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## IN THIS ISSUE

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See Saimeng Jin, Dan Wang  
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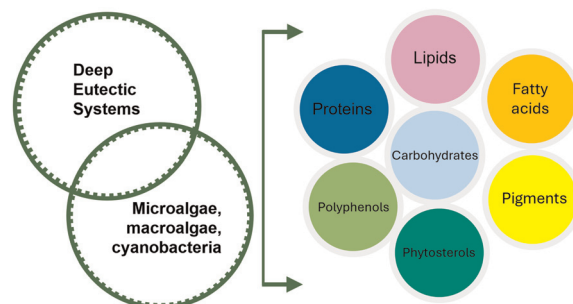
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Kristian Pastor, Ana Rita C. Duarte and Jelena Vladic\*

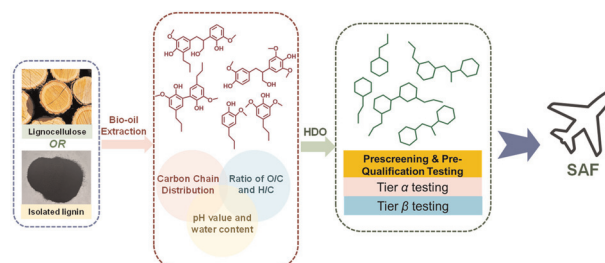


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Jianyu Wang, Zheng Li, Chun Zhao,\* Jing Zhang,\*  
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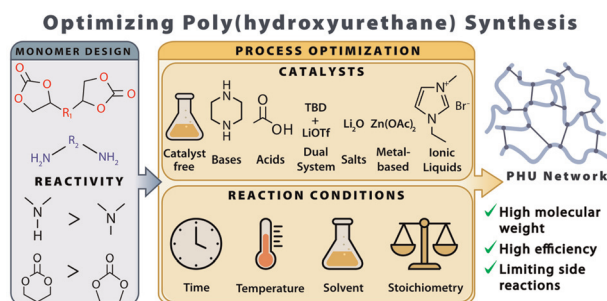
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## TUTORIAL REVIEWS

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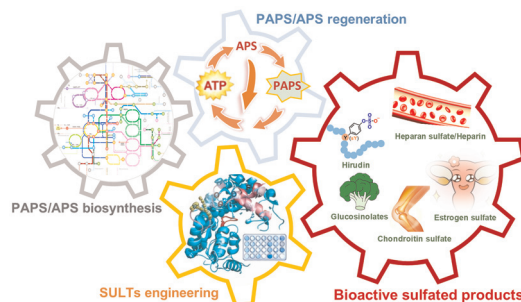
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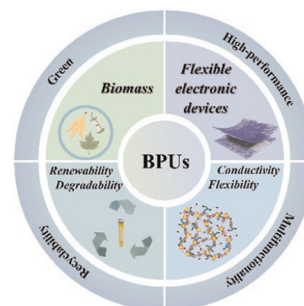
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### Modification strategies for bio-based polyurethanes in flexible electronic devices: a review

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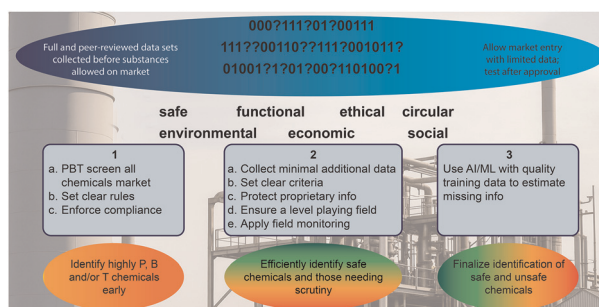


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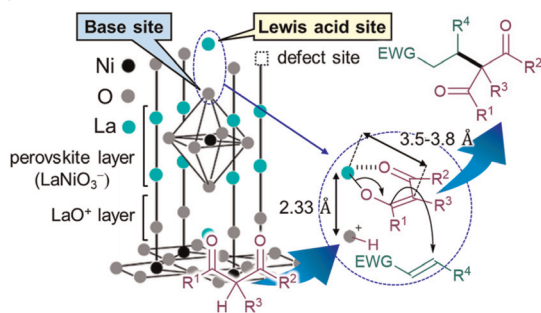
### Avoiding tomorrow's chemical mistakes today

