

# Green Chemistry

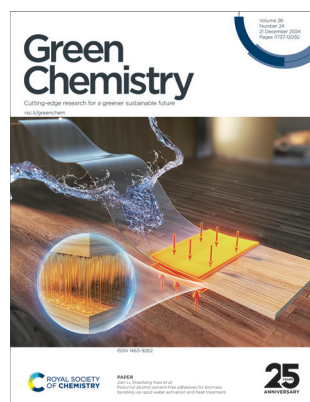
Cutting-edge research for a greener sustainable future

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### Cover

See Jian Li, Shaoliang Xiao  
*et al.*, pp. 11873–11884.

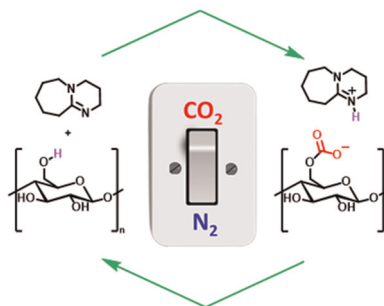
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from *Green Chem.*, 2024, **26**,  
11873.

## CRITICAL REVIEWS

11747

### CO<sub>2</sub> switchable solvents for sustainable dissolution, modification, and processing of cellulose materials: a critical review

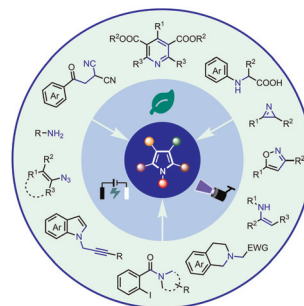
Peter McNeice\* and Ben L. Feringa\*



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### Photo- and electro-chemical synthesis of substituted pyrroles

Binbin Huang



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Fundamental questions  
Elemental answers

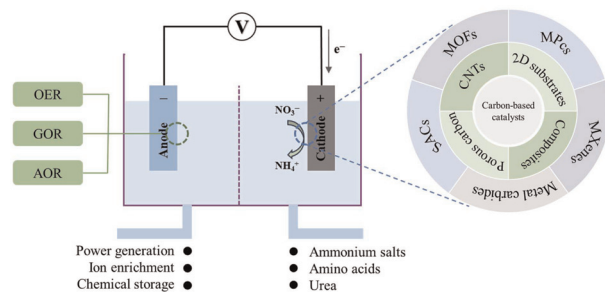


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### Review of carbon-based catalysts for electrochemical nitrate reduction and green ammonia synthesis

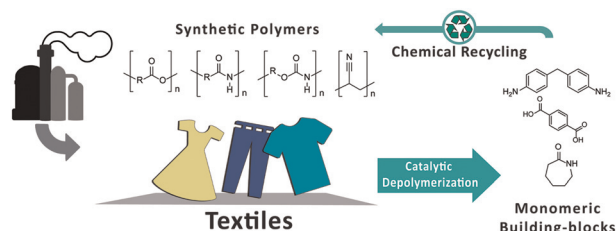
Guanting Liao, Richard L. Smith Jr., Haixin Guo\* and Xinhua Qi\*



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Carmen Moreno-Marrodán, Francesco Brandi, Pierluigi Barbaro\* and Francesca Liguori

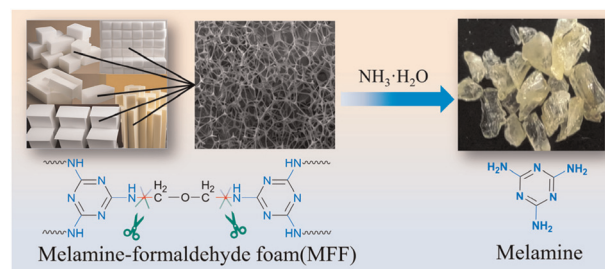


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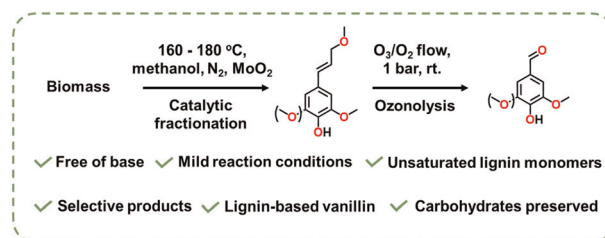
Chaohui Yang, Xinyu Li, Hongyan Li, Chizhou Wang, Qianqian Xing, Xiaoliang Jia, Xiaojing Cui,\* Xianglin Hou\* and Tiansheng Deng\*



