

Green Chemistry

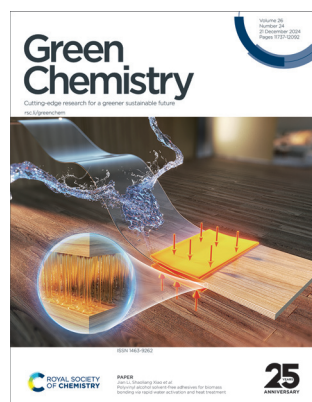
Cutting-edge research for a greener sustainable future

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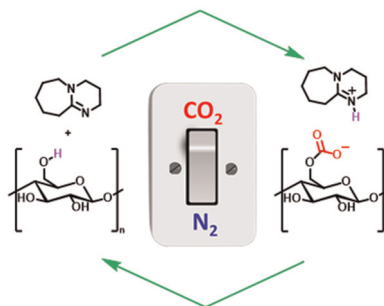
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from *Green Chem.*, 2024, **26**,
11873.

CRITICAL REVIEWS

11747

CO₂ switchable solvents for sustainable dissolution, modification, and processing of cellulose materials: a critical review

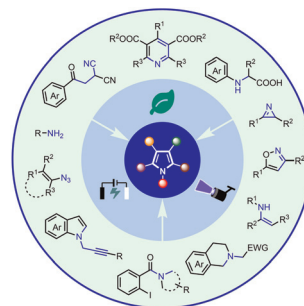
Peter McNeice* and Ben L. Feringa*



11773

Photo- and electro-chemical synthesis of substituted pyrroles

Binbin Huang



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Fundamental questions
Elemental answers

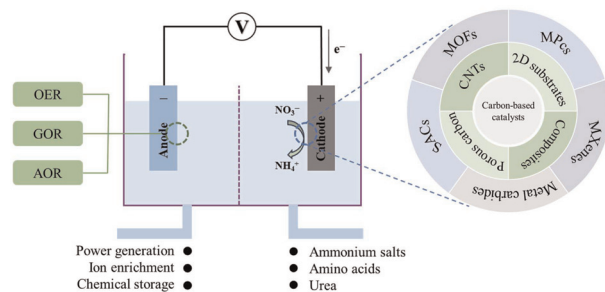


TUTORIAL REVIEWS

11797

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

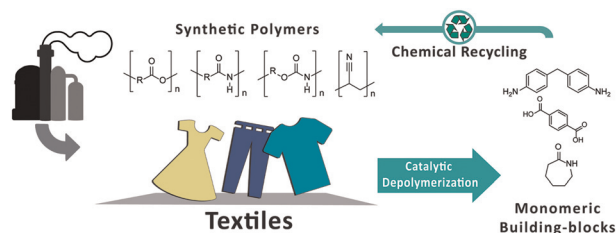
Guanting Liao, Richard L. Smith Jr., Haixin Guo* and Xinhua Qi*



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Advances in catalytic chemical recycling of synthetic textiles

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

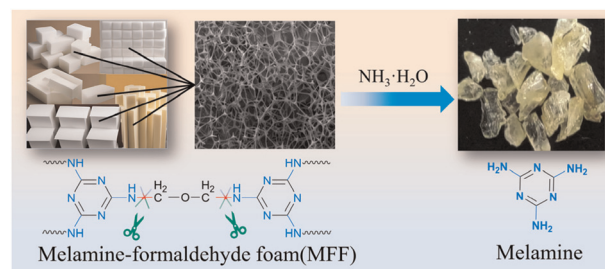


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11860

Efficient decomposition of a melamine–formaldehyde foam into melamine via selective disconnection of bonds

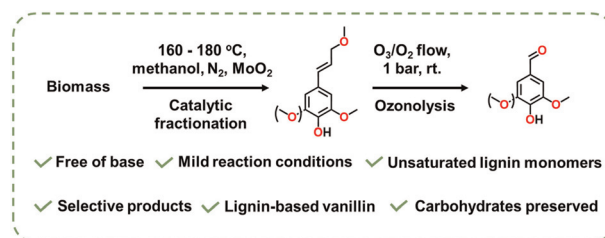
Chaohui Yang, Xinyu Li, Hongyan Li, Chizhou Wang, Qianqian Xing, Xiaoliang Jia, Xiaojing Cui,* Xianglin Hou* and Tiansheng Deng*



