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IN THIS ISSUE

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Cover
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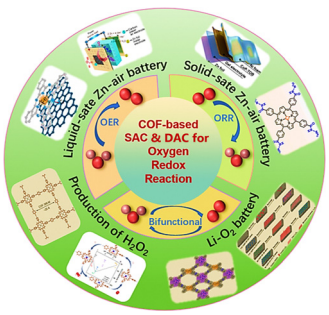
Inside cover
See Parthasarathi Subramanian *et al.*, pp. 12860–12863. Image reproduced by permission of Parthasarathi Subramanian from *Chem. Commun.*, 2024, **60**, 12860.

HIGHLIGHT

12787

Recent advances on COF-based single-atom and dual-atom sites for oxygen catalysis

Xinru Yan, Ning Liu, Wencai Liu, Jiajun Zeng, Cong Liu, Shufen Chen, Yuhua Yang, Xuchun Gui, Dingshan Yu, Guowei Yang and Zhiping Zeng*

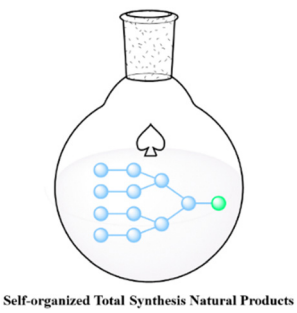


FEATURE ARTICLES

12803

Advances in the self-organized total synthesis of natural products

Li-Sheng Wang, Jia-Chen Xiang* and An-Xin Wu*



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FEATURE ARTICLES

12816

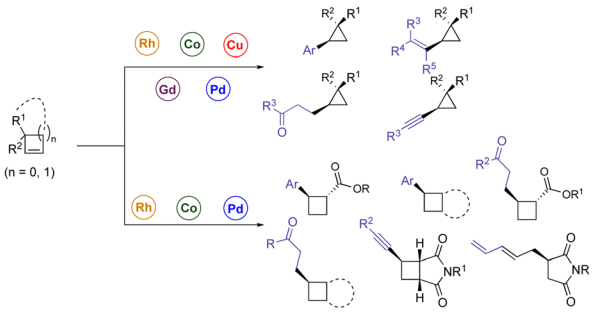
Synthesis and aromaticity of metallacyclopropene complexes

Bingjie Fu, Wei Bai,* Yang Li and Wenfeng Jiang

12830

Recent advances in catalytic enantioselective carbometallation of cyclopropenes and cyclobutenes

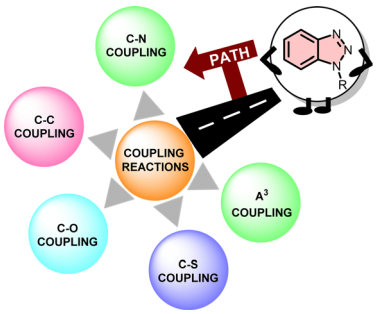
Chuiyi Lin, Qianghui Wu, Yu Wang, Qinglei Chong* and Fanke Meng*



12840

Harnessing benzotriazole as a sustainable ligand in metal-catalyzed coupling reactions

Manvi Sharma, Deepika Thakur, Nidhi and Akhilesh K. Verma*



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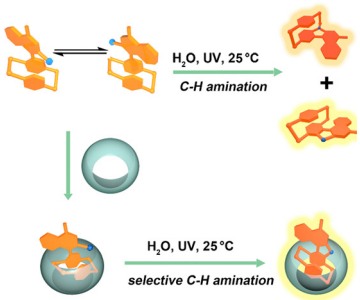
12852

A simple method to modulate the selectivity of aryl azide photolysis using cucurbit[8]uril

Xujun Qiu,* Qianyu Cai, Eric Pohl, André Jung, Haopu Su, Olaf Fuhr, Ute Schepers and Stefan Bräse*