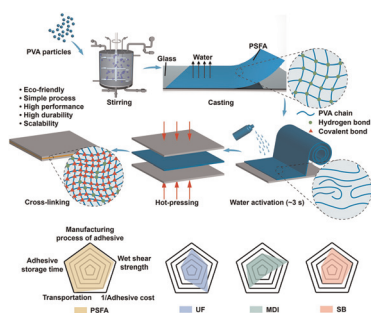
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### Green aromatic aldehyde production from biomass via catalytic fractionation and ozonolysis

Tianyu Ren, Peidong Li, Zhuo He, Xinfeng Pan, Yutao Yang, Yuhe Liao, Haiyong Wang, Yanbin Cui\* and Chenguang Wang\*



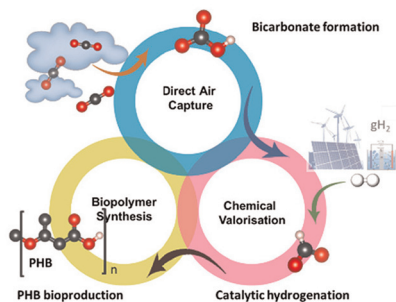
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### Polyvinyl alcohol solvent-free adhesives for biomass bonding *via* rapid water activation and heat treatment

Liangxian Liu, Ming Wei, Haiyu Li, Yutong Chen, Yuyan Jiang, Tian Ju, Zetan Lu, Guoqing Mu, Lijian Cai, Dexiu Min, Yanjun Xie, Jian Li\* and Shaoliang Xiao\*

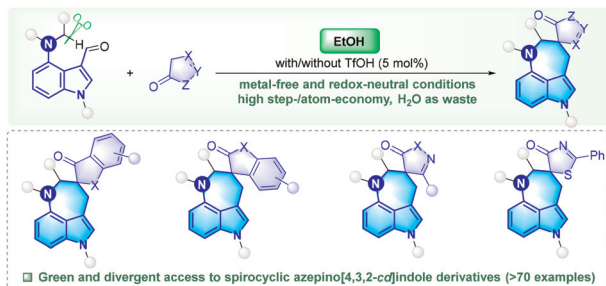
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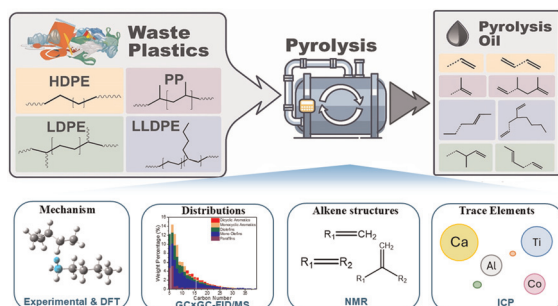
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### EtOH-mediated cascade C(sp<sup>3</sup>)-H alkylation *via* aromatization-driven [1,6]-hydride transfer: green and divergent synthesis of spirocyclic azepino [4,3,2-cd]indoles

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### The effects of polyolefin structure and source on pyrolysis-derived plastic oil composition

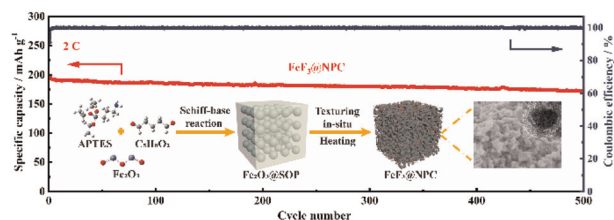
Jiayang Wu, Zhen Jiang, Victor S. Cecon, Greg Curtzwiler, Keith Vorst, Manos Mavrikakis and George W. Huber\*



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### Engineering *in situ*: N-doped porous carbon-confined FeF<sub>3</sub> for efficient lithium storage

