

Green Chemistry

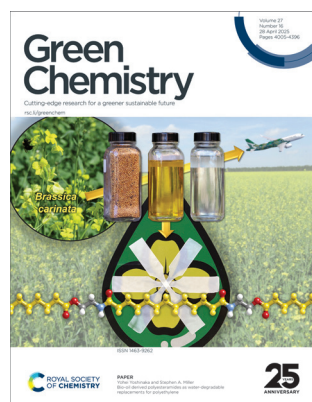
Cutting-edge research for a greener sustainable future

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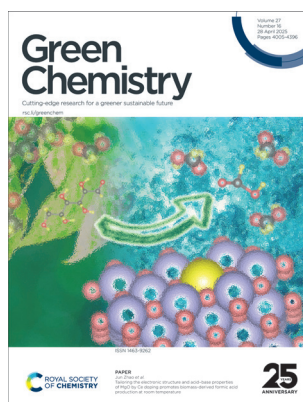
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See Yohei Yoshinaka and Stephen A. Miller, pp. 4152–4164.

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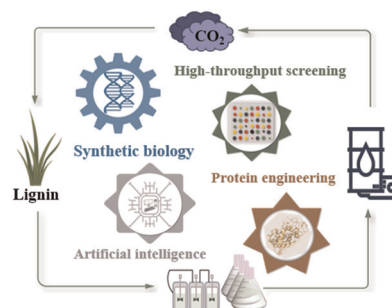
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Ning Fu, Ruo-Ying Liu, Ya Zhou, Bing-Zhi Li,*
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Recent developments in recycling of post-consumer polyethylene waste

Yang Ma, Xinyao Jiang, Xinyue Xiang, Ping Qu* and Maiyong Zhu*



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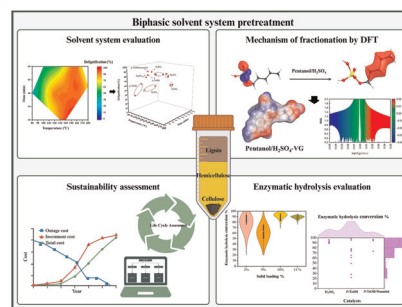
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CRITICAL REVIEWS

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Harnessing the potential of biphasic solvent systems in lignocellulosic biomass fractionation through computational insights

Maryam Saleknezhad, Meysam Madadi,* Salauddin Al Azad and Vijai Kumar Gupta*



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Electrochemical α -hydroxylation of aryl ketones with methanol as the oxygen source

Zhaoliang Yang,* Jianwei Huang, Yahao Wang, Haiyan Du, Yuan Zhou* and Mingming Yu

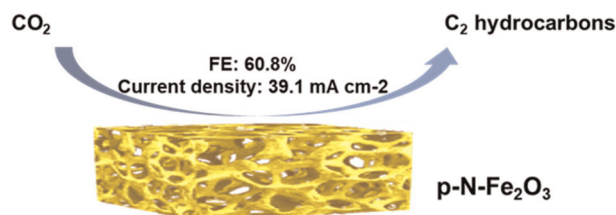


- Oxidant-free and metal-free
- Methanol as the Oxygen Source
- Broad Substrate Scope and high yields
- Scaled up to 2-gram synthesis

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Enhancing the selectivity of C_2 hydrocarbons over Fe-based catalysts by controlling nitrogen doping in electrocatalytic CO_2 reduction

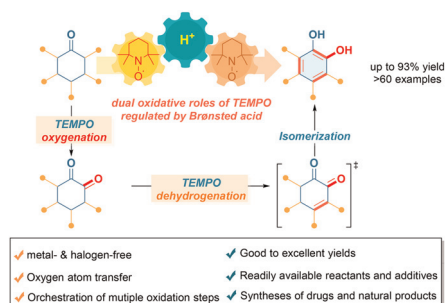
Peng Chen, Shiqiang Liu, Pei Zhang,* Xinchun Kang, Xing Tong, Jun Ma, Chunjun Chen, Zhimin Liu, Xueqing Xing, Zhonghua Wu, Lirong Zheng and Buxing Han*



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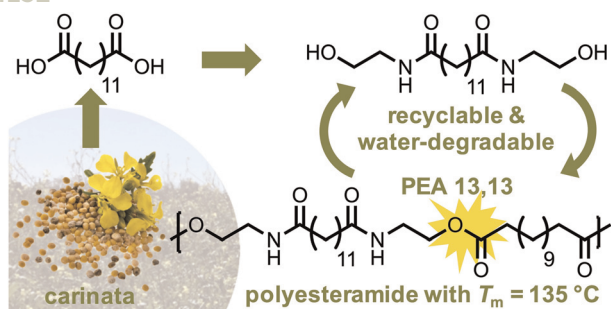
Synthesis of catechols from cyclohexanones via acid-regulated dual oxidative transformations with TEMPO

