

# ChemComm

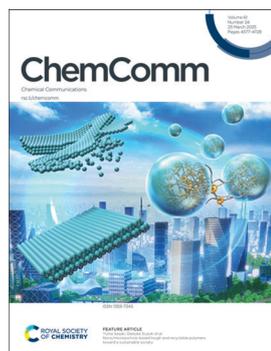
Chemical Communications

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## IN THIS ISSUE

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### Cover

See Yuma Sasaki, Daisuke Suzuki *et al.*, pp. 4606–4620. Image reproduced by permission of Daisuke Suzuki from *Chem. Commun.*, 2025, **61**, 4606.



### Inside cover

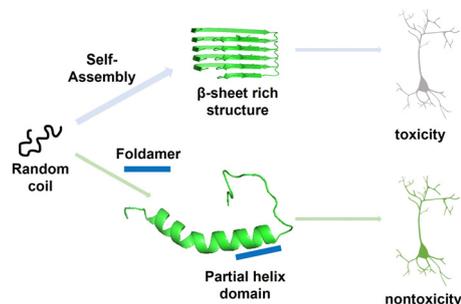
See Martin Kotora *et al.*, pp. 4662–4665. Image reproduced by permission of Martin Kotora from *Chem. Commun.*, 2025, **61**, 4662.

## HIGHLIGHTS

4586

### Unnatural foldamers as inhibitors of A $\beta$ aggregation via stabilizing the A $\beta$ helix

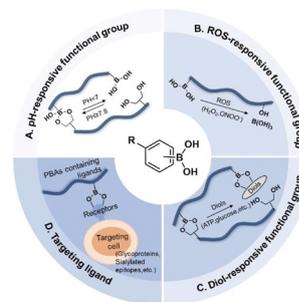
Heng Liu, Xue Zhao, Jianyu Chen, Yu Yu Win and Jianfeng Cai\*



4595

### Phenylboronic acid-modified nanoparticles for cancer treatment

Siming Zhou, Liqun Dai, Lili Pan, Guohua Shen\* and Zhiyong Qian\*



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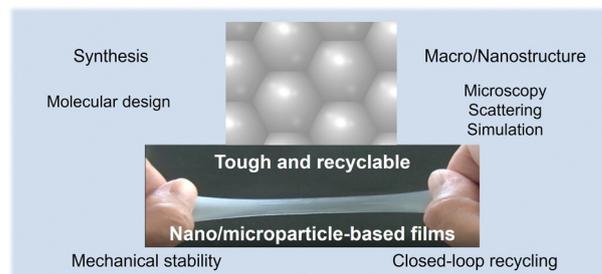
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## FEATURE ARTICLES

4606

**Nano/microparticle-based tough and recyclable polymers toward a sustainable society**

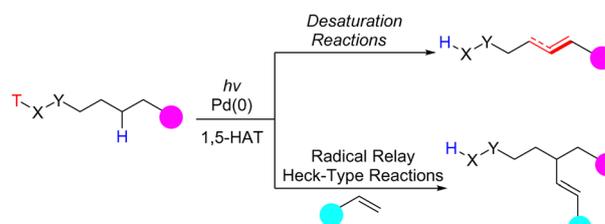
Yuma Sasaki,\* Yuichiro Nishizawa, Takuma Kureha and Daisuke Suzuki\*



4621

**Recent advances in photoinitiated Pd-catalyzed desaturation and Heck-type reactions via 1,5-hydrogen atom transfer**

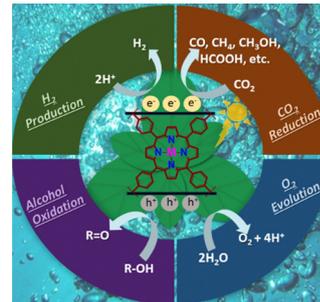
Lu-ning Tang, Jia-cheng Miao and Ming Chen\*