Jeroen B. Guinée\* and Martina G. Vijver



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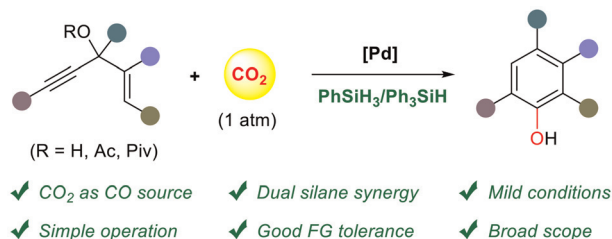
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Taku Kitanosono,\* Sota Iwasaki, Rina Osada, Yasuhiro Yamashita and Shū Kobayashi\*

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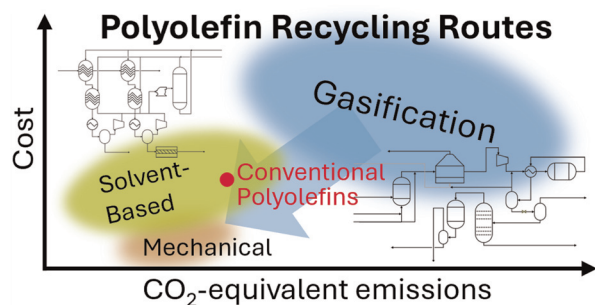


### Dual silane-promoted palladium catalysis: synthesis of phenols from carbon dioxide and 1,4-enynes

Zhongrong Xu, Ting Zhao, Wenxin Jiang, Yanwei Ren, Chaorong Qi\* and Huanfeng Jiang\*

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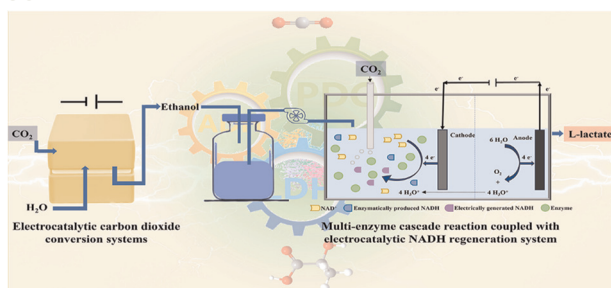
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### Enhancing circularity of polyolefins via gasification: techno-economic and environmental evaluation of variant processes

Benjamin Caudle, Thuy T. H. Nguyen and Sho Kataoka\*

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### A multi-enzyme cascade coupled with electrochemistry for efficient synthesis of L-lactate from carbon dioxide

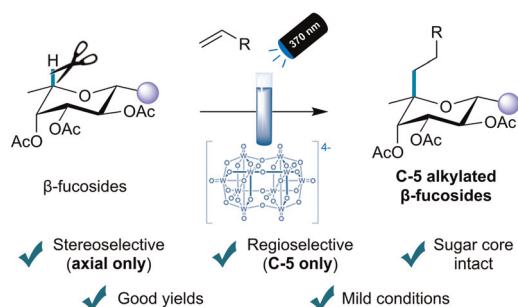
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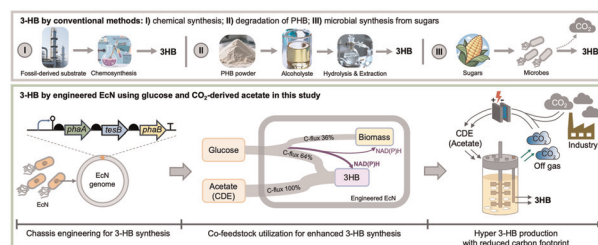
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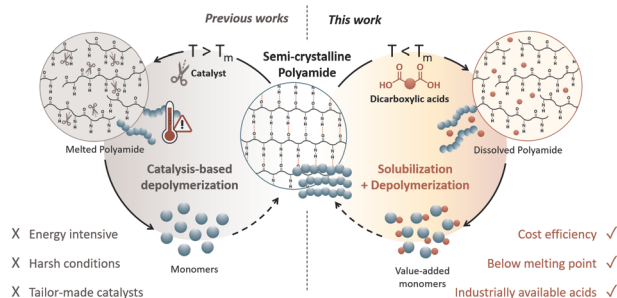
Fu-Ren Yang, Ye Zheng, Rui-Zhe Deng, Lin Xia, Huai-Ming Wang, Yi-Hao Deng, Wei Situ, Yan-Chun Xiao, Hong-Wei Shen, Jin-Yan Lv, Liu-Song Yu, Hui Wang,\* Yi-Na Lin\* and Jian-Wen Ye\*



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### Polyamide depolymerization: unlocking polymer dissolution with dicarboxylic acids