Biping Xu, Xiaojie Liu, Lei Deng, Yaping Shang, Xiaoming Jie* and Weiping Su*



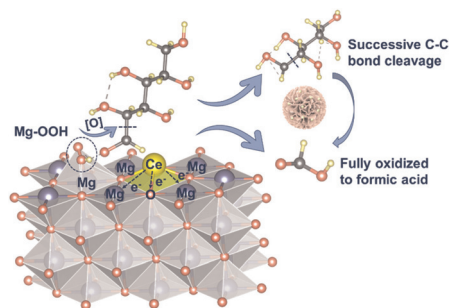
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**Bio-oil derived polyesteramides as water-degradable replacements for polyethylene**

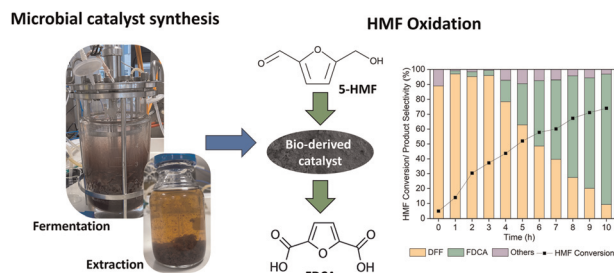
Yohei Yoshinaka and Stephen A. Miller*

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**Tailoring the electronic structure and acid–base properties of MgO by Ce doping promotes biomass-derived formic acid production at room temperature**

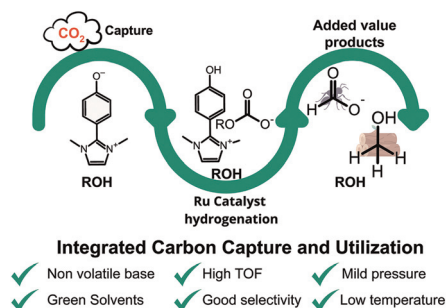
Yiqi Geng, Wenhua Xue, Jian Ye, Ruilong Zhang, Puranjan Mishra and Jun Zhao*

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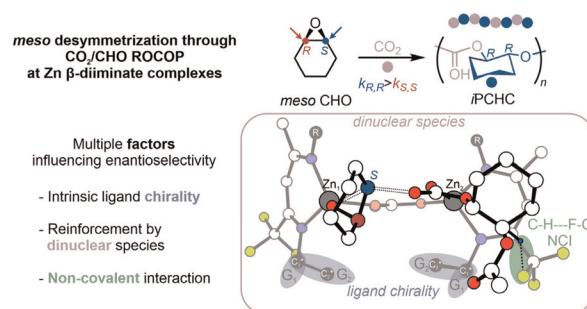
Bruno A. Cândido, Marcelli L. C. Zanirati, Francisco P. dos Santos, Wilmer Villarreal, Jairton Dupont and Pedro Migowski*



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Disclosing multiple factors influencing enantioselective copolymerization of CO₂ with *meso*-epoxides using β -diiminate Zn catalysts

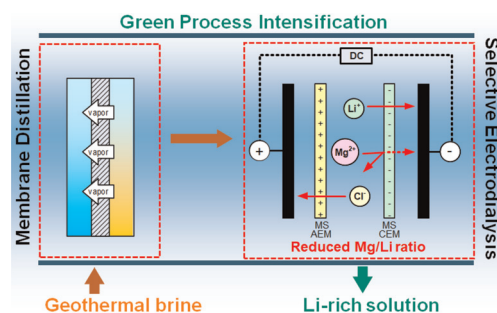
Yolanda Rusconi, Massimo Christian D'Alterio, Claudio De Rosa, Geoffrey W. Coates and Giovanni Talarico*



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Sustainable lithium recovery from geothermal brine via integrated membrane distillation – selective electro dialysis

