

# ChemComm

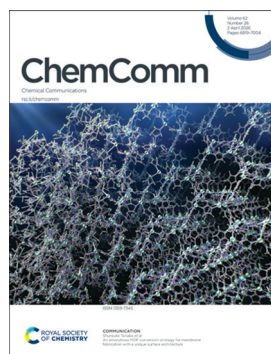
Chemical Communications

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## IN THIS ISSUE

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### Cover

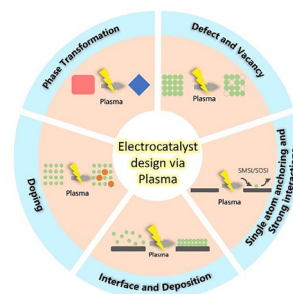
See Shunsuke Tanaka  
*et al.*, pp. 6894–6898.  
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*Chem. Commun.*,  
2026, 62, 6894.

## FEATURE ARTICLE

6830

### Non-thermal plasma restructuring of electrocatalyst surfaces for efficient hydrogen and oxygen reactions

Chu Qin, Zhenglong Tao, Xuanhao Wu\* and Zhongqing Jiang\*

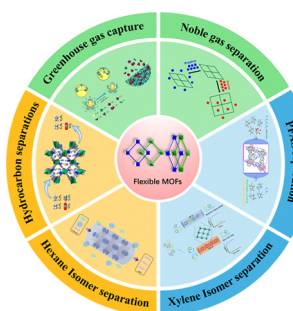


## REVIEWS

6845

### Flexible metal–organic frameworks: Frontiers in dynamic pore engineering for adsorptive separation

Andong Ouyang, Haozhe Yan, Yaoyao Peng,\* Jing Chen\* and Yu Fang\*



# EES Catalysis

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Fundamental questions  
Elemental answers

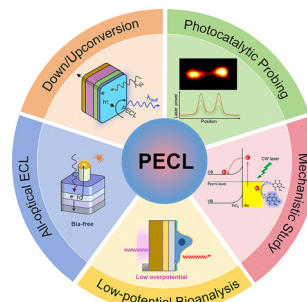


## REVIEWS

6865

### Photoinduced electrochemiluminescence: mechanistic insights and emerging applications

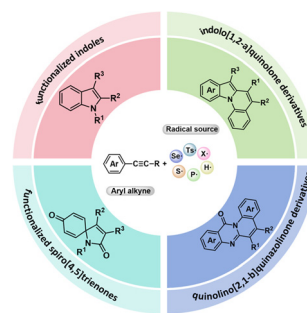
Yao Xiong, Cong-Hui Xu\* and Wei Zhao\*



6874

### Recent advances in the synthesis of polycyclic and spiro N-heterocycles via aryl alkyne-based strategies

Lili Wang, Qiyang Liu and Jinwei Yuan\*

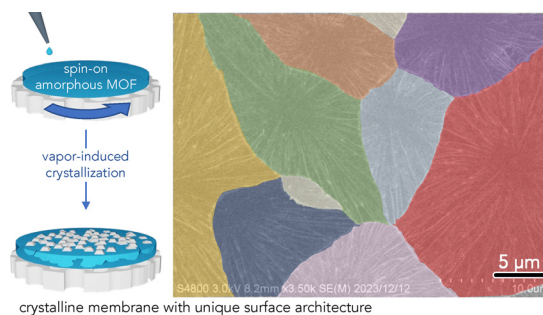


## COMMUNICATIONS

6894

### An amorphous MOF conversion strategy for membrane fabrication with a unique surface architecture

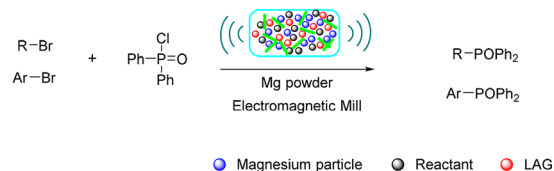
Zilun Guo, Hiroto Maruta and Shunsuke Tanaka\*