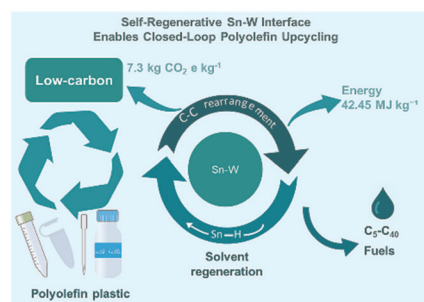
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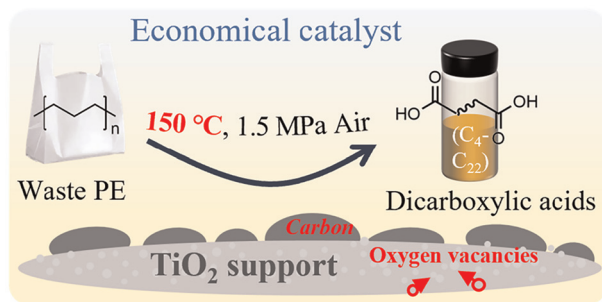
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Chuanya Li, Qianfeng Zhou, Changhu Leng, Yongchao Wang, Chenyang Ma, Junlei Zhang\* and Zhi-Jun Li\*



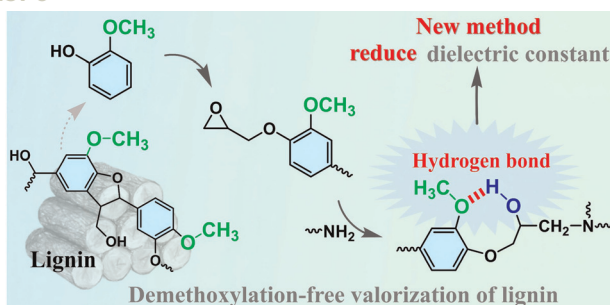
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### Carbon-modified TiO<sub>2</sub> catalysts for oxidative upcycling of waste polyethylene to dicarboxylic acids

Yi Hao, Kaili Wang, Rongrong Jia, Ping Cheng, Liyi Shi, Xiang Wang and Lei Huang\*

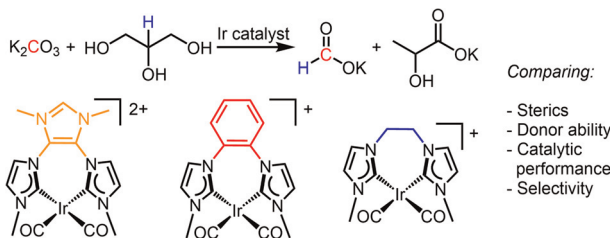
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### Leveraging lignin's *ortho*-methoxy groups for intramolecular hydrogen bonding to reduce the dielectric constant of epoxy resins

Fengyuan Zhang, Haoyang Jin, Haoyu Shen, Longtao Wang, Shanshan Dai, Shuai Du, Shuaiqi Yang, Ben-Lin Hu and Songqi Ma\*

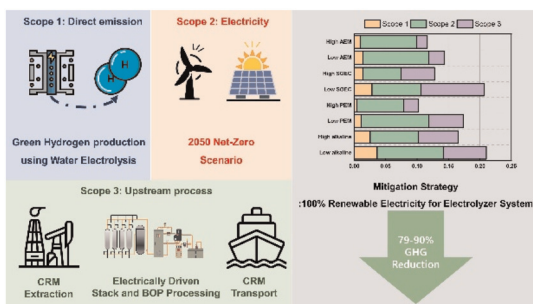
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### Impact of linking groups in chelating bis-carbene iridium catalysts for transfer hydrogenation of inorganic carbonates with glycerol

Marvin L. Richter, Eduardo Peris and Sergio Gonell\*

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### Green hydrogen from water electrolysis: supply chain emissions assessment and net-zero pathways

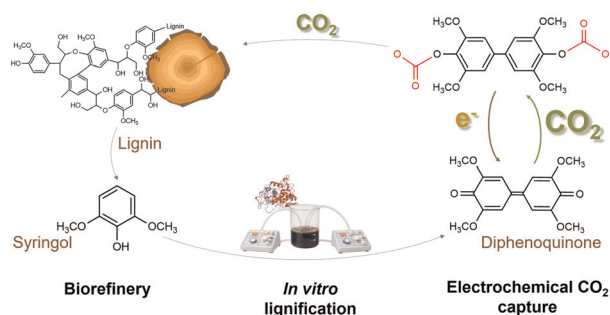
Sanghyuk Koh, Seokju Kim and Boreum Lee\*



