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IN THIS ISSUE

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Cover
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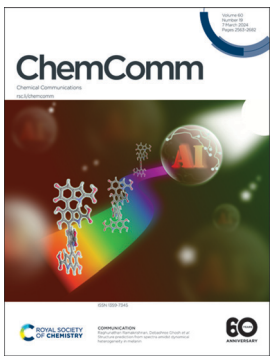


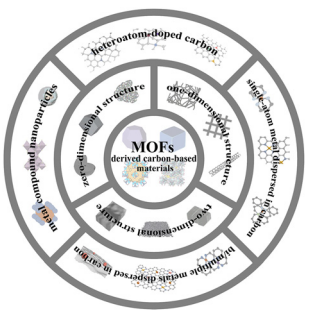
Inside cover
See Raghunathan Ramakrishnan, Debashree Ghosh *et al.*, pp. 2613–2616. Image reproduced by permission of Arpan Choudhury from *Chem. Commun.*, 2024, **60**, 2613.

HIGHLIGHT

2572

Structural and compositional analysis of MOF-derived carbon nanomaterials for the oxygen reduction reaction

Jinjie Zhang, Chengxiao Xu, Yingjie Zhang, Yuzheng Li, Bo Liu, Peipei Huo,* Dan Liu and Jianzhou Gui*

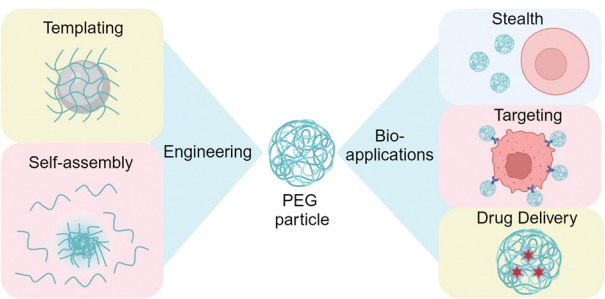


FEATURE ARTICLES

2591

Engineering poly(ethylene glycol) particles for targeted drug delivery

Shiyao Li, Yutian Ma, Jiwei Cui, Frank Caruso and Yi Ju*



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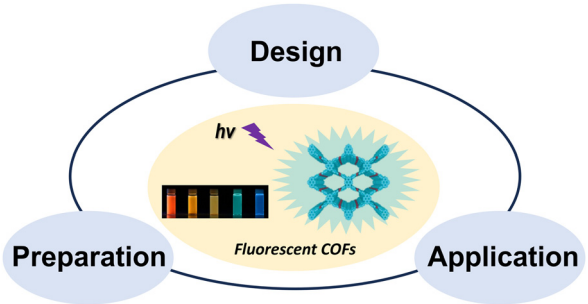
FEATURE ARTICLES

2605

Design and preparation of fluorescent covalent organic frameworks for biological sensing

Yajie Yang, Cheng Zhang, Doudou Cao, Yingbo Song, Shusen Chen, Yan Song, Fengju Wang, Guangtong Wang* and Ye Yuan*



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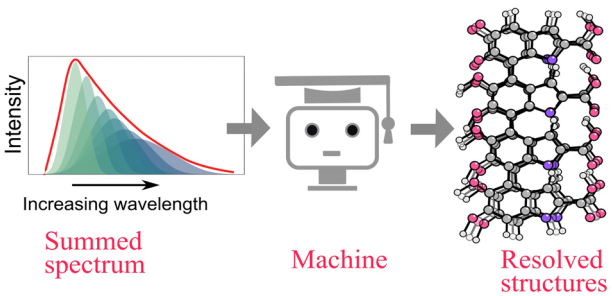
2613

Structure prediction from spectra amidst dynamical heterogeneity in melanin

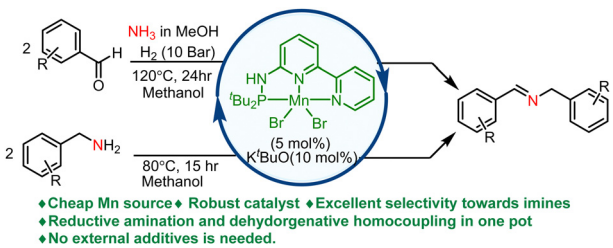
Arpan Choudhury, Raghunathan Ramakrishnan* and Debashree Ghosh*