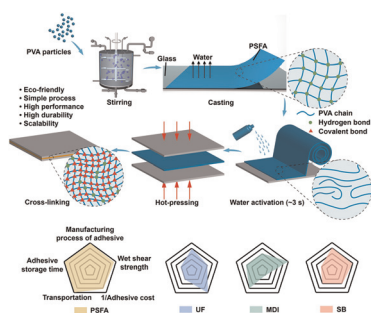
11866

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*



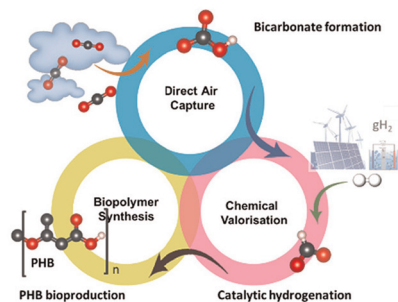
11873



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*

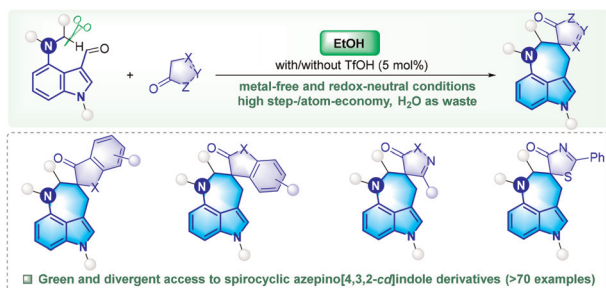
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Upcycling atmospheric CO₂ to polyhydroxy-alkanoates *via* sequential chemo-biocatalytic processes

Manuel Bruch, Julian E. Sanchez-Velandia, Jhonatan Rodríguez-Pereira, Michelle Rich, Nicole Percy, Tanja Narančić, Eduardo Garcia-Verdugo, Victor Sans, Kevin O'Connor* and Marcileia Zanatta*

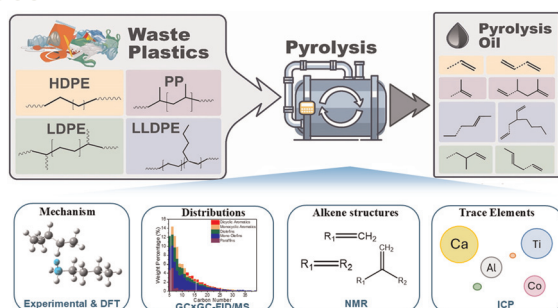
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EtOH-mediated cascade C(sp³)-H alkylation *via* aromatization-driven [1,6]-hydride transfer: green and divergent synthesis of spirocyclic azepino [4,3,2-cd]indoles

Yao-Bin Shen,* Qian-Hao Zhuang, Xiao-Lin Wang, Xiao-De An, Bin Qiu, Tiesheng Shi and Jian Xiao*

11908



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*

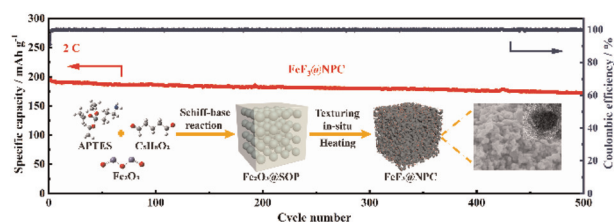


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Engineering *in situ*: N-doped porous carbon-confined FeF₃ for efficient lithium storage

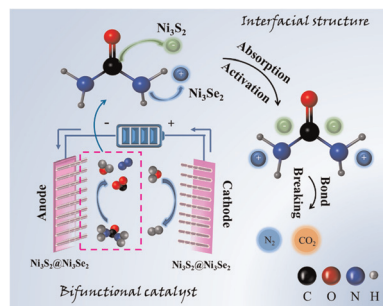
Jinlong Hu, Weijun Xu and Lingzhi Zhang*