6899

### A mechanochemical construction of C–P bonds through radical–radical coupling

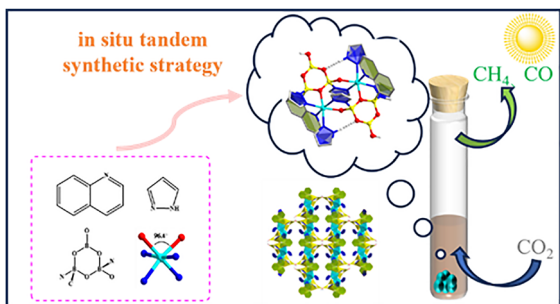
Ruizhi Sun, Juxin Jiang, Wenhao Li, Zengdian Zhao, Dong Liu,\* Hui Liu\* and Lizhi Zhang\*



- single step reaction, easy to operate
- air tolerance
- transition-metal catalyst free
- organic solvent free



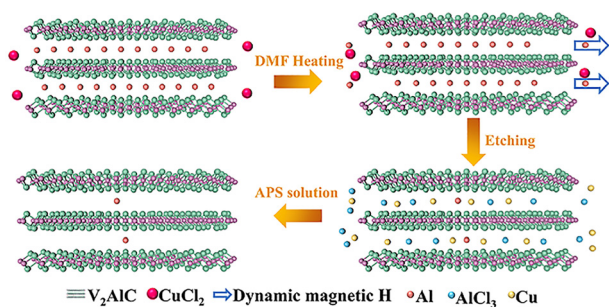
6904



### Synthesis of hybrid nickel boron–oxo clusters for photocatalytic CO<sub>2</sub> reduction

Xiang-Ming Zhang, Jiang-Hong Fu, Pan-Pan Zhao, Shumei Chen,\* Hai-Xia Zhang\* and Jian Zhang

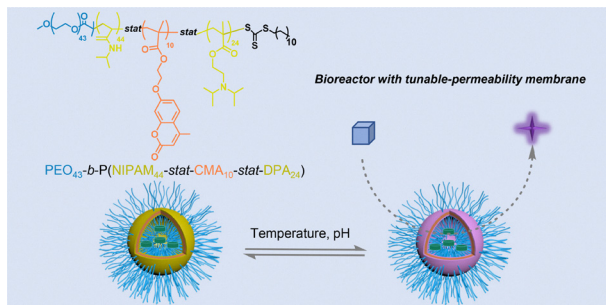
6909



### Rapid and green etching of MAX into MXene phase via a physical process

Feng Gao, Junqi Liu, Xiaohua Qiao, Qilin Zheng, Ruifeng Qi\* and Qingsong Huang\*

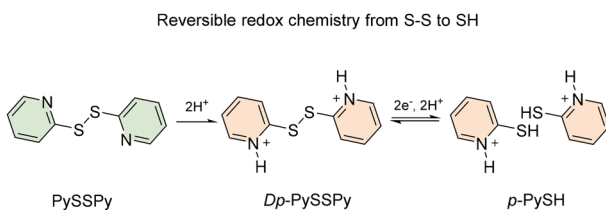
6914



### A dual-gated polymersome nanoreactor

Ping Wei,\* Dongjing Guo and Jinghua Chen\*

6919



### Reversible redox chemistry of disulfide/thiol for aqueous organic flow batteries

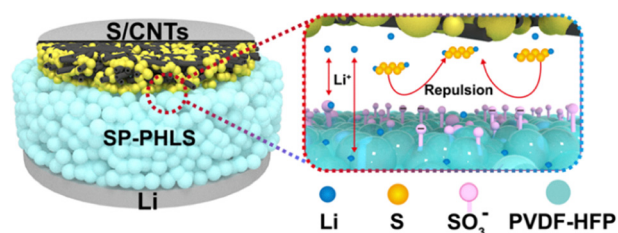
Qiliang Chen, Wei Guo and Yongzhu Fu\*



6923

### Spherulite-packed polymer electrolytes with high ion selectivity for stable lithium–sulfur battery performance

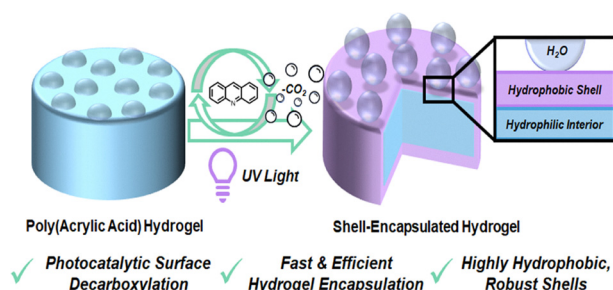
Miaofa Yuan, Leyuan Ma, Kangdong Tian, Rutao Wang, Luyuan Zhang and Chengxiang Wang\*



