of ethylene glycol in methanol to methyl glycolate over Au/ZnO catalysts: effect of preparation methods

Xueyang Ren, Jie Zheng, Jinxian Zhao,* Yanhong Quan and Jun Ren*

