

# Sustainable Energy & Fuels

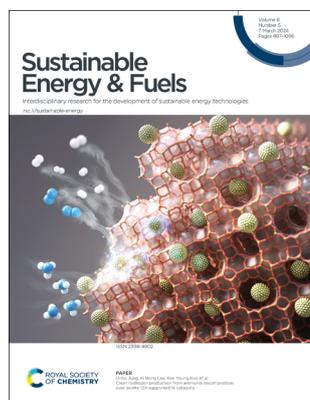
Interdisciplinary research for the development of sustainable energy technologies

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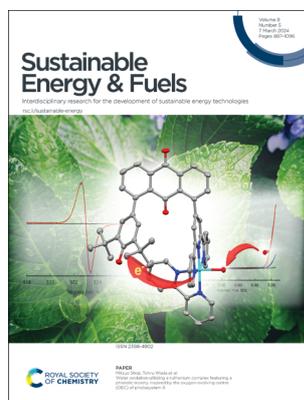
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## IN THIS ISSUE

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**Cover**  
See Unho Jung, Ki Bong Lee, Kee Young Koo *et al.*, pp. 896–904. Image reproduced by permission of Younghee Lee.



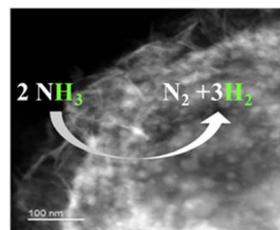
**Inside cover**  
See Mitsuo Shoji, Tohru Wada *et al.*, pp. 905–913. Image reproduced by permission of Tohru Wada from *Sustainable Energy Fuels*, 2024, **8**, 905.

## PAPERS

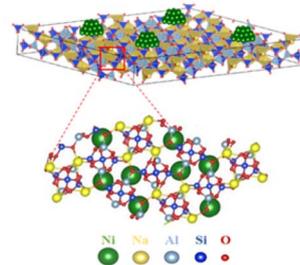
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### Clean hydrogen production from ammonia decomposition over zeolite 13X-supported Ni catalysts

Jiyu Kim, Kyoung Deok Kim, Unho Jung,\* Yongha Park, Ki Bong Lee\* and Kee Young Koo\*



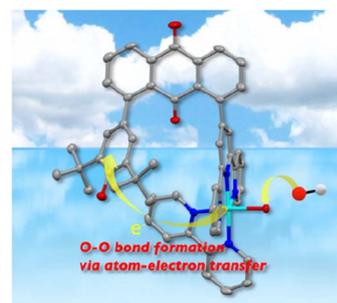
Ni/Zelite 13X(DP)



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Yugo Kumagai, Risa Takabe, Takashi Nakazono, Mitsuo Shoji,\* Hiroshi Isobe, Kizashi Yamaguchi, Tomoyo Misawa-Suzuki, Hirotaka Nagao and Tohru Wada\*



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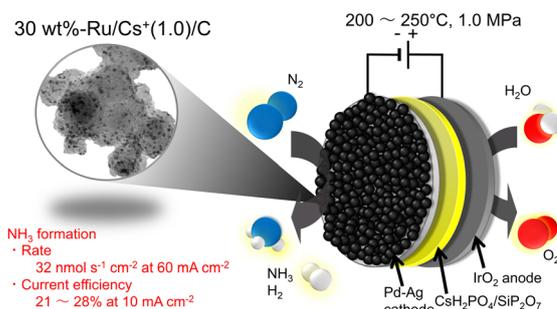
Fundamental questions  
Elemental answers



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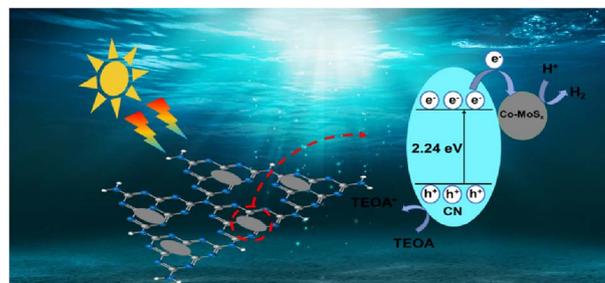
Shintaroh Nagaishi, Rika Hayashi, Aika Hirata, Raisei Sagara and Jun Kubota\*



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### In situ photodeposition of loaded Co–MoS<sub>x</sub> for promoting visible-light g-C<sub>3</sub>N<sub>4</sub> photocatalytic hydrogen production performance

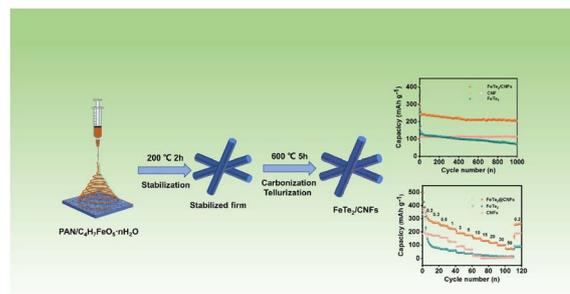
Yonggang Lei, Kim Hoong Ng, Chenyu Zou, Lejun Chen, Yuekun Lai\* and Jianying Huang\*