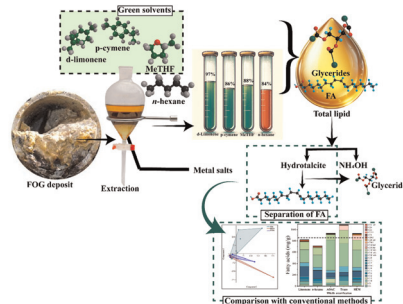
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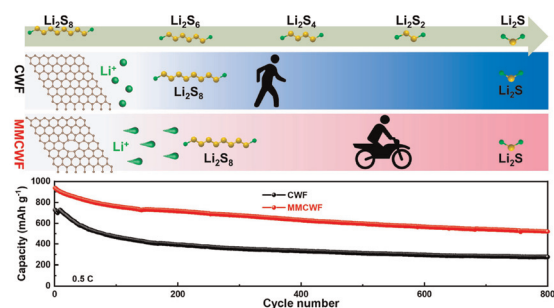
Anika Amir Mohana, Felicity Roddick, Selvakannan Periasamy, Li Gao and Biplob Kumar Pramanik*



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Solvothermal-assisted defect engineering in hierarchically porous carbonized wood fibers for high-performance lithium–sulfur batteries

Yangyang Chen, Yu Liao, Lei Li, Yiding Ding, Ying Wu, Zhen Zhang, Sha Luo, Yiqiang Wu and Yan Qing*



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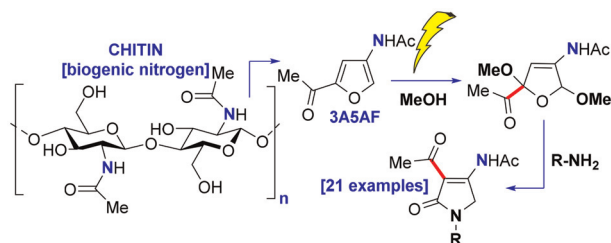
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Protective fractionation of highly uncondensed lignin with high purity and high yield: new insights into propanediol-blocked lignin condensation

Yaling Zhao, Deqing Zhao,* Jingpeng He, Kaibin Ma, Jiatian Zhu, Jianrong Liu,* Yongqi Zhang, Qinqin Xia and Ting Li

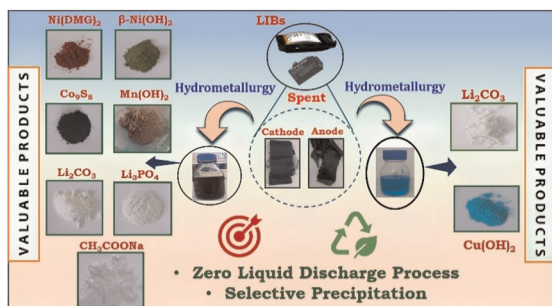
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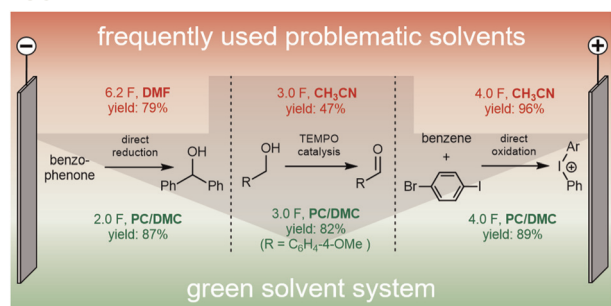
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A closed-loop zero-liquid-discharge process for the precipitative separation of all valuable metals from waste lithium-ion batteries of mixed chemistries at room-temperature

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On the use of propylene carbonate and dimethyl carbonate as green solvents in organic electrosynthesis

Adrian Prudlik, Alexandra Matei, Anton Scherkus, Javier Ivan Bardagi, Sebastian B. Beil* and Robert Francke*

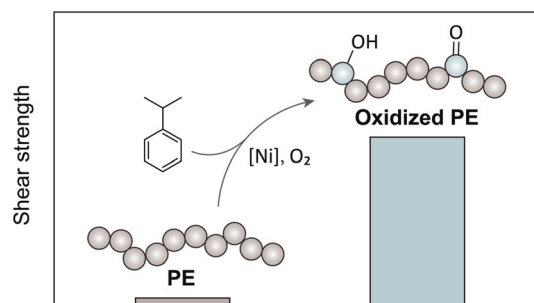


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Cumene-mediated aerobic oxidation of polyethylene

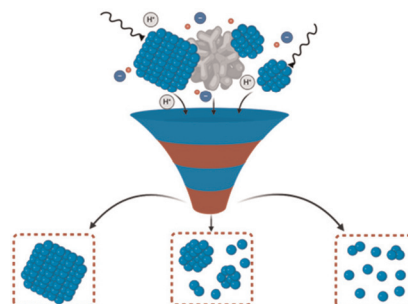
Yizhen Che, Yanfen Wu, Yanyan Zheng, Helai Huang, Qikun Hu and Zhiqiang Niu*



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A nano-SPR model for predicting the dissolution rate of metal and metal oxide nanomaterials in the aqueous environment