4630

**Metalloporphyrins in bio-inspired photocatalytic conversions**

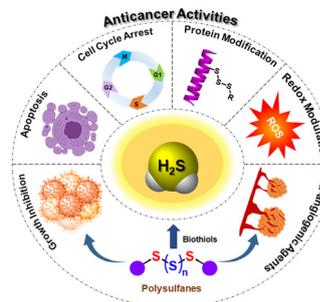
Asterios Charasiadis, Vasilis Nikolaou, Emmanouil Nikoloudakis, Kalliopi Ladomenou,\* Georgios Charalambidis\* and Athanassios G. Coutsolelos\*



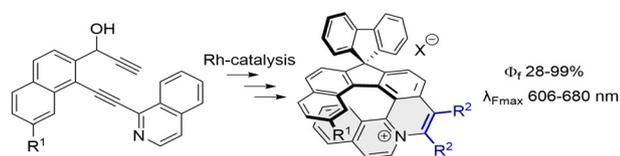
4647

**Synthetic organic polysulfanes as H<sub>2</sub>S donors and anticancer agents**

Abu Sufian, Debojit Bhattacharjee, Pallavi Barman, Rahul Kesarwani, Samanway Das and Krishna P. Bhabak\*



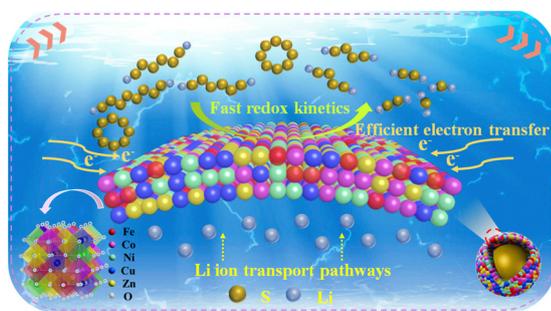
4662



### Synthesis of highly fluorescent helical quinolinizinium salts by a Rh-catalyzed cyclotrimerization/C–H activation sequence

Timothée Cadart, Lucia Feriancová, Petr Henke, Robert Gyepes, Ivana Cisařová, Květa Kalíková and Martin Kotora\*

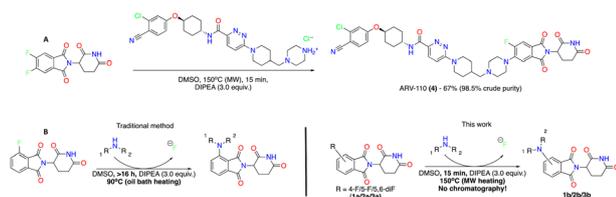
4666



### High-entropy oxide hollow spheres as efficient catalysts to accelerate sulfur conversion kinetics toward lithium–sulfur batteries

Shuang Yu, Yingying Song, Xueda Li, Fang Liu, Huining Chang, Hongqiang Wang\* and Jiao Li\*

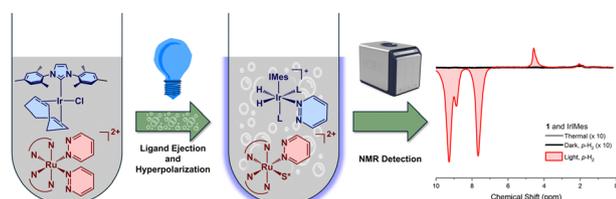
4670



### Microwave-assisted synthesis of pomalidomide building blocks for rapid PROTAC and molecular glue development

Diaeldin I. Abdallah, Johan Israelian, Lina S. Hasan, Naman H. Patel, Jeffrey W. Keillor, Timothy B. Wright, Bilal Saqib, Elvin D. de Araujo and Patrick T. Gunning\*

4674



### Photo-ejected ligands hyperpolarized by parahydrogen in reversible exchange

Emily E. Brown, Rielly J. Harrison, Dmytro Havrylyuk, Stephen J. McBride, Edith C. Glazer, Felix N. Castellano\* and Thomas Theis\*



## COMMUNICATIONS

4678

**A novel Mn@MOF-303 as a catalyst for the highly efficient S-formylation of benzyl thiols with CO<sub>2</sub>**

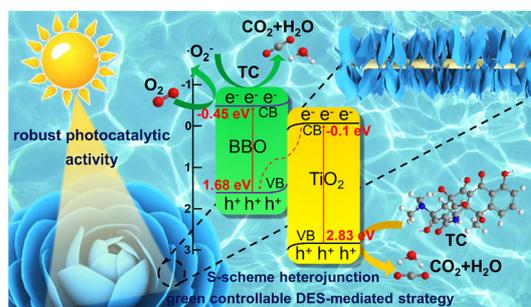
Ya-Shuai Liu, Zhi-Qiang Wang,\* Yong-Po Zhang, Wei-Yu Mu, Wen-Min Wang\* and Jin-Zhong Zhao\*