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Engineering high-valence nickel sites in Ni₃S₂/Ni₃Se₂ architectures enabling urea-assisted hydrogen evolution reactions

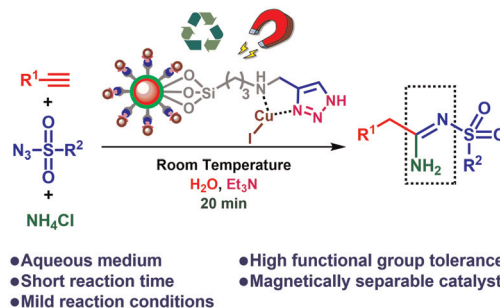
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Green synthesis of *N*-sulfonyl amidine using a CuI-incorporated CoFe₂O₄ nano-catalyst in aqueous medium

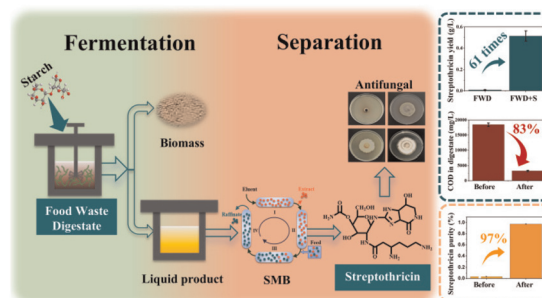
Samrat Charaimuria and Prodeep Phukan*



11963

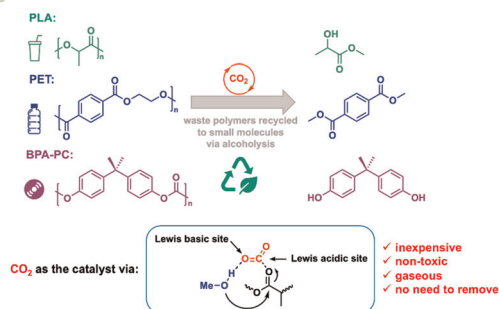
Biological production and simulated moving bed purification of streptothricin F from food waste digestate

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



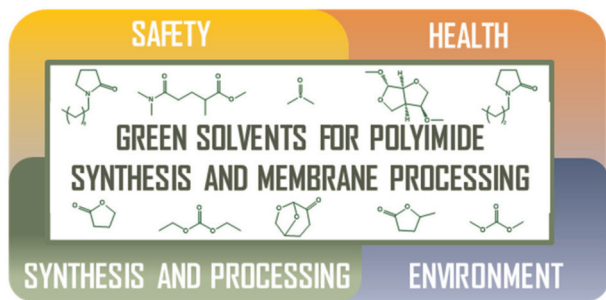
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CO₂ catalyzed recycling of polyester and polycarbonate plastics

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

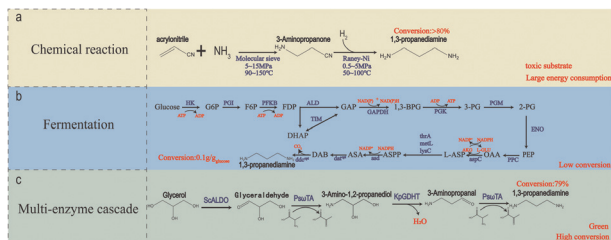
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Green dipolar aprotic solvents for the dynamic polycondensation of high-performance polyimide membranes

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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A green and sustainable multi-enzyme cascade for the biosynthesis of 1,3-propanediamine from crude glycerol *in vitro*

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*

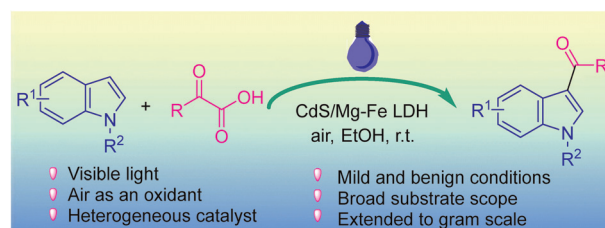


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CdS/Mg–Fe layered double hydroxide: a versatile heterogeneous photocatalyst for the acylation of indoles with α -keto acids

