

Green Chemistry

Cutting-edge research for a greener sustainable future

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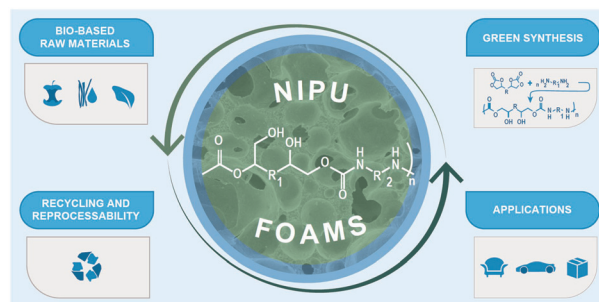
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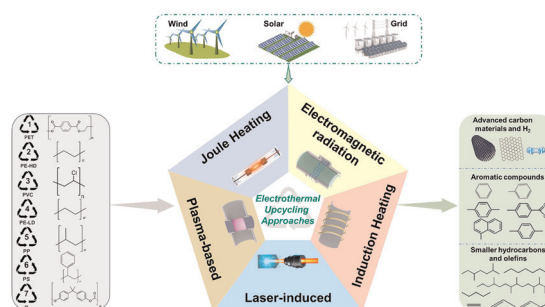


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Electrothermal upcycling of plastic waste

Chunlin Luo, Shuai Liu, Tao Wu, Jianli Hu and Yuxin Wang*



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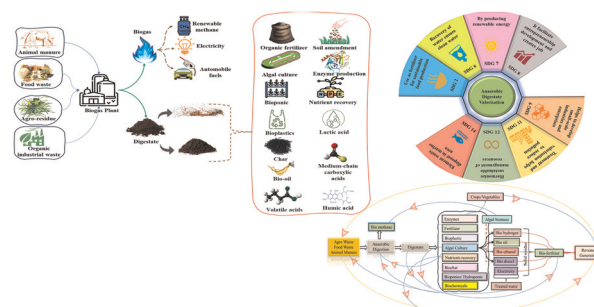


TUTORIAL REVIEWS

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Anaerobic digestion-derived digestate valorization: green chemistry innovations for resource recovery and reutilization

Samuel Jacob, Debajyoti Kundu,*
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 Palas Samanta, Chandan Mahata, Sukhendu Dey,
 R. G. Shibirathna, Arun Barathi, Sunil Kumar,
 Zhiwu Wang and Gaurav Goel

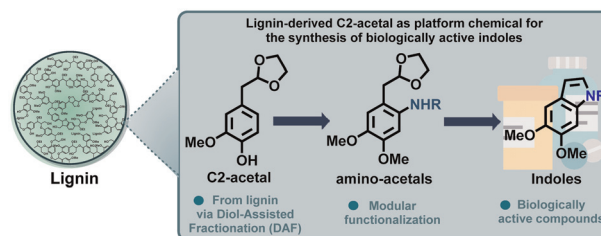


COMMUNICATIONS

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Modular synthetic routes to biologically active indoles from lignin

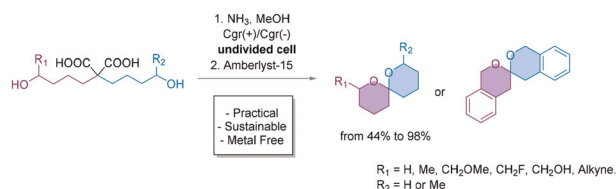
Antonio A. Castillo-Garcia, Jörg Haupenthal, Anna
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eSpiro: A scalable and sustainable electrosynthetic route to spiroketals via anodic oxidation of malonic acids

Marylise Triacca, Carl D. Reens, Hamish Stephen and
 Kevin Lam*

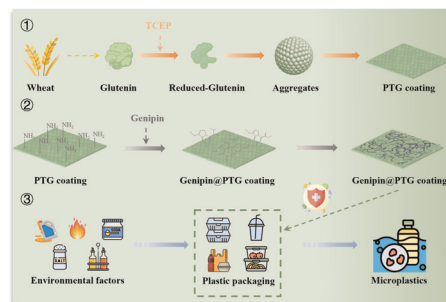


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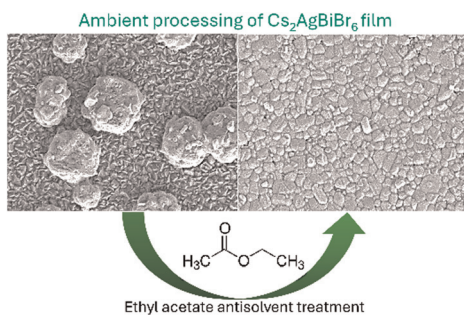
A self-adhesive glutenin-based coating cross-linked by genipin for suppressing microplastic shedding in harsh environments

Yulun Chen, Qingrun Liu, Jianjun Ding, Shaofeng Yuan,
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PAPERS