4682

**Green DES-mediated preparation of the rose-shaped S-scheme heterojunction photocatalyst ( $\beta$ -Bi<sub>2</sub>O<sub>3</sub>/Bi<sub>2</sub>O<sub>2.33</sub>)/TiO<sub>2</sub> to boost antibiotics degradation**

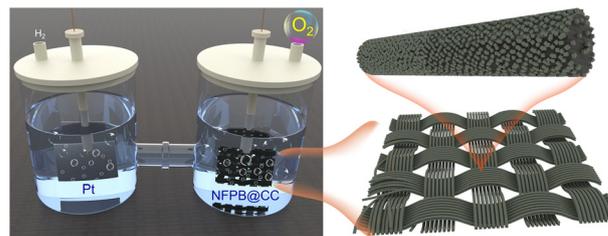
Xiaoyun Zhu, Yongjiao Hu, Lijia Wang, Xuhua Wang, Yingqiang Zhao, Qikun Zhang, Pin Hao\* and Qian Wang\*



4686

**In situ integration of bimetallic NiFe Prussian blue analogs on carbon cloth for the oxygen evolution reaction**

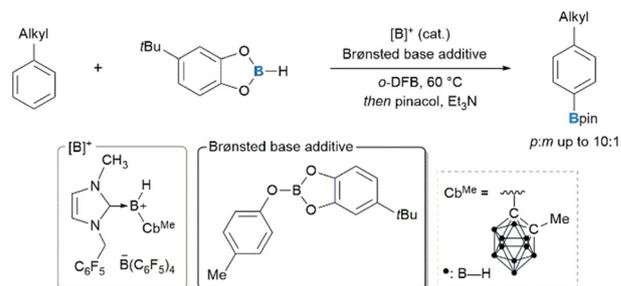
Zhiyong Wang, Shusheng Wan, Yuanmao Chen, Juntao Ren,\* Lin Liu, Panpan Yuan, Qiong Luo, Peng Deng, Zheng Liang, Xinyang Yue\* and Junxiong Wang\*



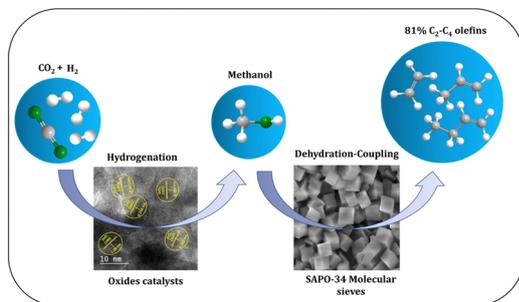
4690

**Borenum-catalysed *para*-selective borylation of alkylarenes**

Xinyue Tan and Huadong Wang\*



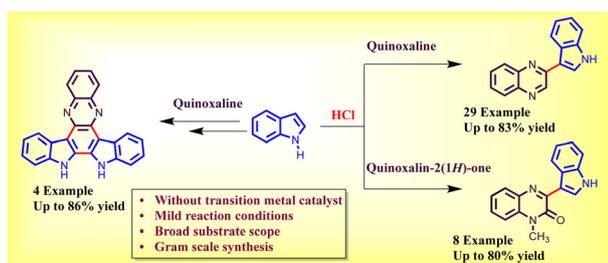
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### Controlled acidity-mediated short-chain olefin synthesis over a Mn–Zn–Zr/Zn–SAPO-34 catalyst via $\text{CO}_2$ hydrogenation

