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Green Chemistry

Cutting-edge research for a greener sustainable future

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IN THIS ISSUE

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Cover
See Eva C. Thompson *et al.*, pp. 5015–5026.

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Inside cover
See Kaige Wang *et al.*, pp. 5027–5039.

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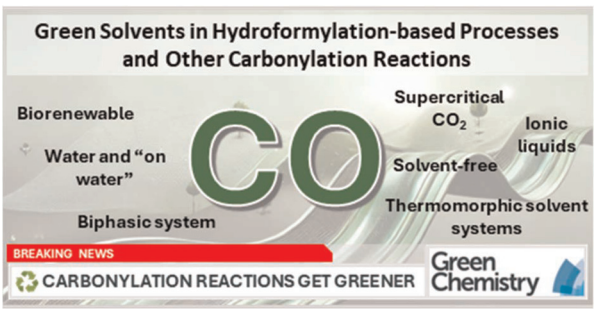
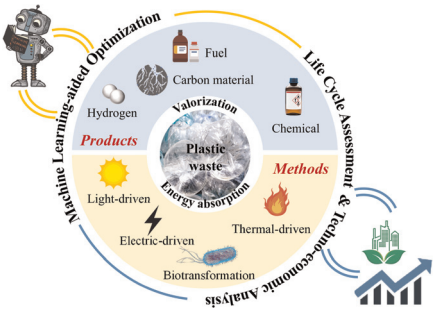
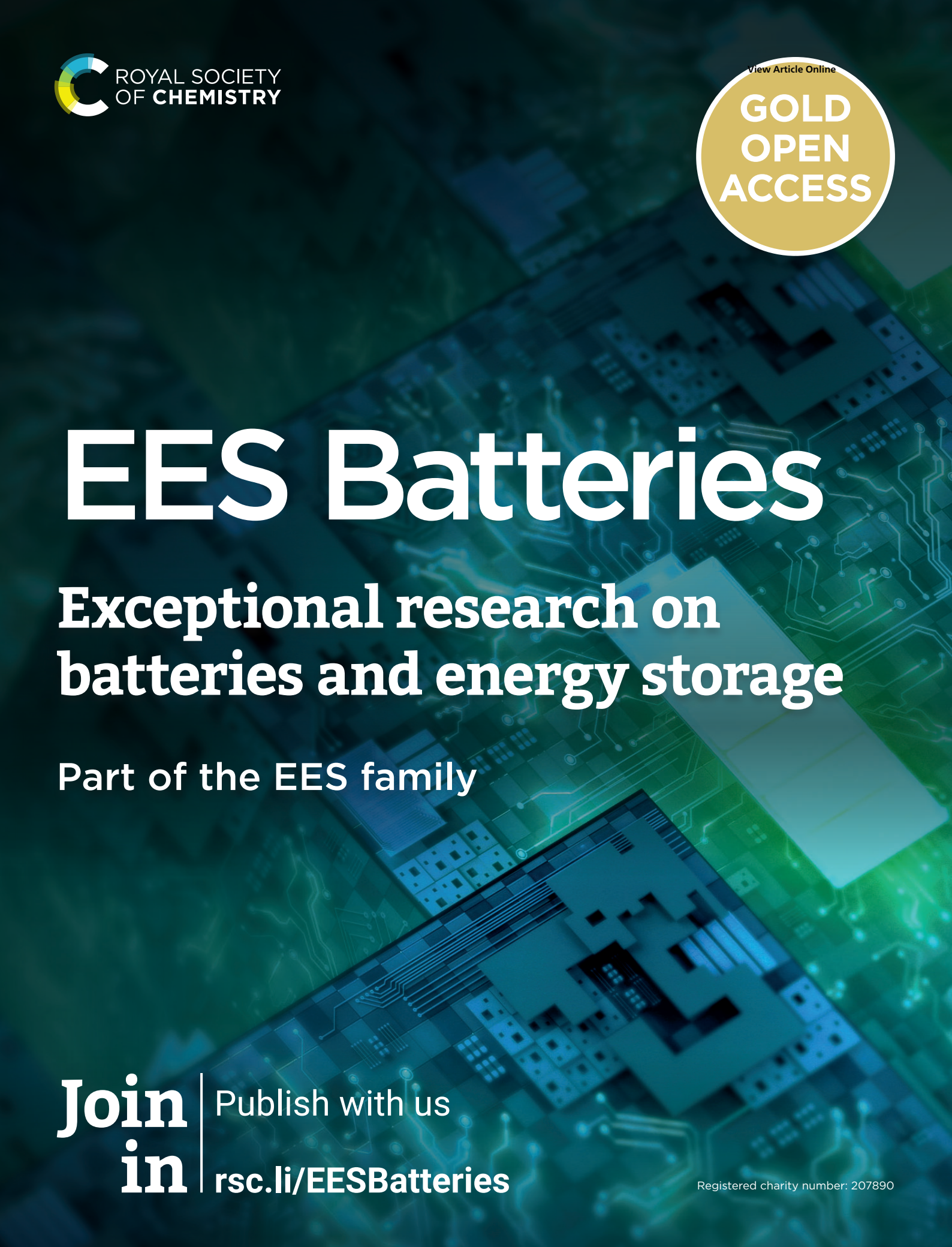
CRITICAL REVIEWS