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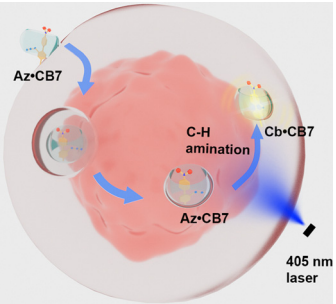
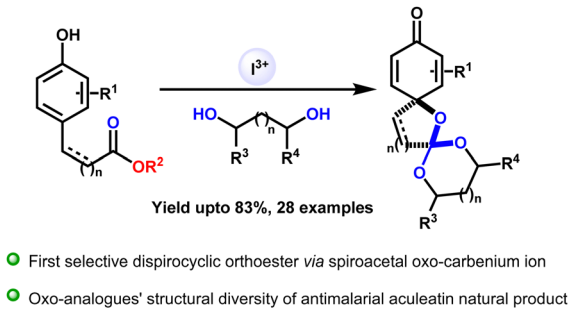
12856



Modulating the photolysis of aryl azides in a supramolecular host to develop photoactivatable fluorophores

Xujun Qiu, Eric Pohl, André Jung, Qianyu Cai, Haopu Su, Olaf Fuhr, Ute Schepers* and Stefan Bräse*

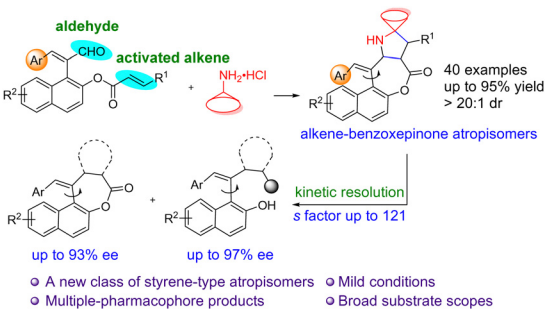
12860



Synthesis of dispiro-orthoester *via* an acetal oxo-carbenium ion

Manoj Kumar, Shubham Singh and Parthasarathi Subramanian*

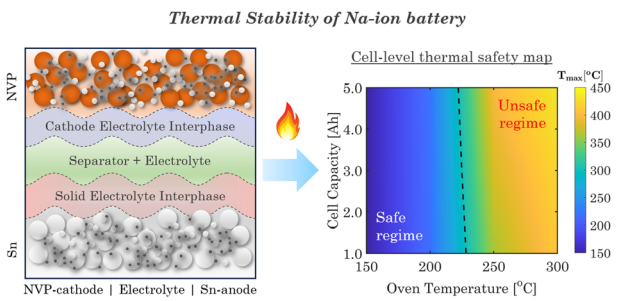
12864



Construction of atropisomeric benzoxepinone-embedded styrenes *via* intramolecular [3+2] cycloaddition and catalytic kinetic resolution

Yue Wang, Xingfu Wei, Aiqi Xue, Yue Huang, Jingping Qu and Baomin Wang*

12868



Electrode–electrolyte interactions dictate thermal stability of sodium-ion batteries

Susmita Sarkar, Avijit Karmakar, Bairav S. Vishnugopi, Judith A. Jeevarajan and Partha P. Mukherjee*

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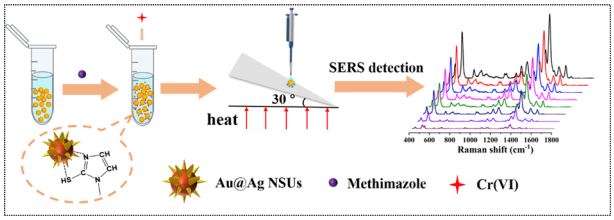
12872

Ultrasensitive surface-enhanced Raman scattering sensing of Cr(VI) with a Au@Ag nano-sea urchin paper-tip substrate