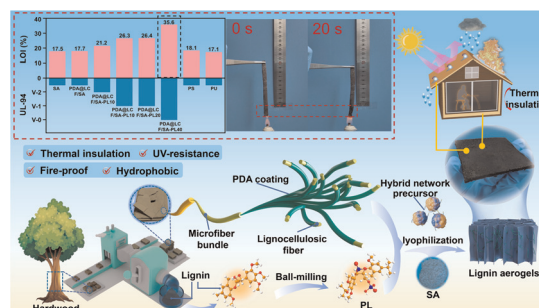
Michal Kalapus and Tomasz Puzyn*



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P–N synergy with lignocellulosic biomimetic flame-retardant aerogels for effective fire-safe and thermal insulation

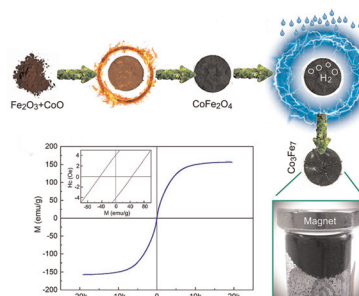
Tao Gui, Shuang-Lin Zou, Hao-Zhen Dou, Wen-Feng Ren, Chang-You Shao, Chun-Lin Xu, Ling-Ping Xiao* and Run-Cang Sun



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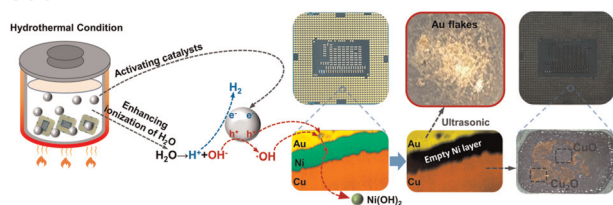
Water-assisted clean electro-preparation of Co_3Fe_7 in molten salts: its enhanced ferromagnetic properties and hydrogen evolution rate

Shengxi Zhao, Kaiyu Xie and Ali Reza Kamali*



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Hydrothermal enhanced etching of Ni for direct recovery of gold flakes from electronic waste

Shuling Shen,* Yu Chu, Ziwei Feng, Zheng Du, Huixin Xiu, Xinjuan Liu, Shuning Xiao, Zhihong Tang, Jing Li and Xun Wang*

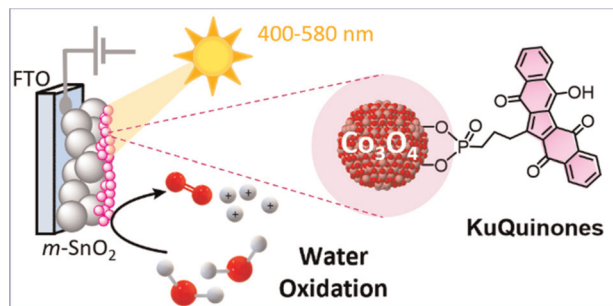
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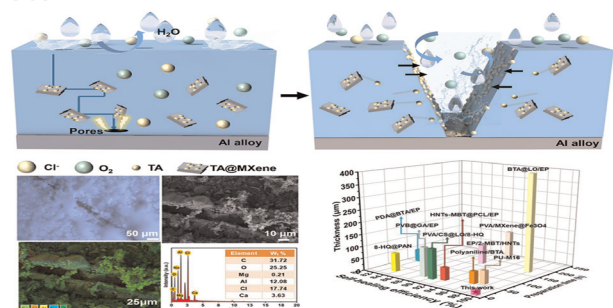
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KuQuinone-sensitized cobalt oxide nanoparticles for photoelectrocatalytic oxygen evolution with visible light

Ruggero Bonetto, Nuria Romero,* Federica Sabuzi,* Mattia Forchetta, Mirco Natali, Raffaella Signorini, Roger Bofill, Laia Francàs, Marcos Gil-Sepulcre,* Olaf Rüdiger, Serena DeBeer, Jordi Garcia-Antón, Karine Philippot, Pierluca Galloni, Andrea Sartorel* and Xavier Sala*

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Enhanced corrosion resistance of an eco-friendly MXene composite coating with self-healing performance

Xiaoqing Ma, Tiange Wang, Baolong Gong, Jiale Hou, Shuxian Ji and Huaijie Cao*



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Shedding light on the path to multifunctional task-specific supported ionic liquids with enhanced catalyst stability and activity

Sergio Alcalde, Raúl Porcar, Nuria Martín, Francisco G. Cirujano, Belén Altava and Eduardo García-Verdugo*