Gaje Singh, Satyajit Panda, Vivek Kumar Shrivastaw and Ankur Bordoloi\*

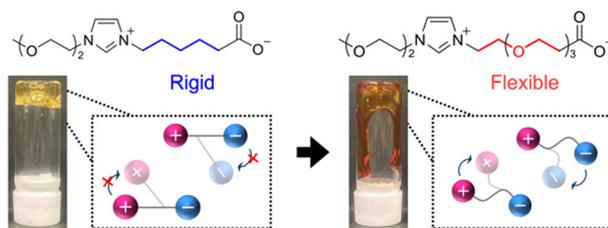
4698



### Brønsted acid-mediated mono- and di-substitution of quinoxalines with indoles: a pathway to indolocarbazole-quinoxaline scaffolds

Mangesh Biramya Valvi, Gaurav Badhani, Karan Prakash More and Subbarayappa Adimurthy\*

4702

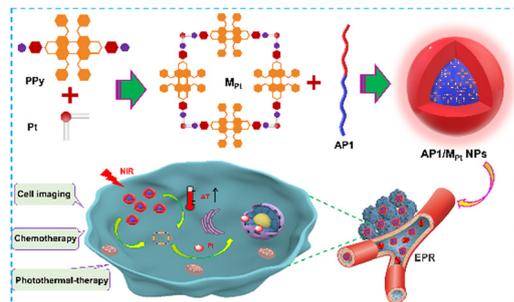


### A low-viscous and flowable zwitterionic liquid

Mitsuhiro Shimizu, Tetsuo Fujie, Mayu Shibata, Tetsuo Komori, Kazuaki Ninomiya, Kenji Takahashi, Takuya Uto and Kosuke Kuroda\*

First stirrable r.t. – zwitterionic liquids

4706



### A discrete platinum(II)-metallacycle with enhanced red emission for imaging-guided synergistic cancer photothermal-chemotherapy

Tianying Liu, Yujia Meng, Xufeng Liang, Jianxia Zhang, Wenqiang Yu, Yushan Cheng, Yao Zhou, Haotian Wang, Hui Duan, Jiaye Zou, Yiqiao Bai, Huanren Chen,\* Ying Han\* and Yong Yao\*

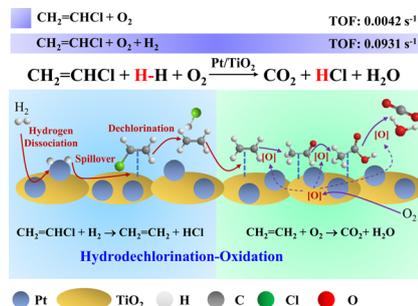


## COMMUNICATIONS

4710

Hydrodechlorination under O<sub>2</sub> promotes catalytic oxidation of CVOCs over a Pt/TiO<sub>2</sub> catalyst at low temperature

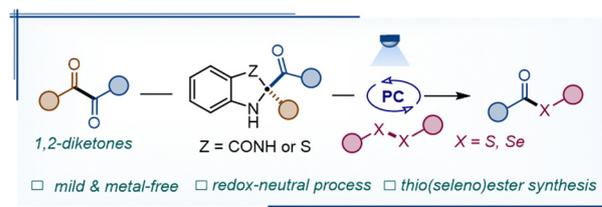
Yonghua Zhao, Yanke Yu,\* Jiahang Li, Jinmin Xie and Chi He\*



4714

## Photocatalytic C–C bond thio(seleno)esterification of 1,2-diketone-derived pro-aromatic intermediates

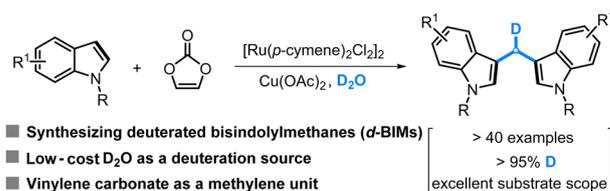
Amit Pal, Sudip Sarkar, Aaron Shibu, Prakash Maity and Basudev Sahoo\*



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## Ruthenium-catalyzed monodeuterium-methylenation of two indole units with vinylene carbonate as a novel methylene precursor

Jiang Nan,\* Lulu Xu and Rui Cao



4722

A [Cu<sup>II</sup><sub>24</sub>] truncated octahedron and its [Cu<sup>II</sup><sub>8</sub>] building block

Lucinda R. B. Wilson, Gary S. Nichol, Scott J. Dalgarno\* and Euan K. Brechin\*

