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Cover

See Satish K. Nune, David J. Heldebrant et al., pp. 2392-2403.

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COMMUNICATION

2386

Photo-induced intramolecular alkyl/aryl group transfer and SO₂ insertion: a new strategy for the synthesis of 3-(alkyl/arylsulfonyl)benzothiophenes

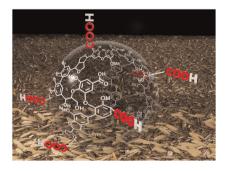
Tiantian Xu, Fen-Dou Wang, Wen-Chao Yang,* Tong Lu, Min Wang* and Pinhua Li*

PAPERS

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Carbon dioxide-negative composite materials: an economically viable solution for CO₂ sequestration

Keerti S. Kappagantula, Yuan Jiang, Francesca Pierobon, MD Reza E. Rabby, Jose Ramos, Yelin Ni, Aditya Nittala, Jaelynne King, Ethan Nickerson, Nicholas C. Nelson, Wontae Joo, Raveen John, John C. Linehan, Raul N. Aranzazu, Satish K. Nune* and David J. Heldebrant*







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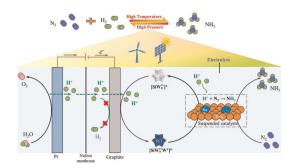
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Electrochemical hydrogenation of nitrogen to ammonia under ambient conditions in a suspended dual-catalyst system

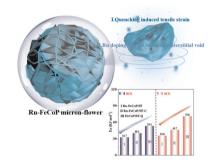
Yue Zhang, Wei Sun,* Rui-shuang Zhang, Yan Feng, Bin Dai* and Jichang Liu



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Tensile-strain-driven interstitial Ru doping structure on an FeCoP/FF electrode accelerates the reaction kinetics of water electrolysis

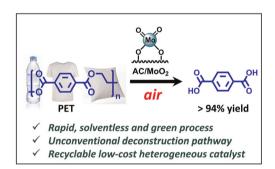
Lu Zhan, Yanru Liu, Guizhong Zhou,* Kang Liu, Yunmei Du* and Lei Wang



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Thermodynamically leveraged solventless aerobic deconstruction of polyethylene-terephthalate plastics over a single-site molybdenum-dioxo catalyst

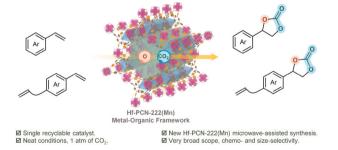
Naveen Malik, Jiaqi Li, Amol Agarwal, Yosi Kratish* and Tobin J. Marks*



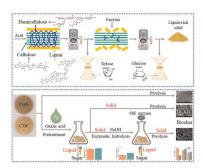
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Auto-relay catalysis for the oxidative carboxylation of alkenes into cyclic carbonates by a MOF catalyst

Ha Phan, Pol de la Cruz-Sánchez, María Jesús Cabrera-Afonso and Belén Martín-Matute*



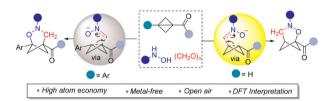
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Advancing biomass utilization: conversion of solid residues from pretreatment and enzymatic hydrolysis into porous carbon materials

Wubliker Dessie, Qiao Wang, Xiaofang Luo, Meifeng Wang, Yunhui Liao, Wufei Tang, Fulin He, Jianhua Wang, Mohammad Rizwan Khan, Zuodong Qin* and Buxing Han*

2464



Amine-promoted three-component cycloaddition of bicyclo[1.1.0] butanes with hydroxylamine and polyformaldehyde: expedient access to 2-oxa-3-azabicyclo[3.1.1]heptanes

Yu Zhu, Xueli Lv, Jun Hong, Shengxing Wu, Zhi Li, Minyan Wang* and Xinpeng Jiang*

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- NFSAs: simpler radial fluorosulfonylation reagent; one-step preparation; SO₂F₂ gas free
- 1,3-dioxolane as both solvent and hydrogen donor enhanced atom economy

Photocatalytic hydro-fluorosulfonylation of alkenes with N-fluorosulfonyl aldimines