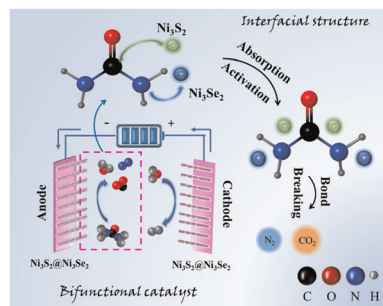
Jinlong Hu, Weijun Xu and Lingzhi Zhang\*



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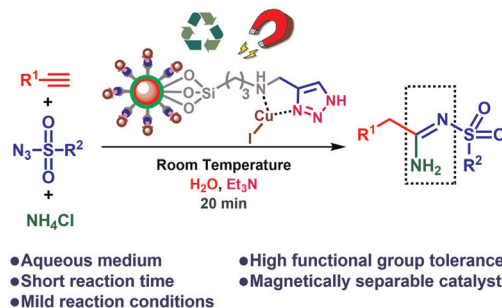
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### Green synthesis of *N*-sulfonyl amidine using a CuI-incorporated CoFe<sub>2</sub>O<sub>4</sub> nano-catalyst in aqueous medium

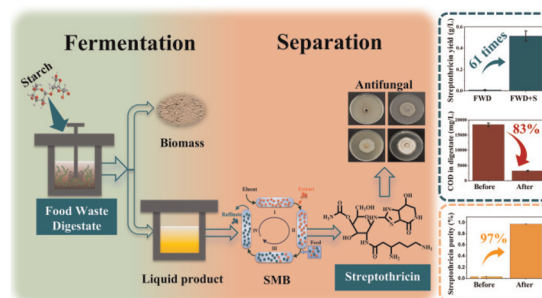
Samrat Charaimuria and Prodeep Phukan\*



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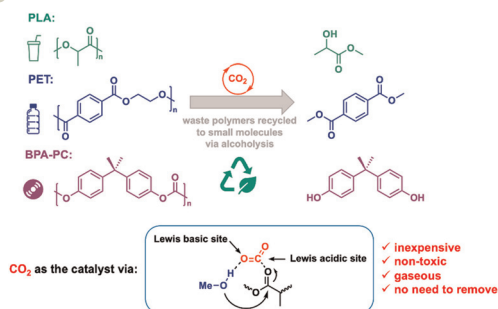
### Biological production and simulated moving bed purification of streptothricin F from food waste digestate

Xiaofang Zhou, Peiyi Li, Yuchen Sun, Zeyang Zhang, Chuanyi Yao, Qingbiao Li\* and Yuanpeng Wang\*



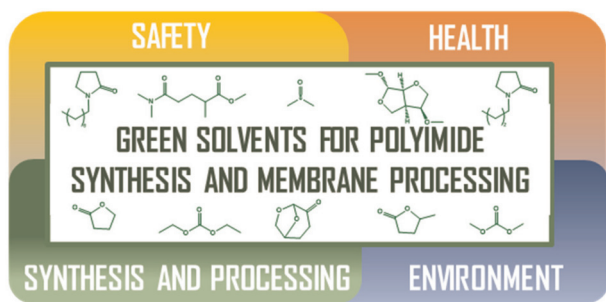
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CO<sub>2</sub> catalyzed recycling of polyester and polycarbonate plastics

Qiao Zhang, Nan Wang, Chenyang Hu, Peng-Yuan Li, Fu-Quan Bai, Xuan Pang,\* Xuesi Chen and Xianhong Wang

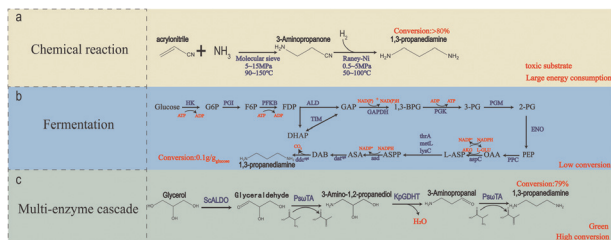
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E. San José, M. R. de la Viuda,\* F. J. Carmona, C. Soto, L. Palacio, P. Prádanos, A. Hernández and A. Tena\*

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Daocheng Liao, Shiming Tang, Ying Lin\* and Suiping Zheng\*