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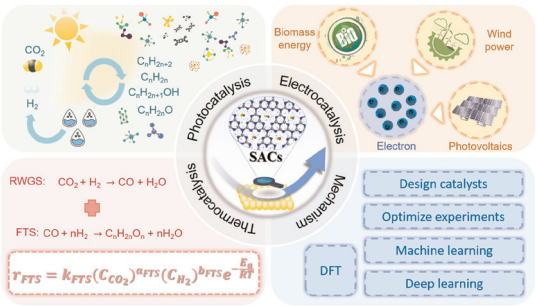

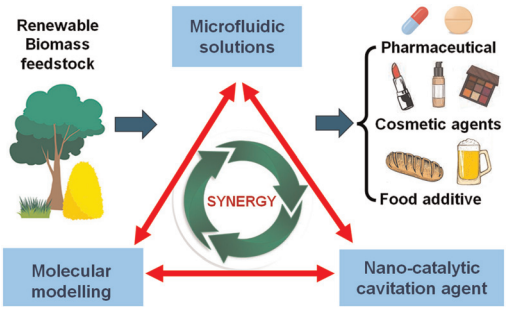

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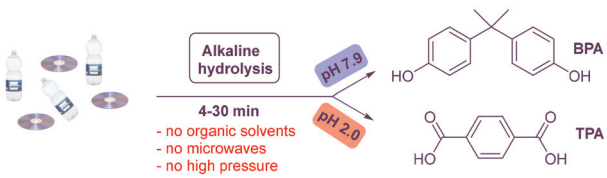

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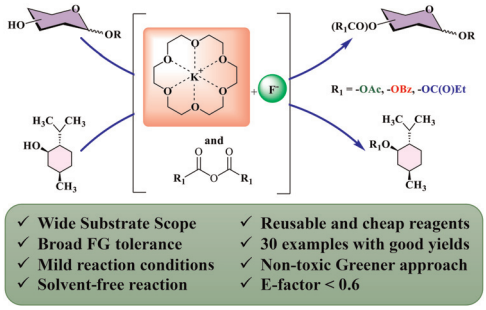
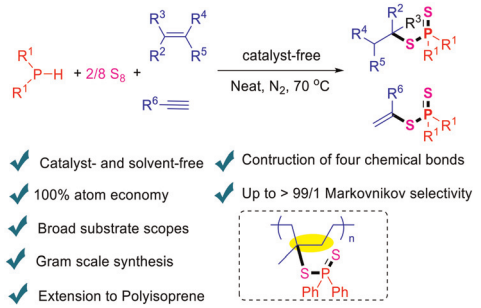