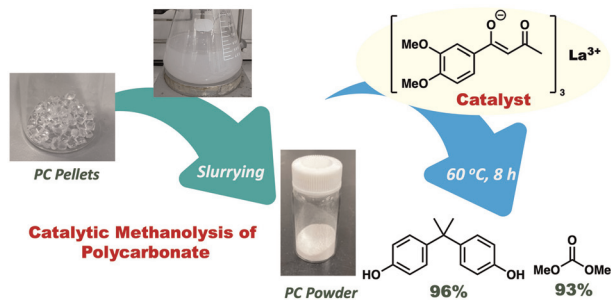
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Ambient and green processing of lead-free double perovskite $\text{Cs}_2\text{AgBiBr}_6$ films

Qian Chen,* Abhinav K. Singh, Hissah Alghathami, Xuzhao Liu, Kun Huang, Andrew G. Thomas, Richard J. Curry, Laurie J. Phillips and Amanda J. Hughes*

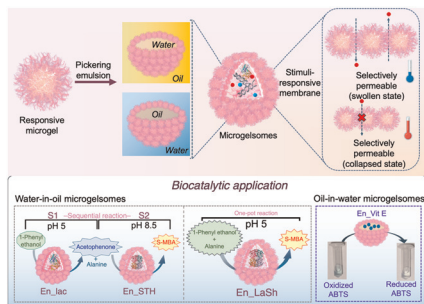
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Efficient low-temperature depolymerization of polycarbonate catalyzed by lanthanum β -diketonate complexes

Yuhō Kinbara, Haruro Ishitani* and Shū Kobayashi*

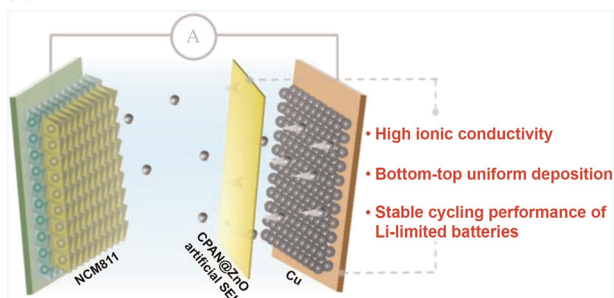
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Microgel-engineered temperature-responsive microcapsules at liquid interfaces for sequential biocatalytic reactions

Divya Gaur, Wasia Khanam, Nidhi C. Dubey and Bijay P. Tripathi*

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High ionic conductivity conjugated artificial solid electrolyte interphase enabling stable lithium metal batteries

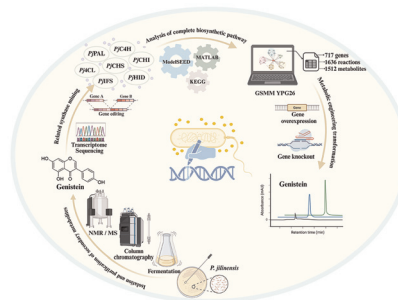
Dong Yan, Yuhao Ma, Hao Wang, Weishang Jia, Xiaobin Niu, Haibo Wang,* Wei Zou* and Liping Wang*



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Discovery and green metabolic engineering of a self-sufficient genistein pathway in *Paenibacillus jilinensis*

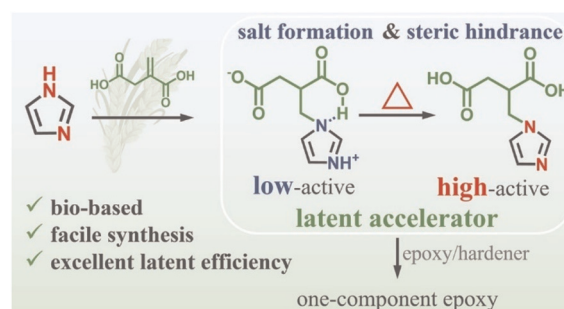
Jia Bao Zhang, Wei Chen, Yong Jun Yang* and Zhen Zhen Liu*



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Bio-based, high-latent-efficiency cross-linking accelerator with steric hindrance and salt formation effects

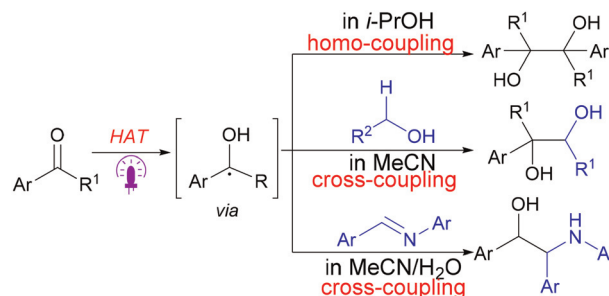
Changhui Jing, Falin Li, Shuai Du, Xin Wang, Fengyuan Zhang and Songqi Ma*



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Direct metal-free homo-/cross-coupling of carbonyls with alcohols or imines under ambient light

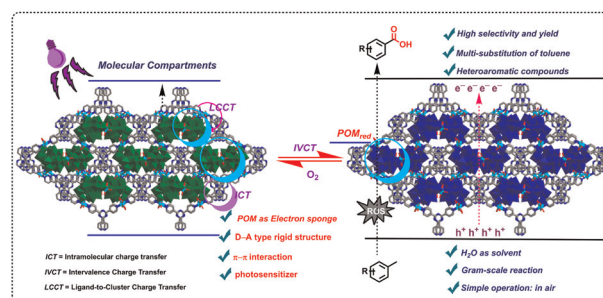
Tongyu Han, Shiqian Zhang, Jinya Li, Quansheng Mou, Jian Gao, Bowen Cao, Chao-Jun Li* and Mingxin Liu*