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## Utilize rather than create: transforming phthalonitrile resin into N-rich hierarchical porous carbon for supercapacitor materials

Yi Li, Qiancheng Liu, Qian Zhang, Xiaoxiao Li, Yang Yang, Pan Wang, Kui Li, Ying Li, Fei Zhong, Qi Liu, Yun Zheng, Xulin Yang\* and Peng Zhao\*

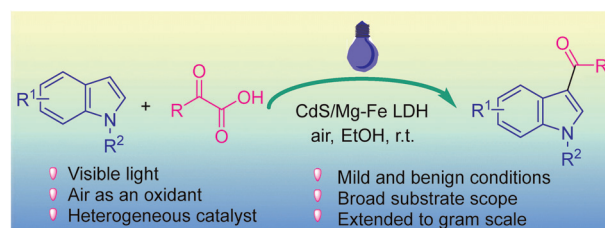


## PAPERS

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**CdS/Mg–Fe layered double hydroxide: a versatile heterogeneous photocatalyst for the acylation of indoles with  $\alpha$ -keto acids**

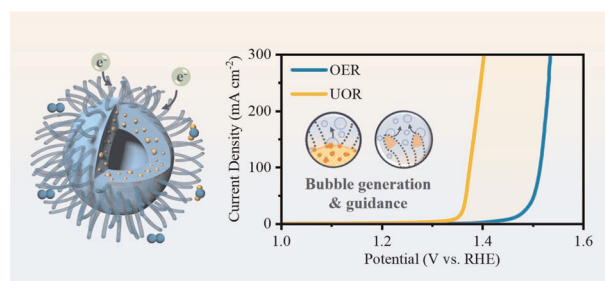
Jun-Bo Wang, Tong Yue, Ling Xu, Zhi-Qiang Hao\* and Zhan-Hui Zhang\*



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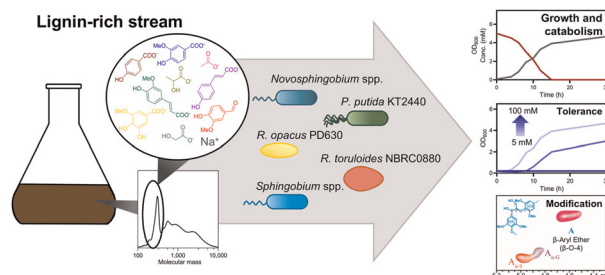
Yuqing Chen, Binyang Liu, Xuesong Liu, Jiahui Ye, Kuan Deng, Chengjie Wu, Qiang Niu, Tao Yang, Wen Tian and Junyi Ji\*



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**Comparison of microbial strains as candidate hosts and genetic reservoirs for the valorization of lignin streams**

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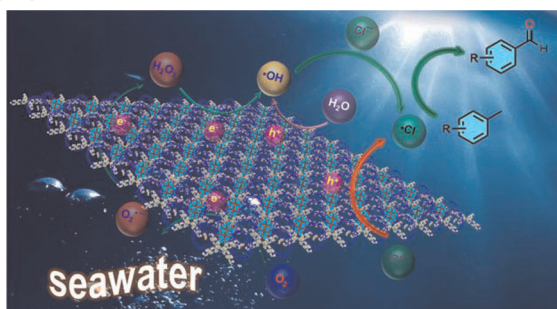
**Ball milling-promoting difunctionalization of alkynyl sulfonium salts with sulfinic acids towards (Z)-1,2-disulfonylethenes**

Li-Hua Yang, Bei Li, Lin Chen, Wen-Shi Yao, Han-Yue Peng, Sha Peng\* and Long-Yong Xie\*



## PAPERS

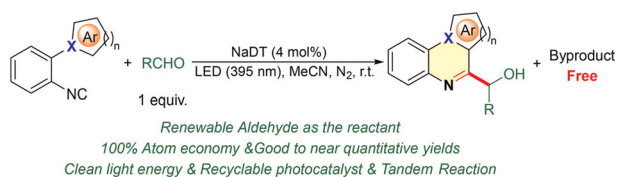
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Yan Fan, Yi Luo, Xu Luo and Xin-Long Ni\*

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Sereena Sunny and Ramasamy Karvembu\*