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### Lignification-mimetic dehydrogenative diphenoquinone synthesis and electrochemical CO<sub>2</sub> capture

Hyeyun Kim, Omer Shinnawy, Seda Ulusoy, Germán Salazar-Alvarez, Ngoc Tuan Tran, Hyesung Cho, Changmin Sung, Seung-Soo Kim, Bonwook Koo, Keunhong Jeong, Kiana Amini and Kwang Ho Kim\*



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### Visible light-mediated stereoselective haloalkylation of bicyclic alkenes

Yan Tang, Devendar Ponnamp, Zhifeng Ma, Xiong Tao, Long Sun, Hekun Yang, Jingchao Chen\* and Baomin Fan\*

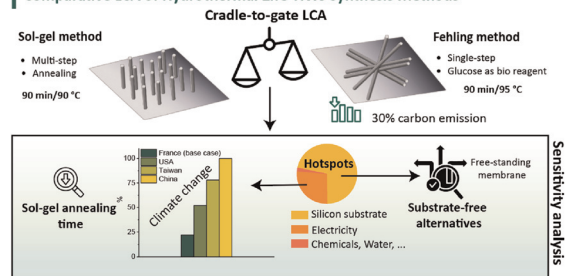


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### Comparative cradle-to-gate life cycle assessment of hydrothermal zinc oxide nanowire synthesis methods

Jamie Silk, Soline Beitone, Mayrazul Hoque, Céline Ternon, Damien Evrard and David Riassetto\*

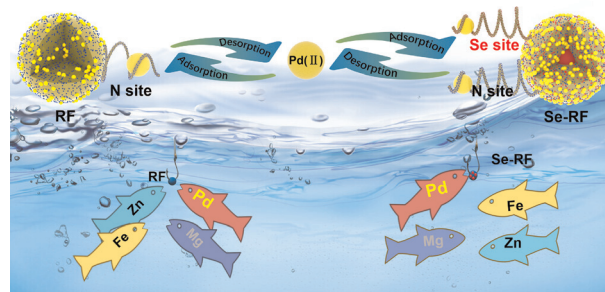
#### Comparative LCA of Hydrothermal ZnO NWs Synthesis Methods



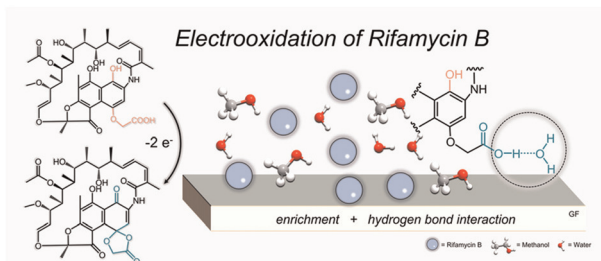
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### Bait-and-anchor strategy in dual N/Se-engineered resins for electrostatic-chelation cascade Pd(II) recovery from extreme environments

Fan Wu, Hao Li,\* Chuangen Zheng, Yanan Huang and Jianming Pan\*



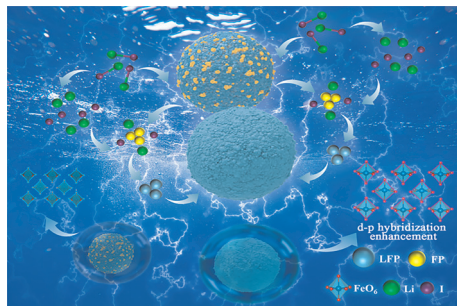
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### Functional-group compatible electrooxidation synthesis of the key antibiotic intermediate rifamycin O

Lihao Liu, Shaoming Zhu, Kai Li, Yuhang Wang, Suiqin Li, Jiahui He, Pan Hu, Chuang Qi, Ruixiang Liang, Xing Zhong\* and Jianguo Wang

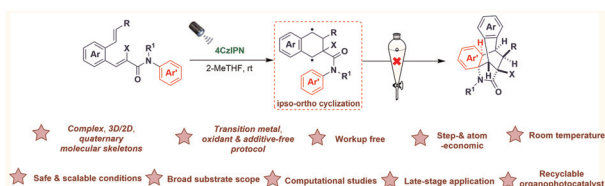
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Zonghao Xu, Zongyu Guan, Yan Song, Xiran Zhao, Yaodong Yuan, Zhipeng Yan, Junhang Tian, Xueyi Sun,\* Biwei Xiao\* and Weidong Zhuang\*