2617

Efficient and chemoselective imine synthesis catalyzed by a well-defined PN^3-manganese(II) pincer system

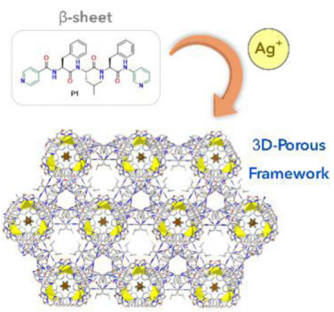
Sandeep Suryabhan Gholap, Abdullah Al Dakhil, Priyanka Chakraborty, Shashikant Dighe, Mohammad Misbahur Rahman, Indranil Dutta, Amol Hengne and Kuo-Wei Huang*



2621

Metal-driven folding and assembly of a minimal β-sheet into a 3D-porous honeycomb framework

Nikhil Bajpayee, Salil Pophali, Thangavel Vijayakanth, Shyamapada Nandi, Aamod V. Desai, Vinod Kumar, Rahul Jain, Santu Bera, Linda J. W. Shimon* and Rajkumar Misra*



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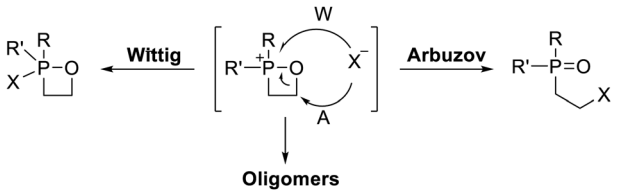
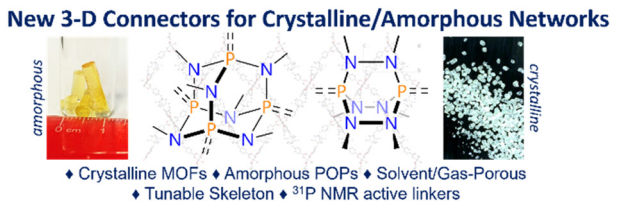
2625



Arbuzov meets 1,2-oxaphosphetanes: transient 1,2-oxaphosphetan-2-iums as an entry point to beta-halo phosphane oxides and P-containing oligomers

Florian Gleim, Gregor Schnakenburg, Arturo Espinosa Ferao* and Rainer Streubel*

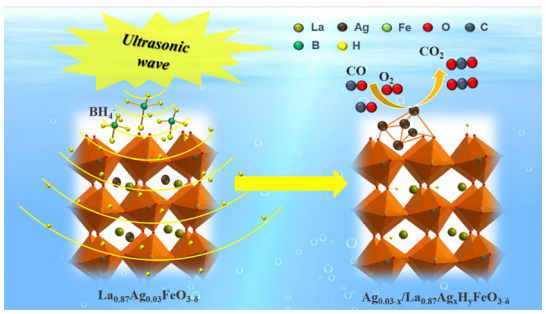
2629



Rigid PN cages as 3-dimensional building blocks for crystalline or amorphous networked materials

Mohsen Shayan, Maryam F. Abdollahi, Mason Chester Lawrence, Etienne C. Guinand, Maxime Goulet, Tanner George, Jason D. Masuda, Michael J. Katz,* Audrey Laventure,* Ulrike Werner-Zwanziger and Saurabh S. Chitnis*

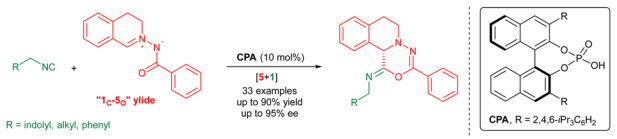
2633



Ultrasonic reduction: an unconventional route to exsolute Ag from perovskite La(Ag)$FeO_{3-\delta}$ for enhanced catalytic oxidation activity

Haijun Wu, Zhibin Geng,* Xu Zhao, Qi Wang, Ming Ya, Taotao Huang, Junzhi Li, Liping Li* and Guangshe Li*