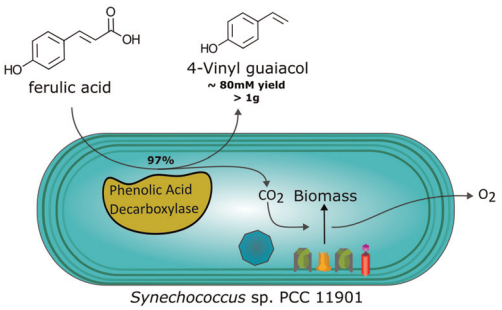
Supramolecular assisted *O*-acylation of carbohydrates

Soumyadip Dey, Debabrata Giri, Adrita Nandy and Abhijit Sau*



Catalyst- and solvent-free, atom- and step-economical synthesis of dithiophosphinates by one-pot domino introduction of sulfur atoms

Xiantao Ma,* Xiaoyu Yan, Shangyuan Li, Xinyu Chen, Sifan Chen and Jing Yu



Gram-scale production of 4-vinyl guaiacol in the fast-growing phototrophic cyanobacterium *Synechococcus* sp. PCC 11901

Thomas Rohr and Florian Rudroff*

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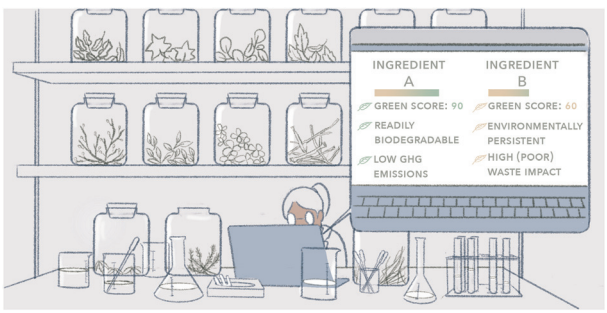

Advancing green chemistry performance assessment: the Estée Lauder Companies' continuing journey towards meaningful transparency

Eva C. Thompson,* Paul Anastas, Heidi Bialk, Deanna D'Alessandro, Voravee P. Hoven, Timothy J. Kedwards, Zhimin Liu, Anja-Verena Mudring, Kei Saito, Vânia Zuin Zeidler and George Daher

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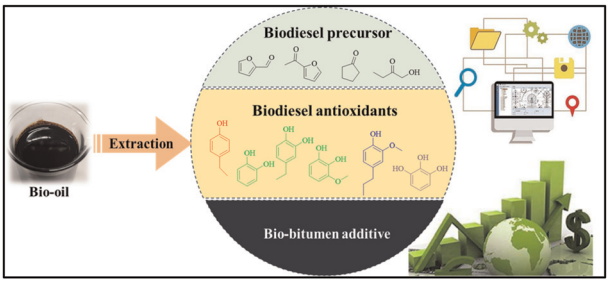