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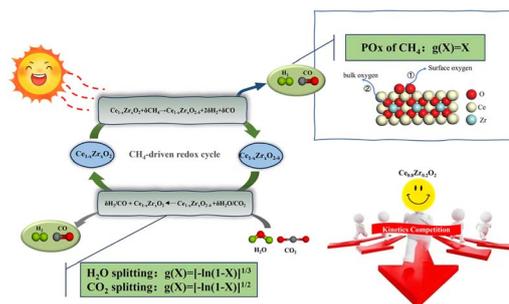
Zihua Lin, Haiyan Zhang,\* Changsheng Yang, Zhenjiang Liu, Daofeng Wen, Xiang Peng, Shengkai Li and Xia Wu



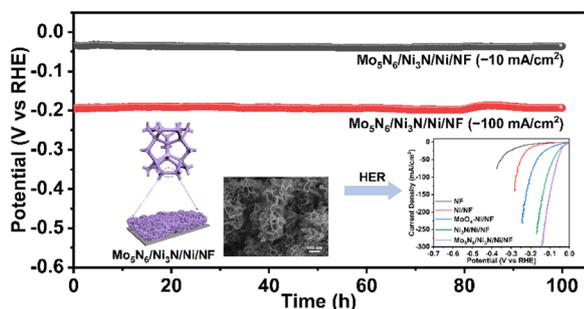
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Yanxin Liu, Shuting Cen, Changsheng Bu,\* Daoyin Liu and Guilin Piao



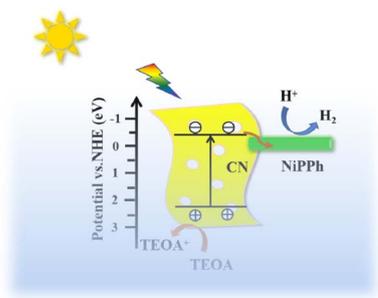
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### Constructing interfacial structure of $\text{Mo}_5\text{N}_6/\text{Ni}_3\text{N}/\text{Ni}/\text{NF}$ for efficient and stable electrocatalytic hydrogen evolution under alkaline conditions

Yang Zhou, Jing Zhou, Muzaffar Ahmad Boda, Kunfeng Zhao, Haojie Ma, Chenhao Shi, Dingwang Yuan\* and Zhiguo Yi\*

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### Construction of novel 1D nickel phosphonate nanorod modified 2D $\text{g-C}_3\text{N}_4$ nanosheets for enhanced photocatalytic hydrogen evolution performance

Xin-Lian Song, Sixiang Zhai, Jin-Tao Ren, Lijiao Gao and Zhong-Yong Yuan\*

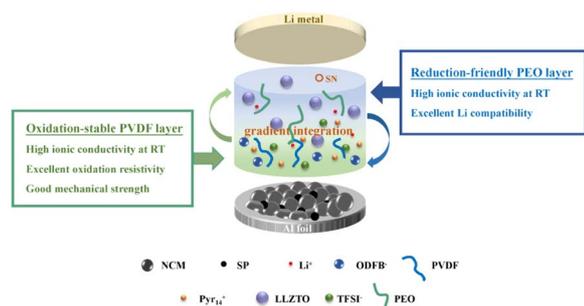
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### An experimental and response-surface-based optimization approach towards production of producer gas in a circulating fluidized bed gasifier using blends of renewable fibre-based biomass mixtures

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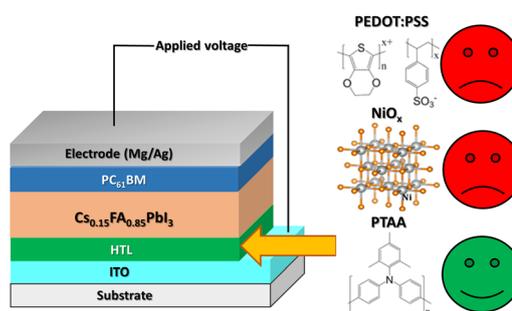
Yan Yuan,\* Xuyi Liu, Kesi Xue, Yaxin Kong, Bin Wang, Huan Liu, Cong Li, Zeyu Li, Yitian Ma and Hai Lu\*