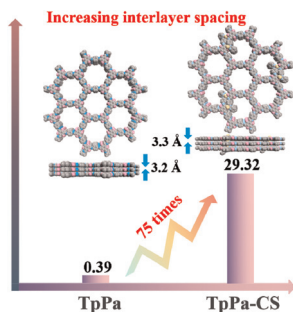
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Babasaheb Sopan Gore, Hsing-Yin Chen\* and Jeh-Jeng Wang\*

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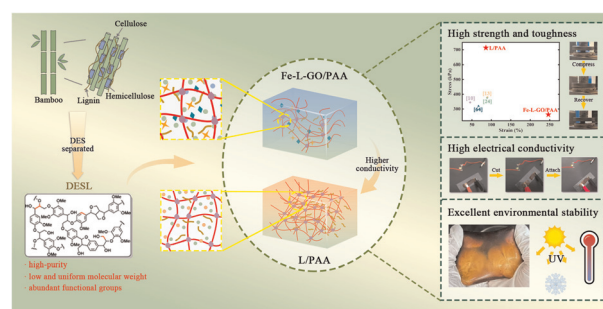
Jiyuan Zang, Haiqin Liu, David James Young, Zhi-Gang Ren and Hong-Xi Li\*



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### DES-separated bamboo lignin-reinforced DES gels with high conductivity, strength, flexibility, and environmental stability

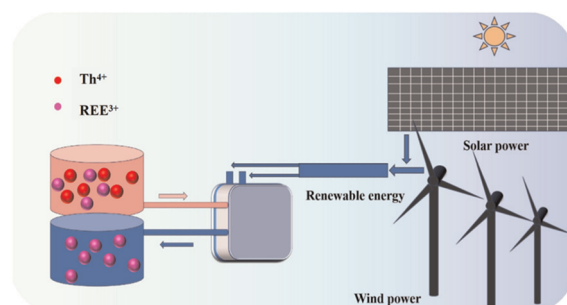
Luyi Huang, Tingting Hua, Yanhui Huang,\* Peifeng Ma, Changhua Fang, Shudong Sun, Liyan Liu and Feicui Qi



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### Electrochemical selective recovery of thorium from rare earths using an amidoxime modified graphite felt electrode

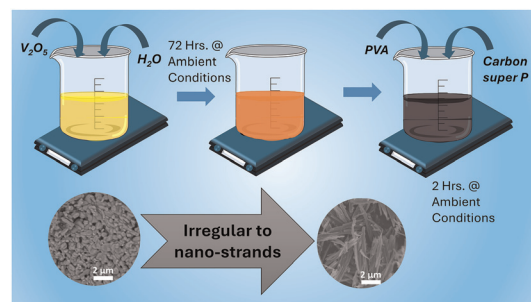
Peilin Lei, Yun Gao and Xiaoqi Sun\*



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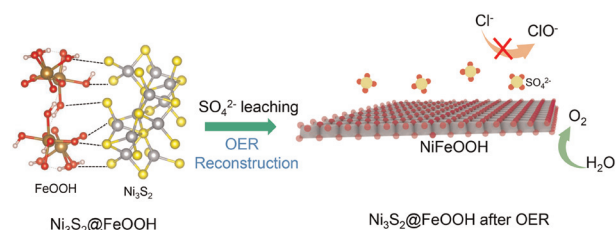
Kudachchige Asanga G. de Alwis,\* Zhenhuan Chen, Dasun P. W. Guruge, Chathushka D. Hettige Dharmasiri, Chao Zhang, Joseph F. S. Fernando, Konstantin L. Firestein\* and Dmitri V. Golberg\*



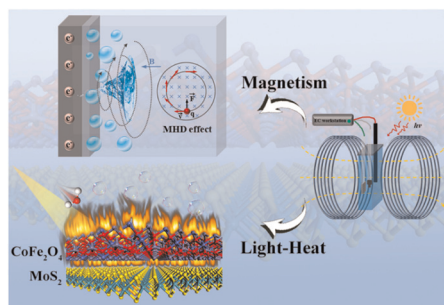
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### A simple self-corrosion method constructs a Ni<sub>3</sub>S<sub>2</sub>@FeOOH heterostructure enabling industrialized seawater oxidation

Yujie Yuan, Ziyu Yang, Hao Wang, Tong Wu, Xiaoyi Zhang, Lin Chen, Zhaohuan Wei,\* Rui Wang, Ch. Venkata Reddy, Jaesool Shim\* and Hui Tang\*



