

Green Chemistry

Cutting-edge research for a greener sustainable future

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See Peiyuan Yao,
Qiaqing Wu,
Dunming Zhu *et al.*,
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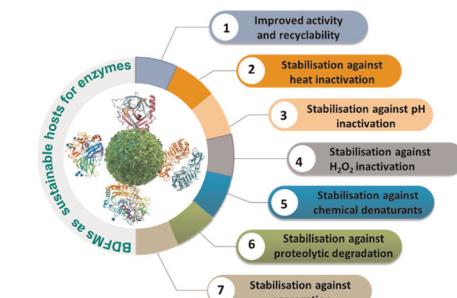
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CRITICAL REVIEW

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Biomass-derived functional materials as carriers for enzymes: towards sustainable and robust biocatalysts

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Dibyendu Mondal*



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Paweł Mateusz Nowak

Unified Greenness Theory



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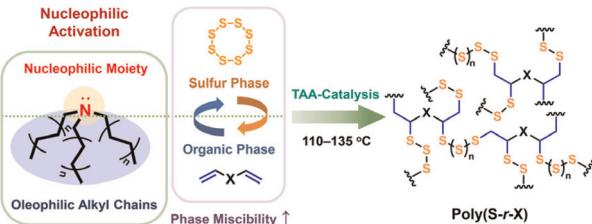


COMMUNICATIONS

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Inverse vulcanization of elemental sulfur catalyzed by trialkyl amines

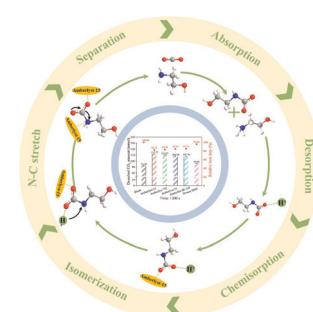
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Qiang Sun, Jia Xiong, Hongxia Gao,* Teerawat Sema, Wilfred Olson and Zhiwu Liang*



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An electrochemical-enabled cascaded cyclization of enaminones with potassium thiocyanate and alcohols to access 2-alkoxythiazoles

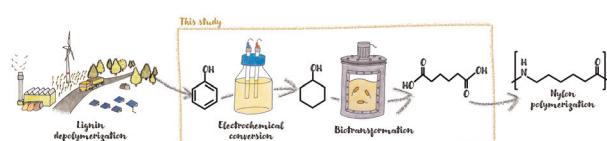
Dandan Li,* Long Chen, Yang Jin, Xiaochen Wang, Long Liu, Yilin Li, Gongyuan Chen, Guanhao Wu, Yujie Qin, Leilei Yang, Mengke Wang, Lulu Zhao, Zhihong Xu and Jiangwei Wen*



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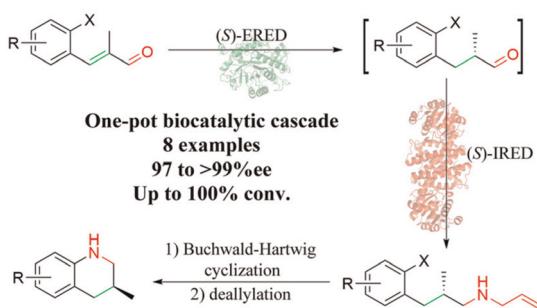
Integrated electrosynthesis and biosynthesis for the production of adipic acid from lignin-derived phenols

Micjel Chávez Morejón, Alexander Franz, Rohan Karande* and Falk Harnisch*



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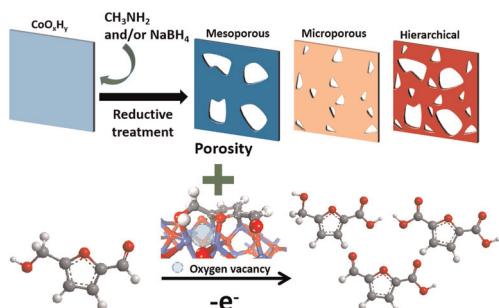
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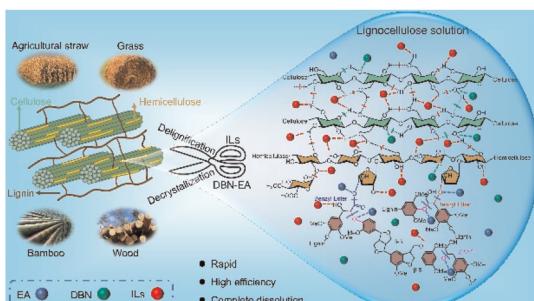
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Ruyi Zhong, Puwei Wu, Qi Wang, Xiting Zhang, Lei Du, Yunhua Liu, Huakang Yang, Meng Gu, Z. Conrad Zhang, Limin Huang* and Siyu Ye*