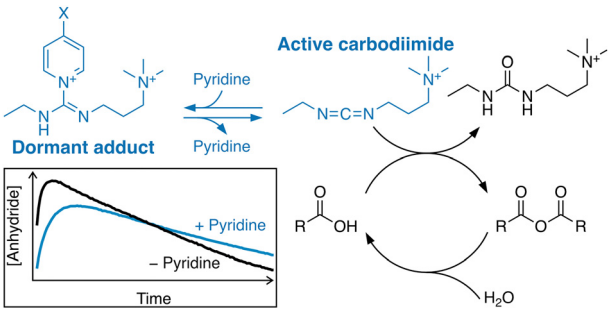
Ronghui Xu, Lu Tan, Wei Xu, Li Xiao, Yingping Zheng,* Ying Li* and Yongbing Lou*



12876

Controlling carbodiimide-driven reaction networks through the reversible formation of pyridine adducts

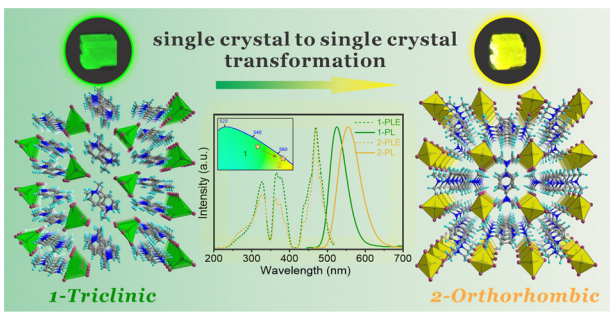
William S. Salvia, Georgia Mantel, Nirob K. Saha, Chamoni W. H. Rajawasam, Dominik Konkolewicz* and C. Scott Hartley*



12880

Promoting structural distortion to enhance the crystal field strength of Mn(II) in tetrahedral bromide for near-unity yellow emission

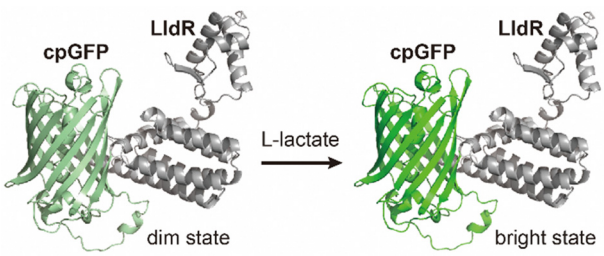
Zhikai Qi,* Ke Zhang, Xingxing Zhao, Nan Zhang, Shi-Li Li and Xian-Ming Zhang*



12884

A user-friendly fluorescent biosensor for precise lactate detection and quantification *in vitro*

Qiwei Wang, Sai Shi, Si Liu* and Sheng Ye*



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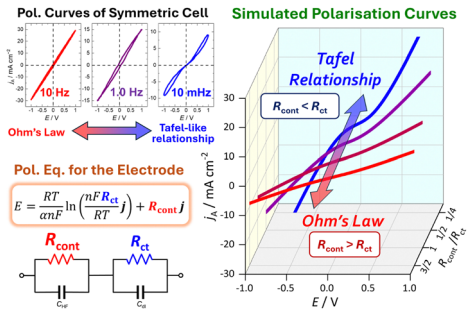
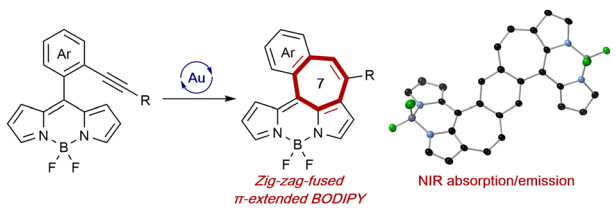
12888



Modelling and analysis of polarisation characteristics in lithium insertion electrodes considering charge transfer and contact resistances