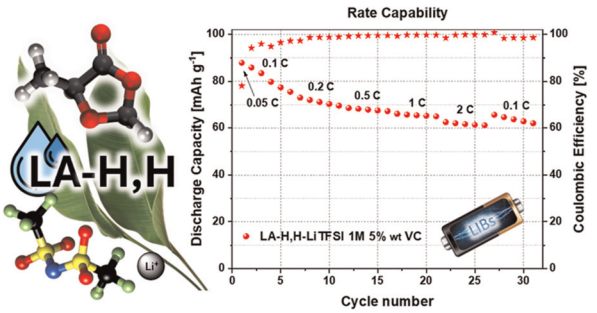

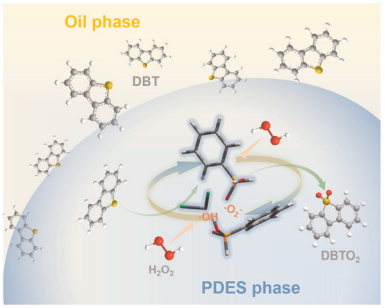

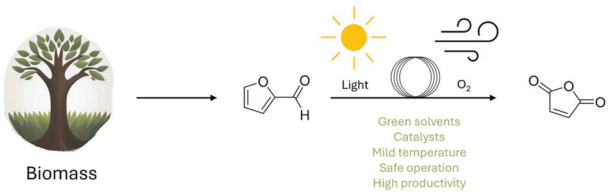

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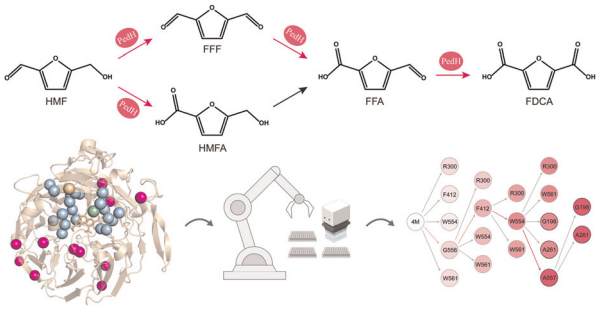
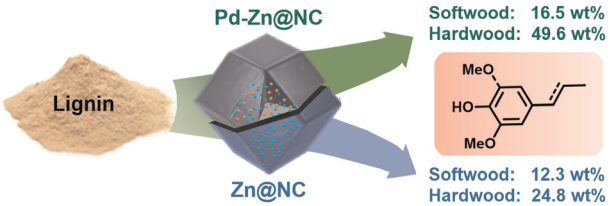


Sequential single-enzyme oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid by an engineered lanthanide-dependent alcohol dehydrogenase

Ke Liu, Ling Jiang, Lun Wang, Qunfeng Zhang, Lirong Yang, Jianping Wu and Haoran Yu*

5091



Insights into the reductive catalytic deconstruction of lignin over ultralow-loading palladium–zinc catalysts derived from zinc imidazolate frameworks

Yi-Hui Lv, Qiang Wang,* Wen-Zheng Yin, Xue-Jie Gao, Ling-Ping Xiao* and Run-Cang Sun*

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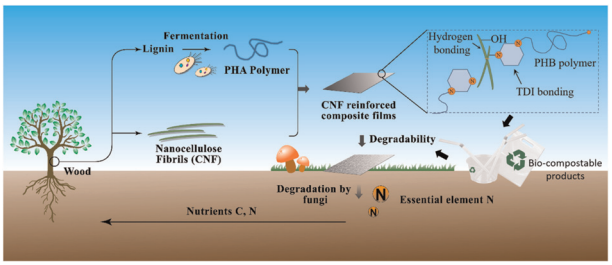
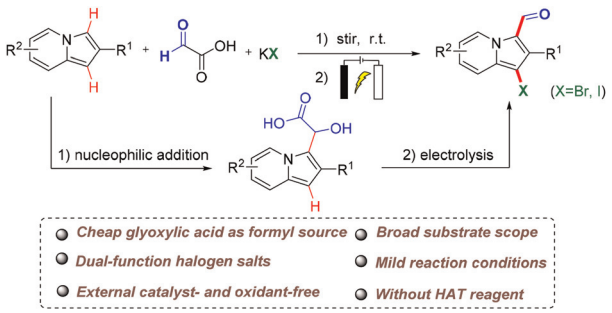


Integrated design of multifunctional reinforced bioplastics (MReB) to synergistically enhance strength, degradability, and functionality

Jinghao Li, Wei Liu, Alex Chang, Zachariah Foudeh, Jiali Yu, Peiran Wei, Kainan Chen, Cheng Hu, Dhatt Puneet, Susie Y. Dai* and Joshua S. Yuan*

5119



Electrochemical difunctionalization of indolizines with glyoxylic acid and halide salts