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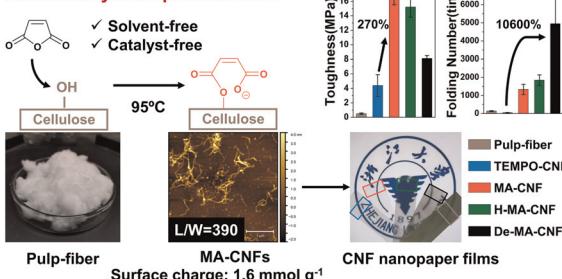


Robust ionic liquid/ethanolamine-superbase solvents enable rapid, efficient and mild dissolution of lignocellulosic biomass

Yang Wang, Huan Wang, Lan Chen, Weitao Wang, Zhaohui Yang, Zhimin Xue* and Tiancheng Mu*

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Eco-friendly cellulose nanofibrils with high surface charge and aspect ratio for nanopaper films with ultrahigh toughness and folding endurance

Da Zhang, Kexia Jin, Khak Ho Lim, Suyun Jie, Wen-Jun Wang and Xuan Yang*

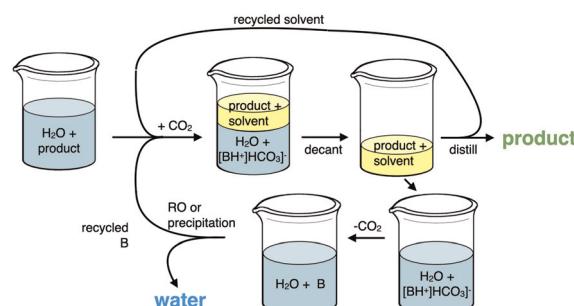


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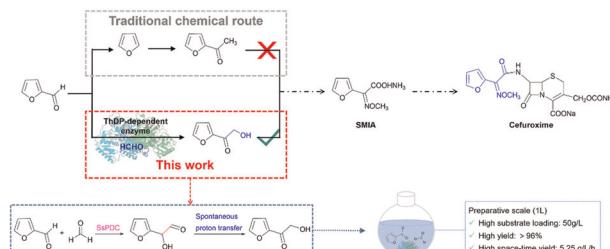
Vanessa Saab Liberato, Tatiana Felix Ferreira, Alex Redmond MacDonald, Bernardo Dias Ribeiro, Maria Alice Zarur Coelho and Philip G. Jessop*
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Biosynthesis of 2-furylhydroxymethylketone, an intermediate of cefuroxime, from furfural and formaldehyde using a ThDP-dependent enzyme

Xianghe Zhang, Hao Wei, Xinlin Wei, Tengteng Qi, Xinrui Zong, Zixi Liu, Jie Qin, Xiuzhen Gao,* Gengxiu Zheng* and Qinyuan Ma*



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High-purity polypropylene from disposable face masks via solvent-targeted recovery and precipitation

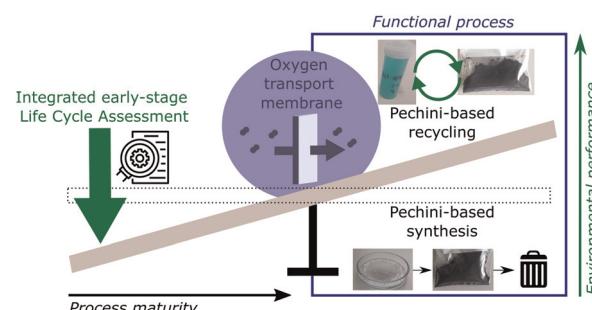
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Recycling process development with integrated life cycle assessment – a case study on oxygen transport membrane material

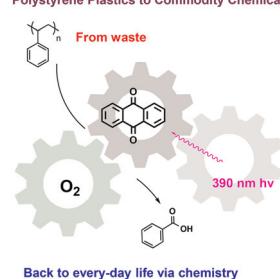
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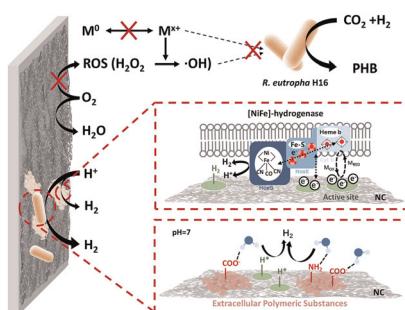
Photochemical Aerobic Upcycling of Polystyrene Plastics to Commodity Chemicals



Photochemical aerobic upcycling of polystyrene plastics to commodity chemicals using anthraquinone as the photocatalyst

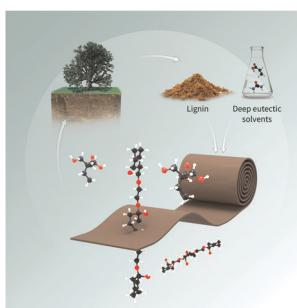
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Efficient CO_2 conversion by biocompatible N-doped carbon nanosheets coupled with *Ralstonia eutropha*: synergistic interactions between microbial and inorganic catalysts

Jiani Yao, Youzhi Li, Siyuan Xiu, Shujie Zheng, Ying Huang, Zijing Zhou, Yang Hou, Bin Yang, Lecheng Lei and Zhongjian Li*