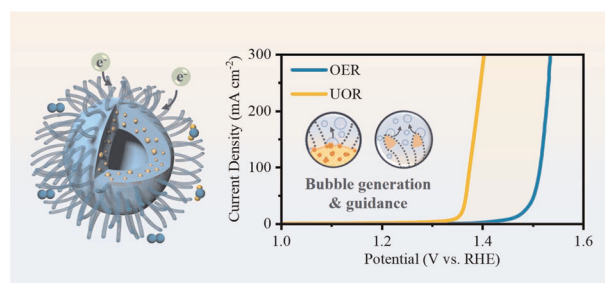
Jun-Bo Wang, Tong Yue, Ling Xu, Zhi-Qiang Hao* and Zhan-Hui Zhang*



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1D/3D hierarchical carbon skeleton confined NiFe nanoparticles with optimized three-phase interfaces as tri-functional electrocatalysts

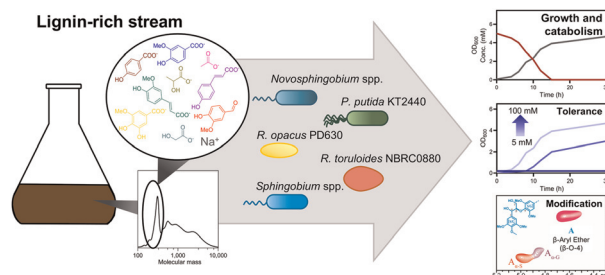
Yuqing Chen, Binyang Liu, Xuesong Liu, Jiahui Ye, Kuan Deng, Chengjie Wu, Qiang Niu, Tao Yang, Wen Tian and Junyi Ji*



12053

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

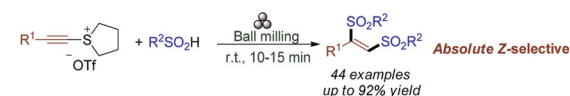
Rebecca A. Wilkes, Andrew J. Borchert, Valentina E. Garcia, Gina M. Geiselman, Sarah Liu, Adam M. Guss, Joshua K. Michener, Daniel R. Noguera, Eiji Masai, John M. Gladden, John Ralph and Gregg T. Beckham*



12070

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*

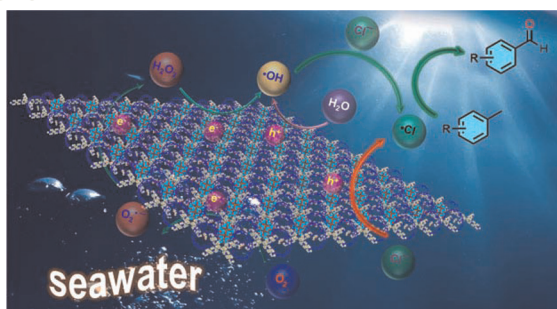


- Metal-, oxidant- and additive-free
- Organic solvent- and extraction-free
- Room temperature and short reaction time
- Ball milling-promoted transformation
- Rarely reported Z-selective disulfonyl products
- Wide substrate scope and satisfactory yields



PAPERS

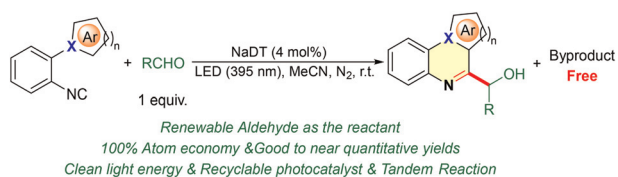
12076



Single-layer 2D supramolecular-organic-framework-supported polyoxometalates: efficient selective oxidation of toluene in seawater under sunlight

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

12084



Decatungstate-photocatalyzed tandem acylation/cyclization/self-hydrogenation of isocyanides with aldehydes to hydroxyalkylated N-heteroarenes via multiple hydrogen atom transfer

Hong-Tao Ji, Qiong-Hui Peng, Jia-Sheng Wang, Yu-Han Lu, Hui Dai, Qing-Xia Luo and Wei-Min He*

RETRACTION

12090

Retraction: Copper catalyzed direct C–H double methylation of aromatic aldehydes employing methanol as an alkylating agent

Sereena Sunny and Ramasamy Karvembu*