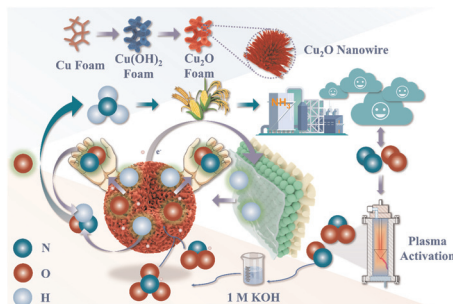
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### Multi-field coupling of photothermal effects and magnetism for boosting the electrocatalytic hydrogen evolution reaction performance

Chong Liu, Lianqing Yu,\* Nannan Chen, Yichao Huang,\* Yaping Zhang and Haifeng Zhu

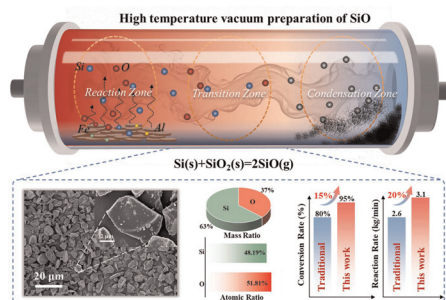
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Chenxi Man, Zhiyuan Xu, Bingtao Xie, Shuai Zhang, Bangdou Huang, Dengke Xi, Xuekai Pei, Leslie Petrik, Cheng Zhang\* and Tao Shao\*

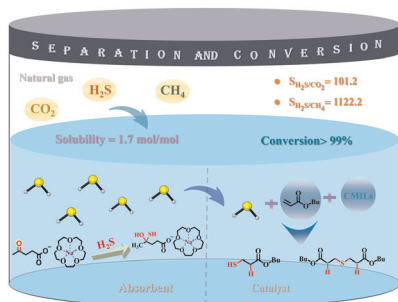
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Xiang Guan, Jianghao Shi, Jijun Lu,\* Liao Shen, Kuixian Wei, Fengshuo Xi, Xiuhua Chen, Chengrong Tan, Wenhui Ma\* and Shaoyuan Li\*

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Keyi Huang, Chengqi Zhao, Zixuan Xu, Qing Zhao, Huiqin Xu, Xiaomin Zhang,\* Leizhi Zheng\* and Youting Wu\*

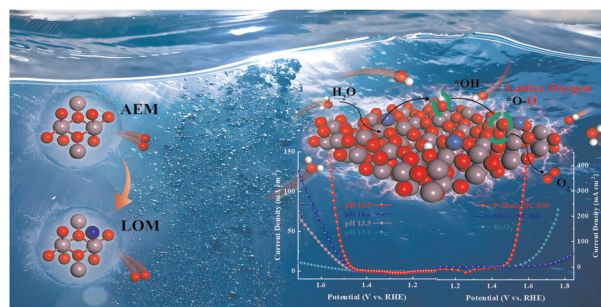


## PAPERS

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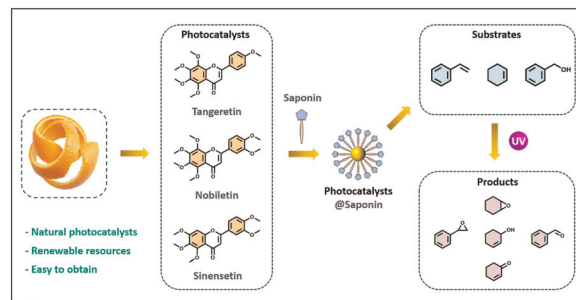
Yi Xu, Fanshu Yuan,\* Xiaotian Xie, Jinhui Tong, Cheng Min, Qian Zhang, Jie Tang, Jie Liu, Tingting Lv and Qianli Zhang\*



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### The AIE-active flavonoids in orange peel for photocatalytic oxidation reactions

Zhuxin Li, Junfei Zhang, Chong Li, Jinzhe Cao\* and Shengyang Tao\*



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### FeS-decorated nickel iron hydroxide with a regulated coordination environment towards improved methanol oxidation reaction

Xianglong Hu, Quande Lu, Xingchen Zhou, Xiaofeng Long, Mengyu Wang, Xueliang Jiang and Huan Yang\*



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### Cyclodesulfurization reaction catalyzed by artificial metalloenzymes containing cobalt protoporphyrin IX cofactors under green aqueous solvent conditions

Xinjia Yu, Yutong Li, Fengxi Li, Shenhan Xie, Liang Li, Hong Zhang,\* Zhi Wang\* and Lei Wang\*