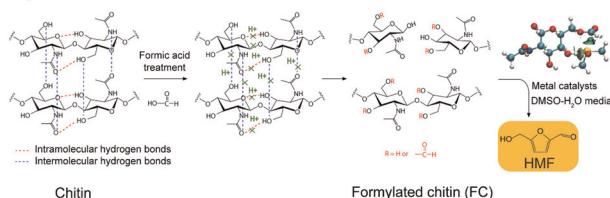
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A lignin-based membrane fabricated with a deep eutectic solvent

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Efficient conversion of chitin into 5-hydroxymethylfurfural via a simple formylation step under mild conditions

Chunxiao Gong, Zhaoyang Ju, Kuichuan Sheng and Ximing Zhang*

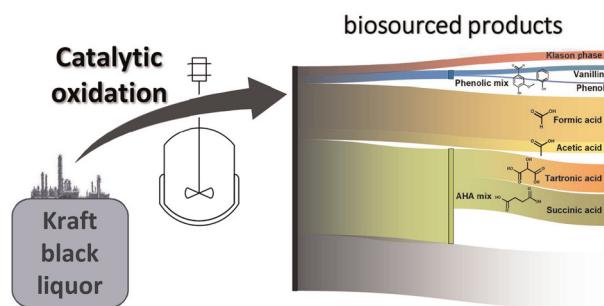


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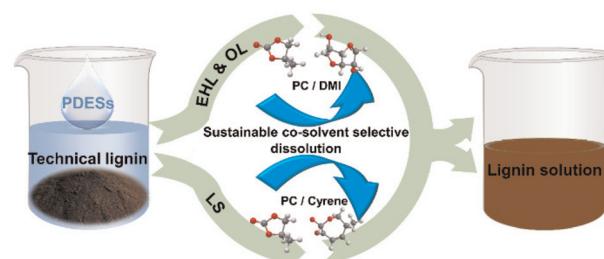
Lea Vilcocq,* Nicolas Chaussard, Antonio Hernández Mañas, Olivier Boyron, Manel Taam, Frédérique Bertaud, Pascal Fongarland and Laurent Djakovitch*



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Sustainable polar aprotic/poly-deep eutectic solvent systems for highly efficient dissolution of lignin

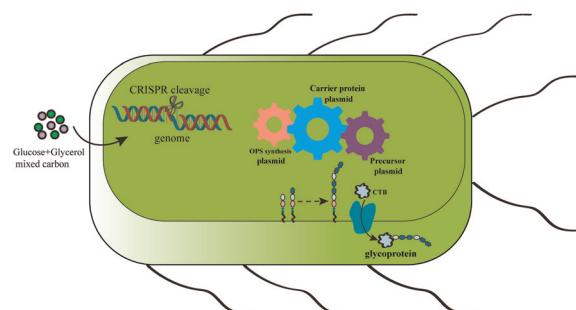
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Sustainable production of a polysaccharide-based glycoprotein by simultaneous conversion of glucose and glycerol in engineered *Escherichia coli*

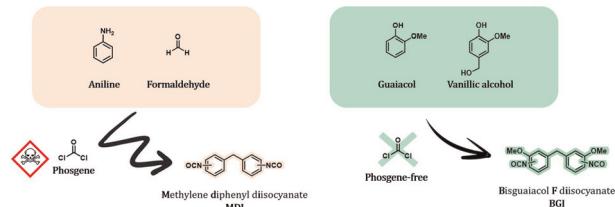
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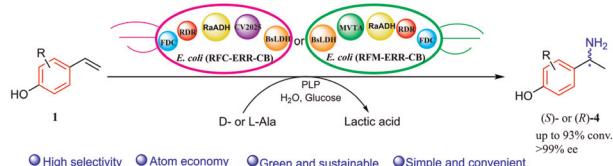
Lignin-based bisguaiacol diisocyanate: a green route for the synthesis of biobased polyurethanes

Sébastien Lemouzy, Aliénor Delavarde, Frédéric Lamaty, Xavier Bantreil, Julien Pinaud and Sylvain Caillol*



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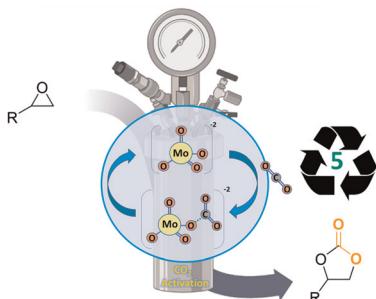
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Qi Jin, Jingqi Zhang, Shuangping Huang, Lili Gao, Honghong Chang and Jiandong Zhang*

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Nicola Bragato, Alvise Perosa, Maurizio Selva, Giulia Fiorani* and Roberto Calmanti*

CORRECTION

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Correction: Sustainable pathway to furanics from biomass *via* heterogeneous organo-catalysis

Sanny Verma, R. B. Nasir Baig, Mallikarjuna N. Nadagouda, Christophe Len and Rajender S. Varma*

