

# Green Chemistry

Cutting-edge research for a greener sustainable future

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## IN THIS ISSUE

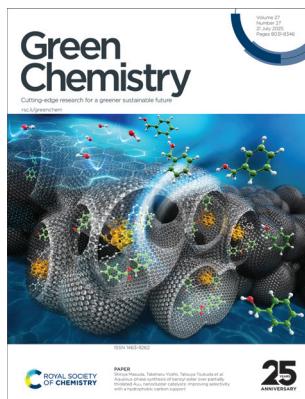
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### Cover

See Min Li, Limei Yu,  
Shu-Xin Liu, Yunhe Jin et al.,  
pp. 8126–8132.

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### Inside cover

See Shinya Masuda,  
Takeharu Yoshii,  
Tatsuya Tsukuda et al.,  
pp. 8133–8142.

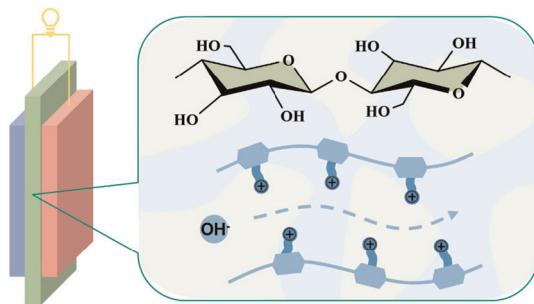
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## CRITICAL REVIEW

8041

### Modification strategies for cellulose-based anion exchange membranes

Chen Cheng, Siyuan Zhu, Chichong Lu\* and  
Zhichuan J. Xu\*

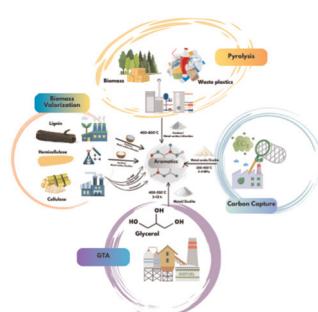


## TUTORIAL REVIEW

8055

### Renewable aromatic production from waste: exploring pathways, source materials, and catalysts

Ripsa Rani Nayak and Navneet Kumar Gupta\*



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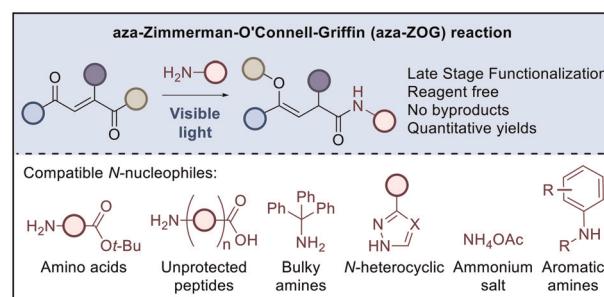
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## COMMUNICATIONS

8112

**Visible-light-mediated late-stage  
N-functionalization of unprotected peptides:  
introducing the aza-Zimmerman–O’Connell–  
Griffin reaction**

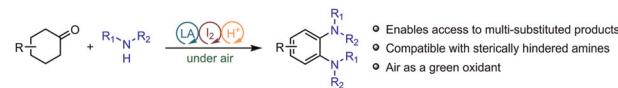
Sara Bacaioco, Mario Martos, Wilma Yhlen Graf,  
August Runemark, Ganesh H. Shinde,  
Ganesh S. Ghotekar and Henrik Sundén\*



8120

**Aerobic oxidative synthesis of  
*o*-phenylenediamines from cyclohexanones**

Yichen Sun, Shuyuan Tang, Binzhi Zhao and Ning Jiao\*

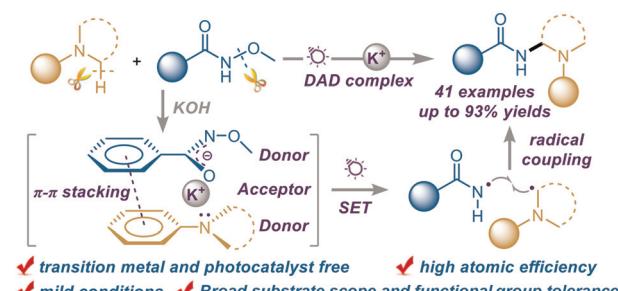


## PAPERS

8126

**Transition metal/photocatalyst-free synthesis of  
geminal diamines via a sandwich-like photoactive  
donor–acceptor–donor complex**