Chenglong Feng, Xin Liu, Peipeng Zhang, Meichao Li* and Zhenlu Shen*

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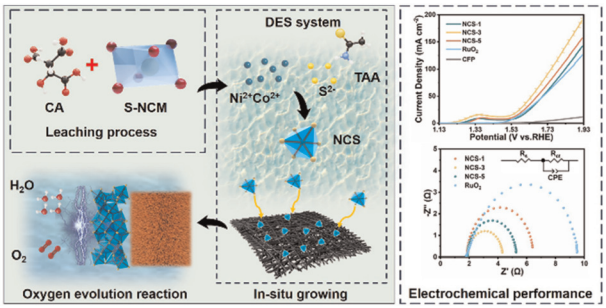

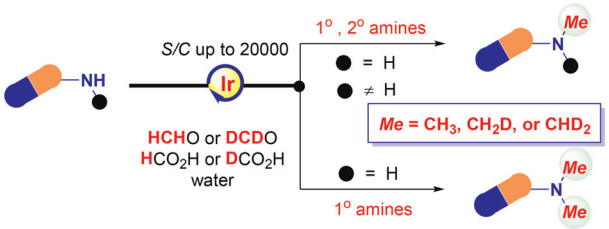

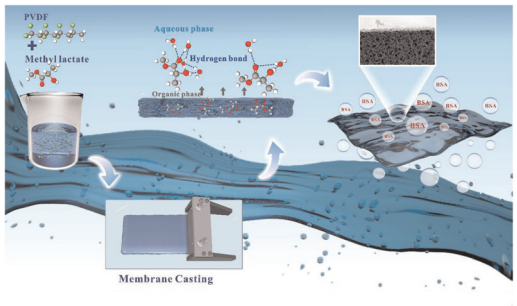

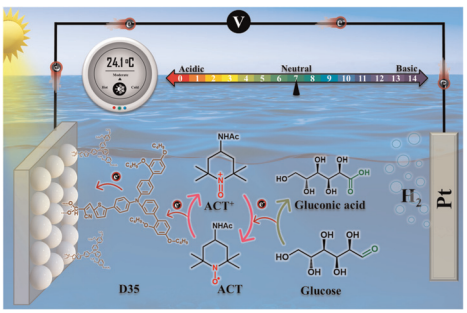

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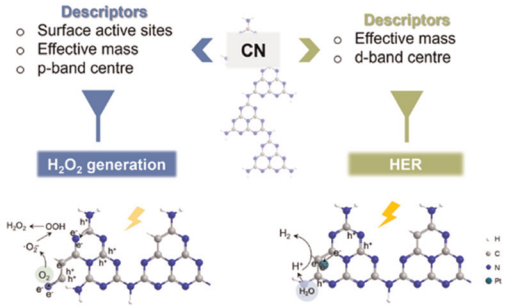

Descriptor-driven design of carbon nitride for visible light photocatalysis

Xuying Li, Haoxin Mai,* Tsuyoshi Takata, Nicholas Cox, Qi Li, Junlin Lu, Xiaoming Wen, Edwin L. H. Mayes, Salvy P. Russo, Takashi Hisatomi, Kazunari Domen, Dehong Chen* and Rachel A. Caruso*

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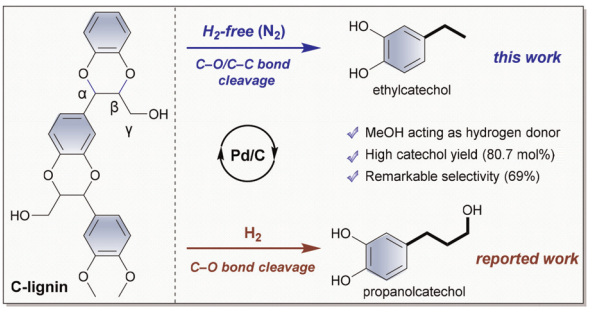

Selective catalytic depolymerisation of C-lignin into ethylcatechol using commercial Pd/C under hydrogen-free conditions