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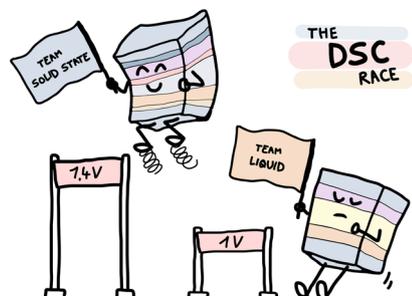
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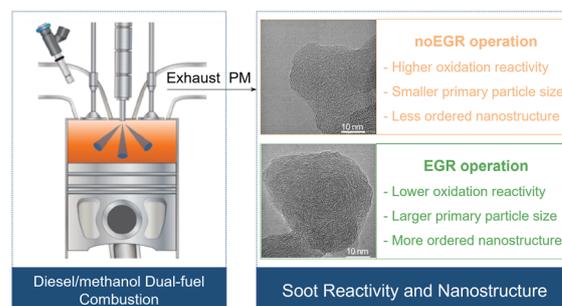
Sina Wrede, Bin Cai, Fangwen Cheng, Malin B. Johansson, Tomas Kubart, Carl Hägglund and Haining Tian\*



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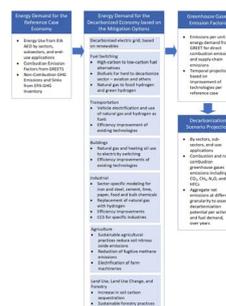
Hao Chen, Zhenhua Ji, Xiaochen Wang,\* Mingzhang Pan, Chengshan Yi and Peng Zhang



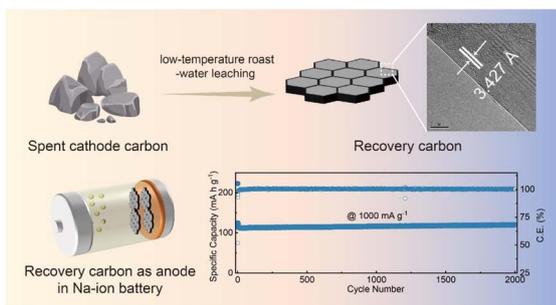
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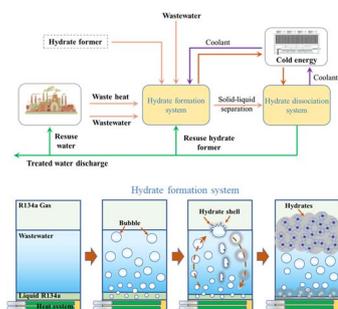
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### Stable and fast Na-ion storage of recovered carbon from the spent carbon cathode of aluminum electrolysis

Yao Lu, Zhifan Hua, Chao Chen, Zibo Chen, Xinyi Li, Hailin Yu, Ke Peng\* and Zhongliang Tian\*

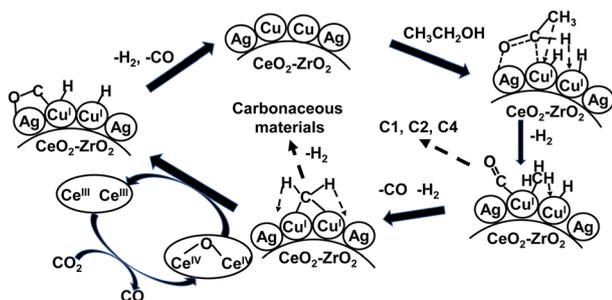
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### Low-grade waste heat recovery for wastewater treatment using clathrate hydrate based technology

Lingjie Sun, Aliakbar Hassanpouryouzband,\* Tian Wang, Fan Wang, Lunxiang Zhang,\* Chuanxiao Cheng, Jiafei Zhao and Yongchen Song\*

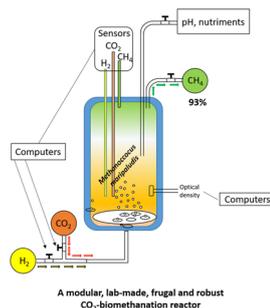
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Naoya Inoue, Yuuki Hatooka, Chihiro Okada, Shiori Shimidzu, Tadanori Hashimoto and Atsushi Ishihara\*

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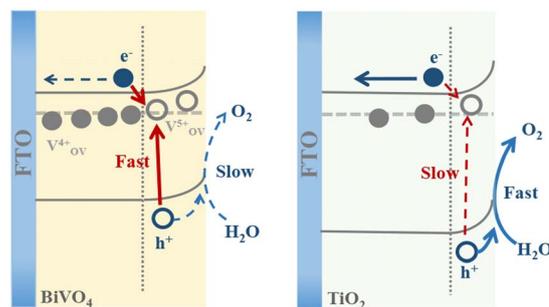
Grégory Cwicklinski,\* Roger Miras, Julien Pérard, Clara Rinaldi, Elisabeth Darrouzet and Christine Cavazza\*



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Wenjun Zhu, Yuling Yuan and Yimeng Ma\*



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Nicholas R. Myllenbeck,\* Eric Monroe, Mysha Sarwar, Teresa Alleman, Cameron Hays, Jon Luecke, Junqing Zhu, Charles McEnally, Lisa Pfefferle, Anthe George and Ryan W. Davis