Ziyi Xu, Ziyang Chen, Shuyang Liu, Jian Gao, Jinglan Lei,  
Min Li,\* Yongqiang Zhang, Ziyu Gan, Limei Yu,\*  
Shu-Xin Liu\* and Yunhe Jin\*



8133

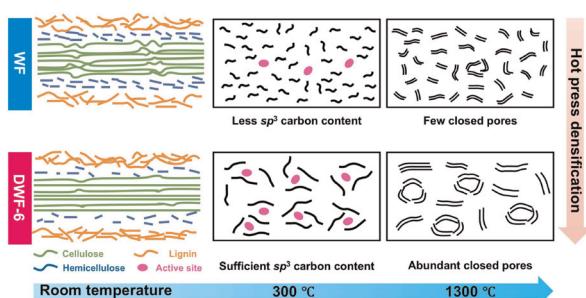
**Aqueous-phase synthesis of benzyl ester over  
partially thiolated Au<sub>25</sub> nanocluster catalysts:  
improving selectivity with a hydrophobic carbon  
support**

Kosuke Sakamoto, Koki Chida, Shinya Masuda,\*  
Takeharu Yoshii,\* Hirotomo Nishihara and  
Tatsuya Tsukuda\*

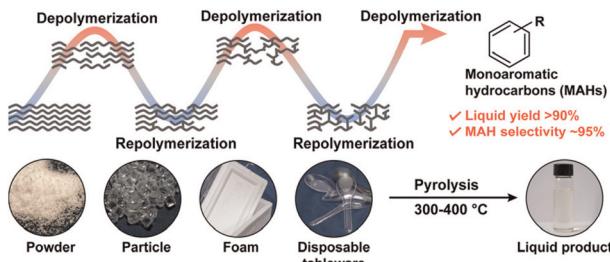


## PAPERS

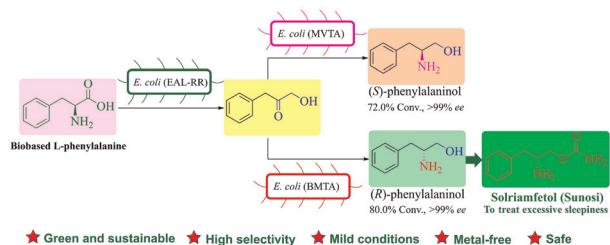
8143



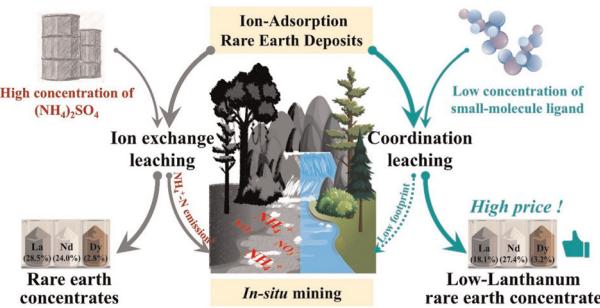
8154



8162



8174



### Synchronously reconfiguring closed pore and interlayer spacing of wood-derived hard carbon *via* hot-pressing for advanced sodium-ion batteries

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

### Recycling of polystyrene waste to mono-aromatic hydrocarbons *via* intermittent thermal scission

Zhuohan Lin, Jiaxin Li, Wang Xu, Qiaohui Ruan, Jiakang Hu, Peiqing Yuan and Yan Li\*

### Cascade biocatalysis for enantioselective reconstruction of both enantiomers of phenylalaninol from biobased L-phenylalanine

Xue Han, Yunyi Li, Tian Xie, Lili Gao, Shuangping Huang,\* Hang Gao\* and Jiandong Zhang\*

### Ligand-induced tetrad effect in coordination leaching of ion-adsorption rare earth ores: enhanced recovery of high-value low-lanthanum rare earth concentrates

Kui Zou and Hongbo Zhao\*

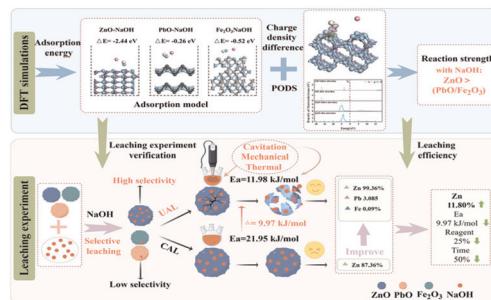


## PAPERS

8188

## Mechanism of ultrasound-enhanced alkaline selective leaching of zinc from steel waste: experimental and DFT simulation analysis