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### Photocatalytic surface grafting of hydrophobic shells onto hydrogels

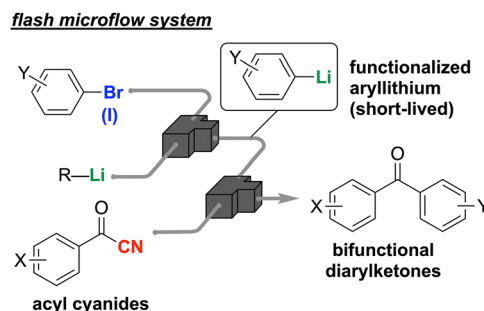
Yanru Zhao, Cabell B. Eades, Peng Yu, Xinjin Li, Xianye Li\* and Brent S. Sumerlin\*



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### Selective nucleophilic addition of aryllithium reagents to $\alpha$ -ketonitriles giving ketones under microflow conditions

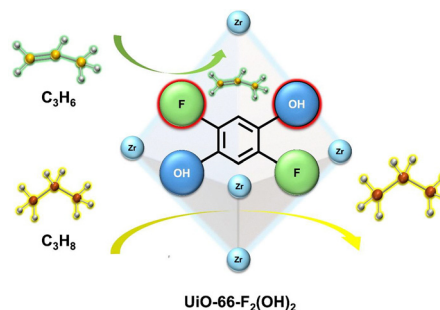
Mohammad S. Qenawy, Kazuhiro Okamoto and Aiichiro Nagaki\*



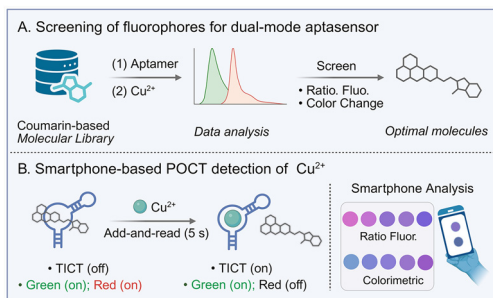
6936

### Rational integration of fluorine and hydroxyl functionalities in UiO-66 metal–organic framework for enhanced propylene/propane separation

Yao-Ting Wang, Yu-Tung Chou, Po-Chuan Chao, Anton S. Pozdeev, Alexander S. Ivanov, Yu-Chun Chuang, Chung-Kai Chang, Ilja Popovs, Watchareeya Kaveevivitchai\* and Teng-Hao Chen\*



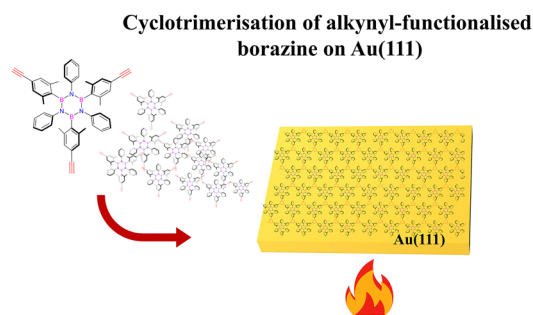
6941



### A dual-mode aptasensor integrating ratiometric fluorescence and colorimetry for on-site Cu<sup>2+</sup> detection

Lingli Bu, Xia Yang, Shenao Qu, Junhao Hu, Qingwei Cui, Mengqi Wang, Yue Wang,\* Kai Shi,\* Sheng Lei\* and Jiaheng Zhang\*