Xiang Zhou, Sheng-Cai Wang, Qi-Long Chen, Zi-Yan Zhang, Yan-Shi Xiong,* Gui Lu and Jiang Weng*

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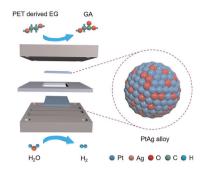
Intelligent metal recovery from spent Li-ion batteries: machine learning breaks the barriers of traditional optimizations

Shanshan E, Bo Niu,* Jia Liu, Yilin Yuan, Jiefeng Xiao and Zhenming Xu

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Bifunctional PtAq-enabled oscillation electrorefining of PET waste-derived ethylene glycol and water for rapid glycolic acid and H₂ coproduction

Xin Hu, Luliang Liao, Li-Ming Yang, Bao Yu Xia* and Bo You*



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Tunable selective electrochemical selenization of tetrahydroquinolines with diselenides

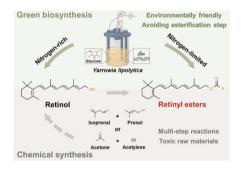
Lan-Xi Zong, Yu-Fang Tan, Yu-Hao Yang, Yan-Hong He* and Zhi Guan*



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Biosynthesis of retinyl esters in Yarrowia lipolytica through metabolic engineering and fermentation condition optimization

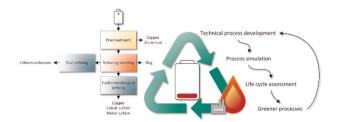
Jin Zhang, Lingxuan Sun, Wenli Yang, Huangwei Xu, Juzheng Sheng, Mengmeng Liu, Qingsheng Qi and Jin Hou*



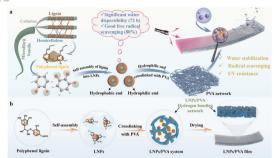
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Evaluating the possibilities and limitations of the pyrometallurgical recycling of waste Li-ion batteries using simulation and life cycle assessment

Marja Rinne, Heikki Lappalainen and Mari Lundström*



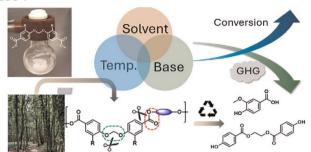
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Green extraction of polyphenolic lignin using FeCl3-mediated tartaric acid-DES and its derived lignin nanoparticles for enhancing the application performance of PVA film in green agriculture

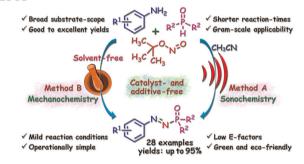
Yadan Luo, Linlin Liang, Huaying Luo, Fanyan Zeng, Chengrong Qin,* Chen Liang, Baojie Liu, Caoxing Huang and Shuangquan Yao*

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Synthesis and chemical recycling of biobased poly(acetal-ester)s with a non-cyclic acetal unit

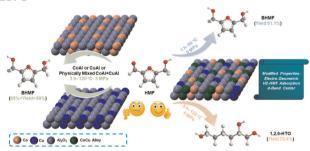
Niklas Warlin, Sathiyaraj Subramaniyan, Maria Nelly Garcia Gonzalez, Rafael N. L. de Menezes, Smita V. Mankar, Nitin G. Valsange, Nicola Rehnberg, Patric Jannasch* and Baozhong Zhang*



Sono- and mechanochemical dual syntheses of bio-relevant aryldiazenyl-substituted phosphine oxides/phosphonates via P(O)-H functionalisation

Debojyoti Mukherjee, Indrajit Karmakar and Goutam Brahmachari*

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Efficient and switchable production of bio-diol/ triol chemicals from 5-hydroxymethylfurfural

Armin Rezayan, Dan Wu, Zhen Zhang, Xiaomeng Yang, Renfeng Nie, Tianliang Lu, Jianshe Wang, Xiaogin Si, Yongsheng Zhang* and Chunbao Xu*

CORRECTIONS

2592

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*

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Correction: Efficient separation of oil—phenol mixtures and removal of neutral oil entrainment *via* an *in situ* deep eutectic method

Wanxiang Zhang, Yangchangqing Zhao, Bingru Wang, Zhigang Lei, Shuhang Ren, Yucui Hou and Weize Wu*