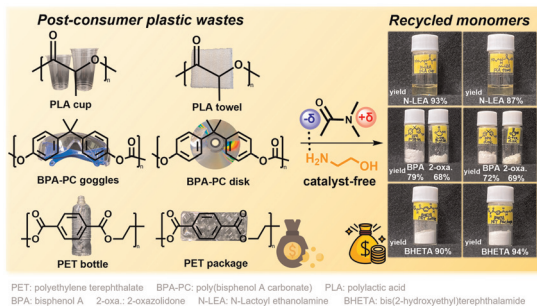
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Photocatalytic oxidation of various C–H bonds by a polyoxometalate nanocluster-dominated compartmentalized metal–organic framework

Jiachen Jiao, Chuanbao Zhang, Hui Sun, Haina Hu, Ziqing Xu, Junwei Zhao, Qiuxia Han* and Pengtao Ma*



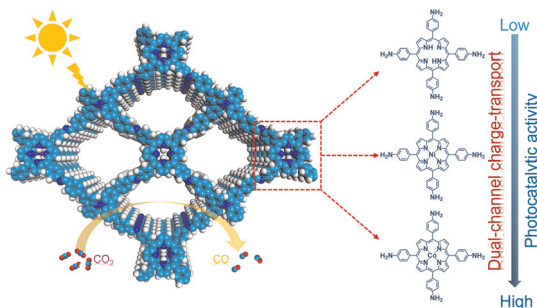
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Solvent-promoted catalyst-free aminolytic degradation for chemical recycling of single and mixed plastic wastes

Kai Cheng, Yu-I. Hsu* and Hiroshi Uyama*

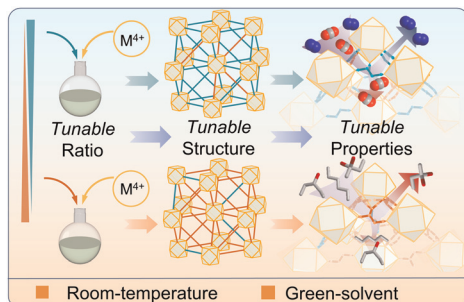
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Tuning charge-carrier transport in isostructural covalent organic frameworks for enhanced photocatalytic CO₂ reduction

Yize Zhang, Haobo Xu, Hangshuai Li, Junrong Jiao,*
Xin Wen, Qinggang Meng and Xingwang Lan*

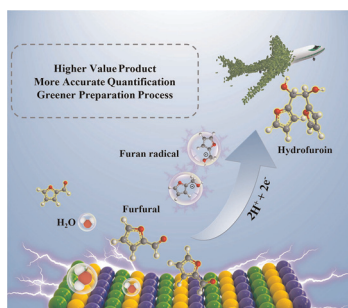
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Pore tuning in multivariate Zr/Ce-MOFs utilizing C4 natural linkers through room-temperature synthesis for customized adsorptive separation of gases and vapours

Bochun Zhang, Qingqing Yan and Sujing Wang*

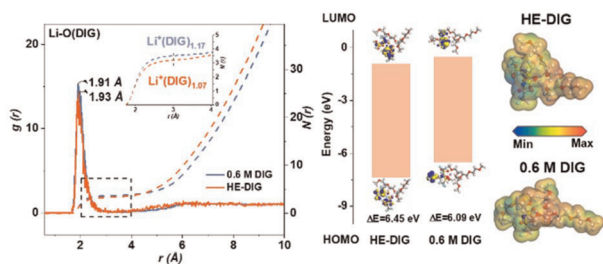
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Efficient radical-driving electrocatalytic dimerization of furfural to jet fuel precursors using WMoB nanoflakes

Xiaodie Zhang, Bin Liu, Yuchen Wang, Ying Long,*
Zhenhao Xu, Hua-Tay Lin, Rafael Luque* and Kai Yan*

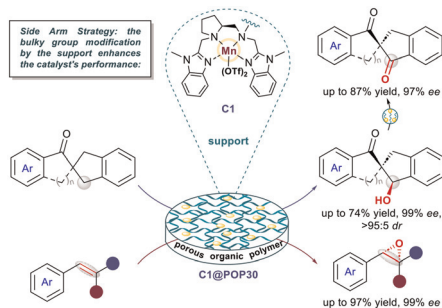
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An entropy-driven multi-anionic electrolyte for Li-ion batteries with high voltage stability and superior temperature adaptability

Jia-Zhen Zhao, Fu-Da Yu,* Hai-Nan Wang, Ji-Huai Wu, Zhang Lan, Yi-Ming Xie and Lan-Fang Que*

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Supported manganese catalysts achieve highly efficient C–H bond oxidation and olefin epoxidation

Yirui Chen, Yuqi Cheng, Wanting Tong, Hangtao Wu, Chuhan Zhao, Dingguo Song, Fei Ling* and Weihui Zhong*