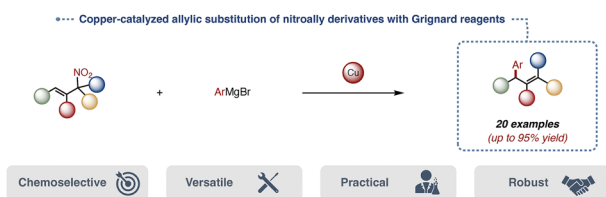
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### Nanoporous BNC network on Au(111) from a borazine-based arylalkyne

Carolina M. Ibarra-Barreno, Martina Crosta, Joel Deyerling, Alida J. van Hunnik, Knud Seufert, Davide Bonifazi,\* Willi Auwärter\* and Petra Rudolf\*

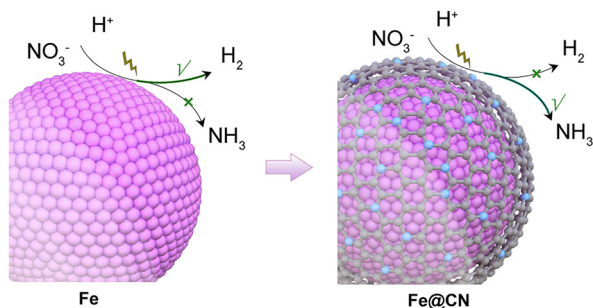
6950



### Copper-catalyzed allylic substitution of nitroallyl derivatives with Grignard reagents

Louis Clavier, Nicolas Fincias, Stellios Arseniyadis\* and Laurent El Kaim\*

6954



### Interface modulation boosts the nitrate reduction performance of iron-based catalysts

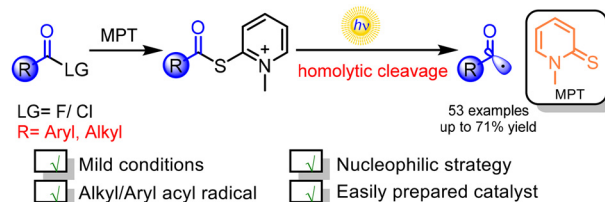
Jianlong Ma, Jiahao An, Yunpeng Zuo, Huimin Jia, Wenbiao Zhang\* and Tingting Li\*



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### Photocatalyzed generation of acyl radicals from aryl/alkyl acyl halides *via* nucleophilic substitution

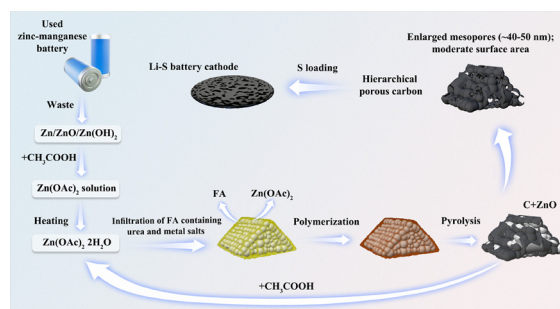
Haowen Zhan, Jiansheng Chen, Yajing Luo, Yang Ke and Xinjun Tang\*



6964

### Macro-mesoporous carbon architectures for confining sulfur and facilitating Li<sup>+</sup> transport in high-performance Li–S batteries

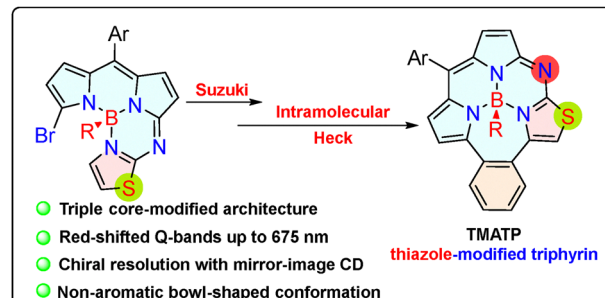
Huanyu Zhang and Limin Huang\*



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### Chiral bowl-shaped thiazole-embedded B(III)-azatriphyrins(2.1.1): a nonaromatic platform *via* triple core-modification