Kingo Ariyoshi* and Yuma Nagashima

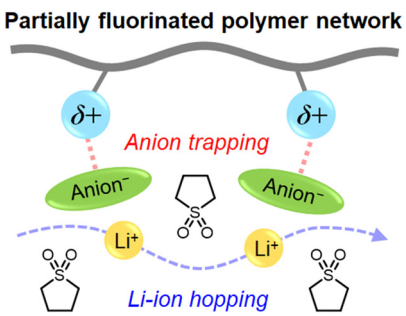
12892



Zig-zag-fused π-extended BODIPYs *via* gold-catalysed cycloisomerisation

Fumika Ohashi, Hideaki Takano* and Hiroshi Shinokubo*

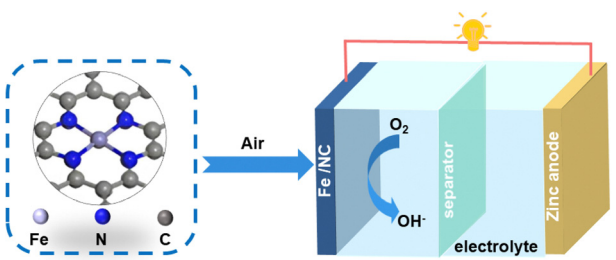
12896



A partially fluorinated polymer network enhances the Li-ion transference number of sulfolane-based highly concentrated electrolytes

Yukako Konishi, Hisashi Kokubo, Seiji Tsuzuki, Ryoichi Tatara and Kaoru Dokko*

12900



In situ biomass-confined construction of an atomical Fe/NC catalyst towards oxygen reduction reaction

Mingfu Ye, Yang Li, Jieyue Wang, Linxiao Zhan, Mingyue Wang, Chunsheng Li, Wenhai Wang,* Guohong Fan,* Chang Chen* and Konglin Wu*

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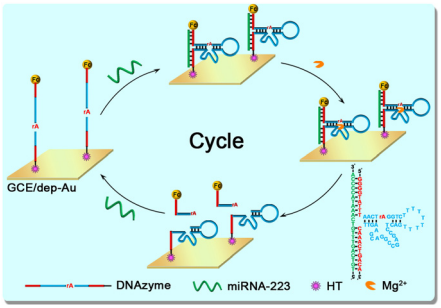
Target-assisted self-cleavage DNAzyme electrochemical biosensor for MicroRNA detection with signal amplification

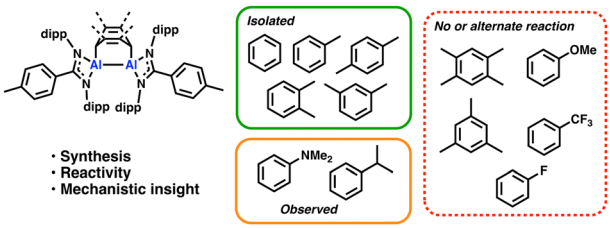
Juan Zhang, Benting Xie, Haonan He, Hejun Gao, Fang Liao,* Hongquan Fu* and Yunwen Liao



12908

Probing the reactivity of a transient Al(I) species with substituted arenes

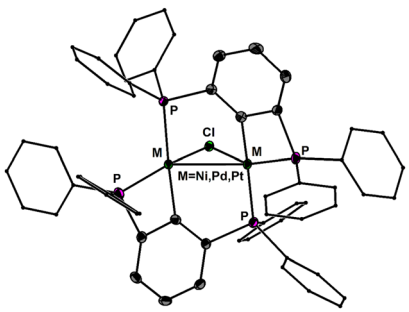
Imogen Squire, Michelangelo Tritto, Juliana Morell and Clare Bakewell*



12912

Cationic dinuclear complexes $[M_2(PCP)_2\mu\text{-}Cl][GaCl_4]$ of the group 10 elements. metallophilic interactions and catalytic dehydrogenation of Me_2NHBH_3