2637



Chiral phosphoric acid-catalyzed enantioselective [5+1] cycloaddition reaction of *C,N*-cyclic azomethine imines with isocyanides

Jiulong Yu, Jinyu Wu, Yu Zhu, Dong Xiong, Lin Yang, Jun Li* and Jianfeng Zheng*

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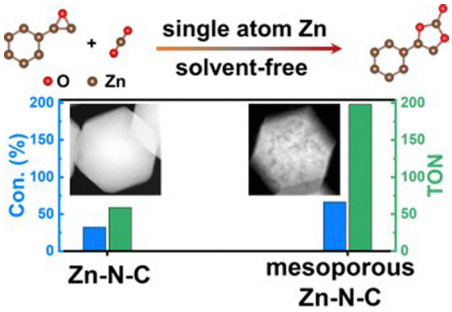
2641

Ligand-assisted formation of mesoporous Zn–N–C to realize superior catalytic activity in solvent-free CO_2 cycloaddition reactions

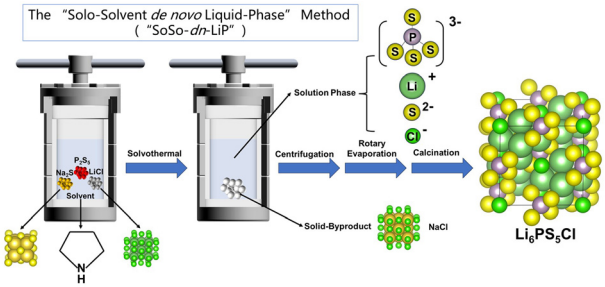
Yan Zhou, Shanshan Lv, Mengmeng Feng, Changjin Qian, Shoujie Liu* and Zheng Chen*



2645

A "solo-solvent *de novo* liquid-phase" method for synthesizing sulfide solid electrolyte Li_6PS_5Cl

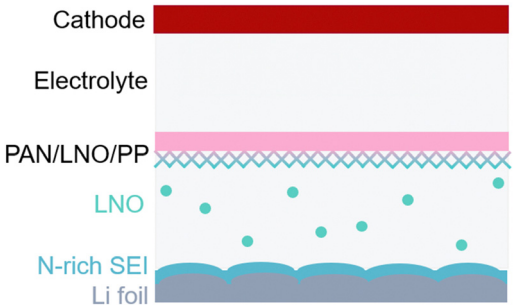
Xinyu Wang, Shijie Xu, Aiguo Han, Yujiang Sun, Yuzhe Zhang, Shunjin Yang, Xiao Sun, Yifan Yan, Haoran Qian, Yanru Wang, Jiakai Wang and Yongan Yang*



2649

Sustainable release of $LiNO_3$ in carbonate electrolytes for stable lithium metal anodes

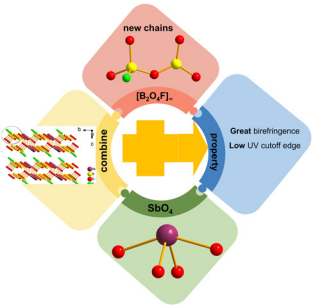
Siyu Li, Yuhang Liu, Ke Wang, Xiaoqi Hu, Wanqing Guan, Zhuzhu Du, Hongfang Du and Wei Ai*



2653

New antimony fluorooxoborates with strong birefringence and unprecedented structural characterisation

Chenhui Hu, Mengfan Wu, Jian Han,* Zhihua Yang, Shujuan Han and Shilie Pan*



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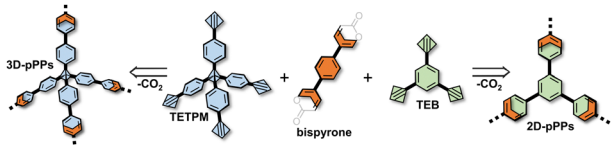
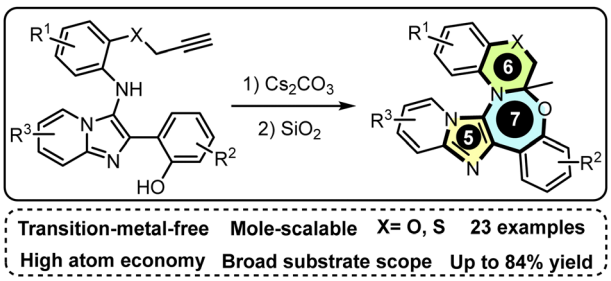