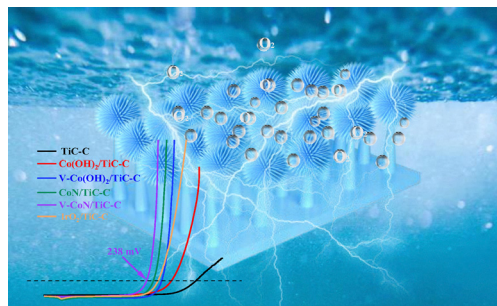
Lei Zhang, Qinghua Wu, Zhongxin Li,\* Wenxin Gu, Zhengxin Kang, Hua Wang, Long Wang, Yingjian Shang, Lijuan Jiao\* and Erhong Hao\*



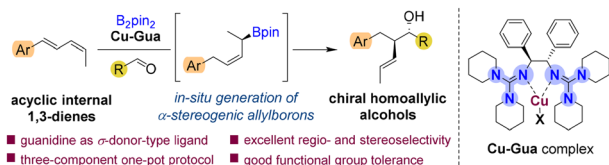
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### Electronic structure modulation of a CoN/TiC–C nanoarray by vanadium doping for enhanced alkaline oxygen evolution

Yi Sun, Weiye Shi, Zhongbao Wang, Xueyu Du, Yan Zhang, Chunqing Huo,\* Shengjue Deng\* and Shiwei Lin\*



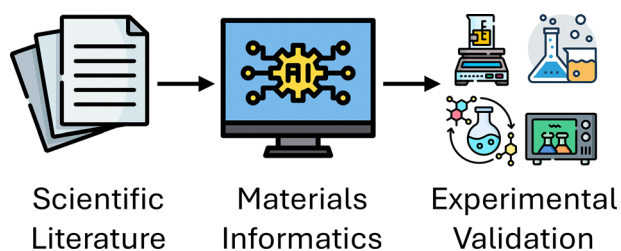
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### Cu–guanidine-catalysed asymmetric protoboration of internal 1,3-dienes for one-pot access to chiral homoallylic alcohols

Huangfeng Zhang, Ai Zhang, Tao Tang, Tao Jin, Chengzhi Wang, Yao Qin, Xiaoyan Ma, Jinghua Tang, Jinyu Liu and Yicen Ge\*

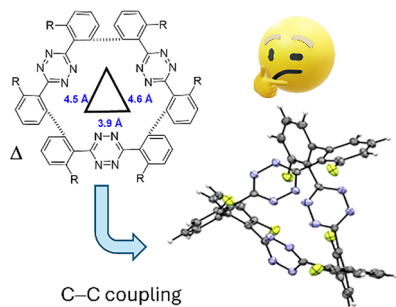
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### Domain-adapted discovery of PET depolymerisation routes using in-house curated scientific literature

Dawn Sivan, Saima Zafar, K. Satheesh Kumar, T. K. Manoj Kumar, Kohbalan Moorthy, Izan Izwan Misnon, Chun-Chen Yang and Rajan Jose\*

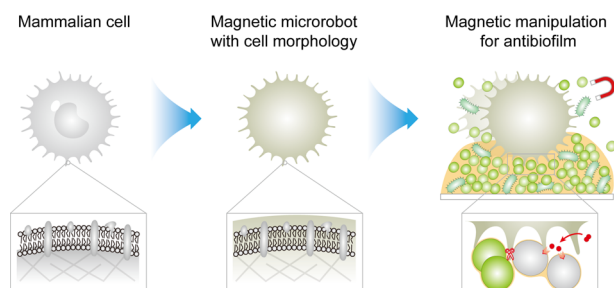
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### Small cavitated macrocycles from direct C–C coupling of *s*-aryl tetrazine units

Clève D. Mboyi, Henri Sabbadin, Marie-José Penouilh, Quentin Bonnin, Régine Amardeil, Hélène Cattey, Sophie Fournier, Charles H. Devillers, Julien Roger and Jean-Cyrille Hierso\*

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### Bioinspired antibacterial microrobots derived from mammalian cells for biofilm disruption

Yanan Chen, Junkai Ma, Liwei Fu, Zijian Zheng\* and Wenshuo Wang\*



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## From molecular tweezers to pliers: a significant enhancement of fullerene grasping capability

Mahboob Subhani, Xinliang Liu, Zhi Yu, Martin Saunders and Hai Xu\*