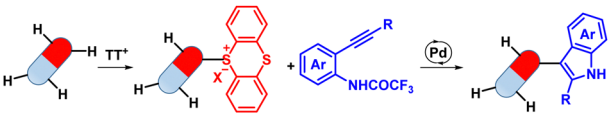
Fabio Meyer, Pim Puylaert, Daniel Duvinage, Emanuel Hupf* and Jens Beckmann*



12916

Efficient accessibility of indole and pyrrole nuclei *via* late-stage aryl C–H activation of drug molecules promoted by thianthrenium salts

Wangcheng Hu, Tingting Yang, Shuguang Chen,* Lili Yuan* and Yongjia Shang*



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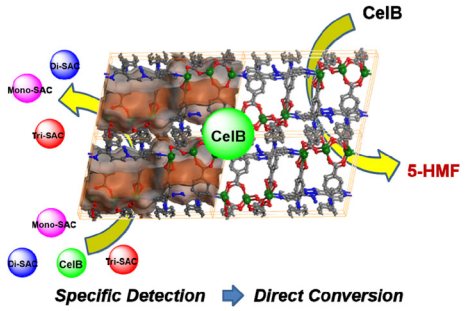
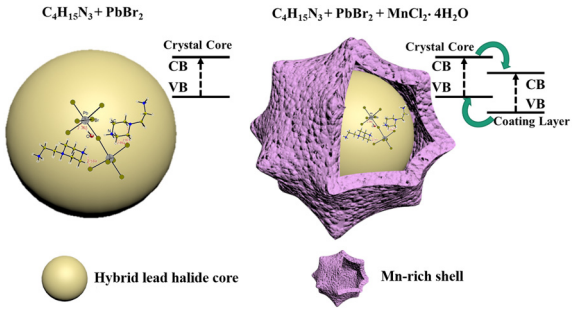


An amino and triazole-containing metal–organic framework: cellobiose sensing and its catalytic conversion under mild conditions

Fangmin Huang, Jiayi Li, Jiabiao Li, Tingyu Yang, Pengyan Wu,* Xinyu Chen, Junlei Sun, Yanhui Shi and Jian Wang*

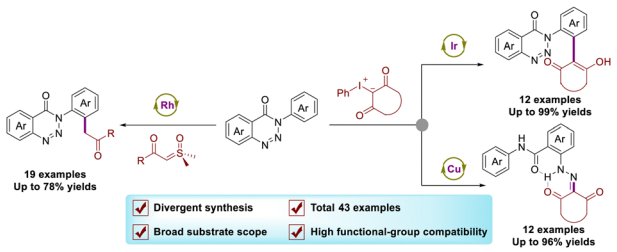
12924



A core–shell model of polymetallic hybrid metal halides

Dongjie Tian, Jie Lin, Adel Mesbah, Jiajing Zhou, Mianji Yang, Romain Gautier* and Xi Chen*

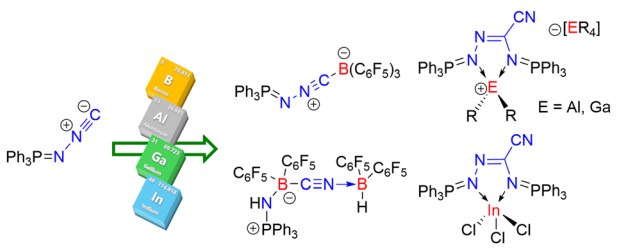
12928



Metal-catalyzed divergent synthesis from ylides with 3-arylbenzo[*d*][1,2,3]triazin-4(3*H*)-ones

Mei-Zhu Bao, Xiao-Ying Pan, Wen-Rong Wu, Lin Xiao, Jidan Liu, Xu-Ge Liu,* Shang-Shi Zhang* and Limin Zhao*

12932



Reactivity of *N*-(isocyanoimino)triphenylphosphorane toward group 13 Lewis acids

Beili Tang, Shaoying Ju, Weili Yan, Ting Chen, Douglas W. Stephan* and Yile Wu*

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