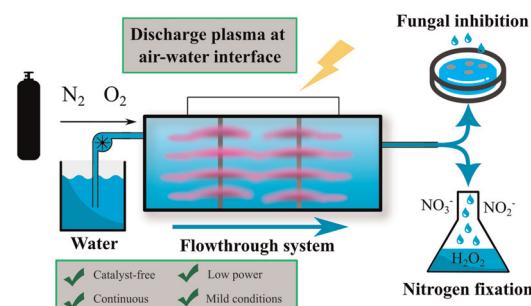
Chunfu Xin, Shenxu Bao,\* Yimin Zhang, Bo Chen, Wei Ding, Hongwei Zhang and Shuo Liu



8203

## Streamer-spark discharge at the water surface as a source of plasma-activated water: nitrogen fixation yields and biocidal efficiency

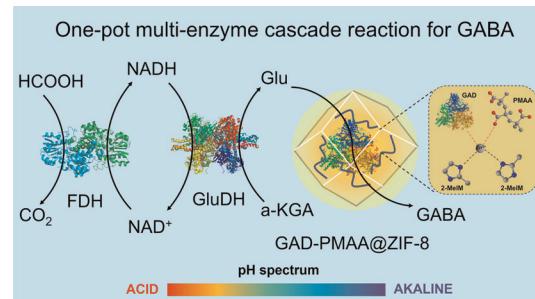
Jiří Fujera,\* Petr Hoffer, Václav Prukner, Palma Rosa Rotondo, Garima Arora, Vít Jirásek, Rita Milvia De Miccolis Angelini, Petr Lukeš and Milan Šimek\*



8216

## Engineered pH-buffering nanocomposite for robust one-pot multi-enzyme cascade synthesis of $\gamma$ -aminobutyric acid

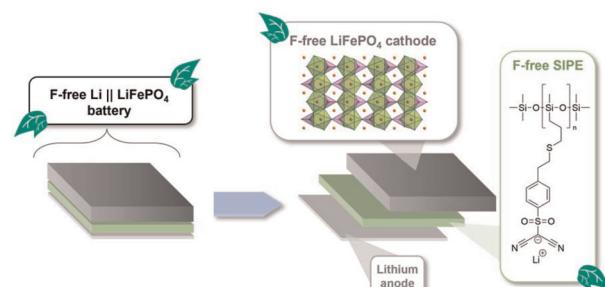
Hang Luo, Tin Pou Lai,\* Yanxin Gao, Wenjin Li, Yilin Fan and Liyun Zhang\*



8226

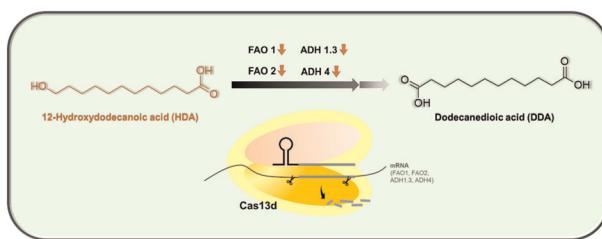
## Fluorine-free polysiloxane-based single-ion-conducting polymer electrolyte for lithium–metal batteries

Leo Gräber, Vittorio Marangon,\* Manish Kumar, Marcel Weil and Dominic Bresser\*



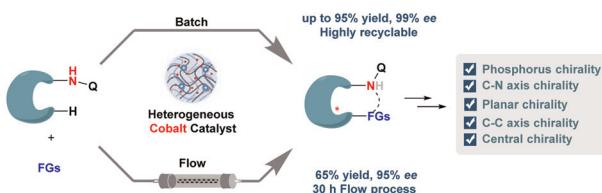
## PAPERS

8237

**Green synthesis of  $\omega$ -hydroxydodecanoic acid by engineering *C. viswanathii* with Cas13d**

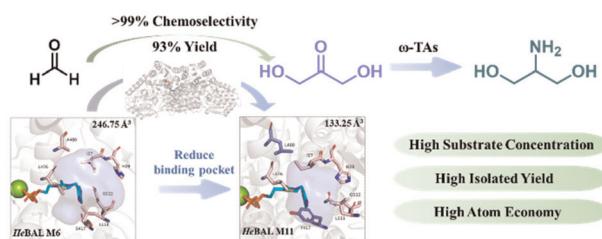
Chin-Wei Chang, Yen-Tzu Tung, Siang-Cing Huang, Yun-Ching Chen, Pramod Shah, Xuan-Mai Le Thi, Vy Anh Truong, Mai Thanh Thi Nguyen and Yu-Chen Hu\*