Diels–Alder cycloaddition polymerization for porous poly-phenylenes with exceptional gas uptake properties

Timur Ashirov, Patrick W. Fritz, Taner Yildirim* and Ali Coskun*

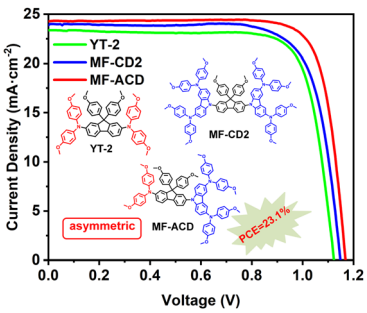
2661



Transition-metal-free intramolecular double hydrofunctionalization of alkyne to access 6/7/5-fused heterocyclic skeletons

Kimia Aghaie, Kamran Amiri, Mohammad Rezaei-Gohar, Frank Rominger, Dmitry Dar'in, Alexander Sapegin and Saeed Balalaie*

2665



An efficient asymmetric structured hole transport material for perovskite solar cells

Dan Peng, Ziyang Xia, Haoxin Wang, Cheng Chen,* Mengde Zhai,* Yi Tian* and Ming Cheng

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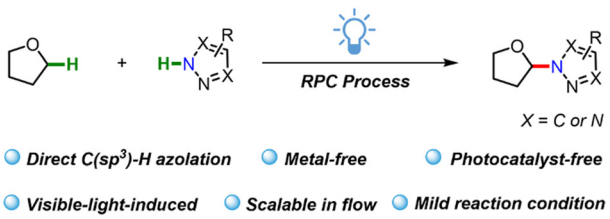

Visible light-induced C(sp^3)–H azolation of ethers *via* radical-polar crossover

Cheng Huang,* Yu-Shu Qin, Chen-Lu Wang, Peng Xiao, Sheng Tang, Hong-Jun Liu, Zhenhong Wei and Hu Cai*

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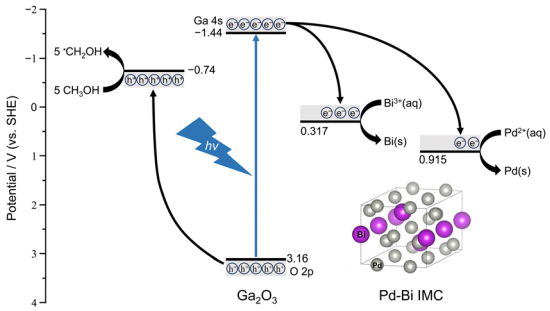
Pd_3Bi intermetallic particles prepared by the photodeposition method for photocatalytic ethane production from methane

Surya Pratap Singh, Kosuke Beppu and Fumiaki Amano*



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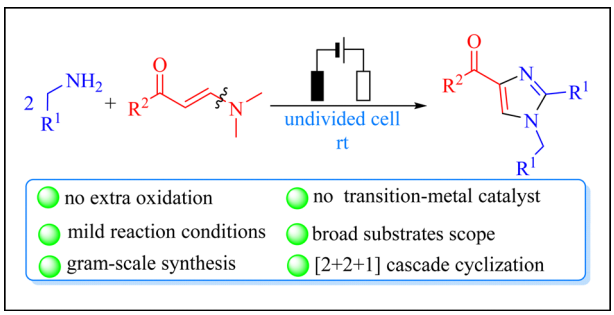
Electrochemical multicomponent [2+2+1] cascade cyclization of enaminones and primary amines towards the synthesis of 4-acylimidazoles

Mingxu Wang, Ying Gao, Xiao-Jing Zhao, Lu Gao* and Yonghui He*