Xuening Li, Shuizhong Wang* and Guoyong Song

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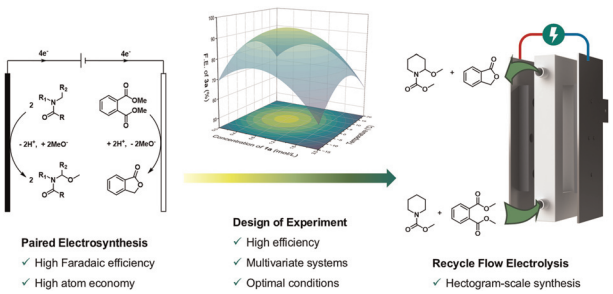

Pairing Shono-type electro-oxidation with the electro-reduction of dimethyl phthalate in a recycle flow reactor

Zonghan Li, Chaoren Shen and Kaiwu Dong*

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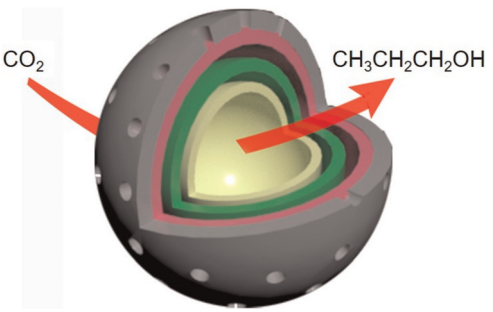

Multi-layered CuO/SiO_2 core–shell structure improves electrocatalytic CO_2-to-*n*-propanol conversion

Sha Wang, Jiangling Zhang,* Yingzhe Zhao, Jiajun Zhong, Zhongjun Chen, Yisen Yang, Buxing Han, Yongxin Cheng, Meiling Li and Qian Li

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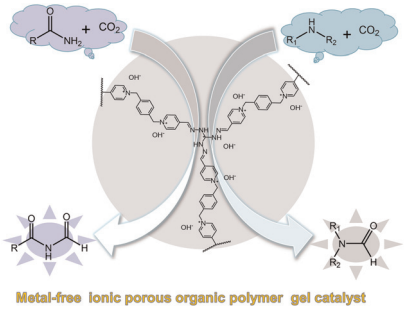

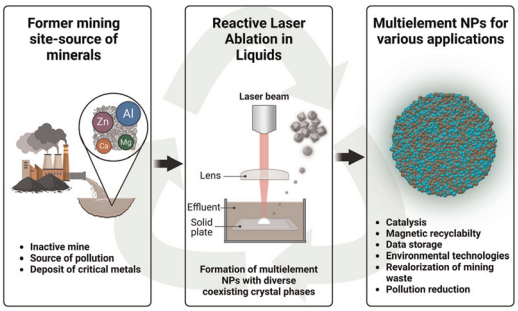

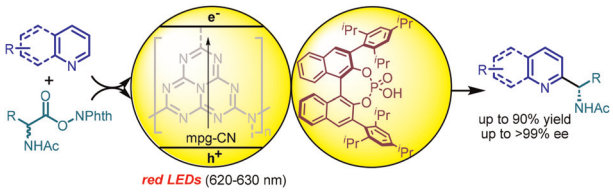

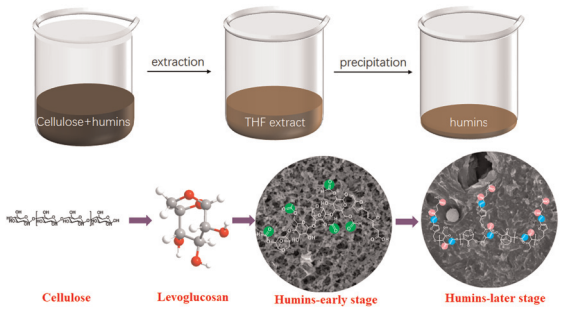

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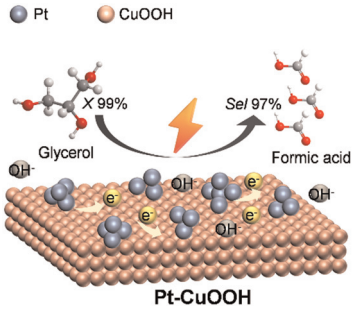

CORRECTION

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