8251

**Design of a polymer supported chiral cobalt catalyst for heterogeneous enantioselective C–H activations**

Jie Lin, Dingguo Song, Wenji Zhang, Changdi Zheng, Cunwei Zheng, Jiayang Lv, Jun Xue,\* Weihui Zhong\* and Fei Ling\*

8260

**Structure-guided engineering of benzaldehyde lyase for efficient synthesis of dihydroxyacetone and one-pot biosynthesis of 2-amino-1,3-propanediol**

Yue Fan, Xuemeng Li, Yu Li, Jinhui Feng, Min Wang, Cuiying Zhang, Peiyuan Yao,\* Qiaqing Wu\* and Dunming Zhu\*

8270

**Enhanced photocatalytic desulfurization: unlocking the power of Anderson-type polyoxometalate-boosted (001) TiO<sub>2</sub> nanodisks using deep eutectic solvents**

Chuanli Wang, Ting Su,\* Qing Liu,\* Deyang Zhao, Zhiguo Zhu, Kaixuan Yang, Christophe Len and Hongying Lü

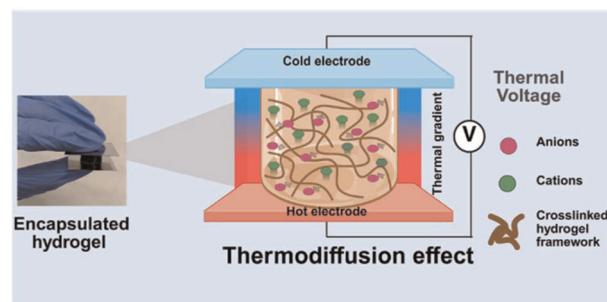


## PAPERS

8283

**Amine-functionalized lignin hydrogels for high-performance N-type ionic thermoelectric materials**

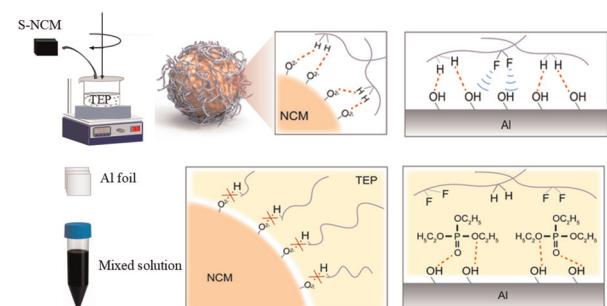
Nazish Jabeen, Clara M. Gómez, Rafael Muñoz-Espí, Andrés Cantarero, Maurice N. Collins and Mario Culebras\*



8300

**Green solvent-based separation and regeneration of layered ternary cathode materials for sustainable lithium-ion battery recycling**

Liying Ou, Ying Zhang, Pengwei Li,\* Kai Zhu, Yinyi Gao and Dianxue Cao\*



8313

**Amino and hydroxyl functionalization of nucleosides via resonant acoustic mixing**

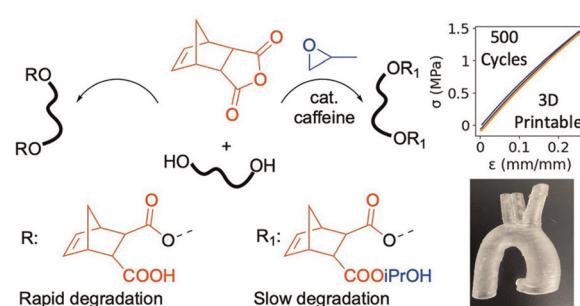
Julian Marilyn, Olivia Del Carlo, James D. Thorpe and Masad J. Damha\*



8319

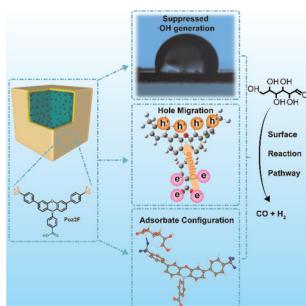
**Caffeine-catalyzed synthesis of photopolymers for digital light processing**

Warrick Ma, Anthony R. D'Amato and Yadong Wang\*



## PAPERS

8333



**Tailoring surface reaction pathways by self-assembling a trifluoromethyl-terminated molecular layer to enhance photocatalytic cellulose-to-syngas conversion in pure water**

Jianfeng Lin, Ren Yu, Xiaoyu Shi, Jie Zhao,  
Shangxian Chen, Liang Huang, Libo Li, Donglei Bu,\*  
Ning Cai\* and Shaoming Huang\*

