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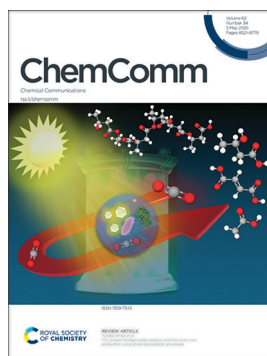
## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 62(34) 8521-8778 (2026)



### Cover

See Zhigang Wang, Guangyu Zhu *et al.*, pp. 8533–8550. Image reproduced by permission of Guangyu Zhu and Shu Chen from *Chem. Commun.*, 2026, 62, 8533.



### Inside cover

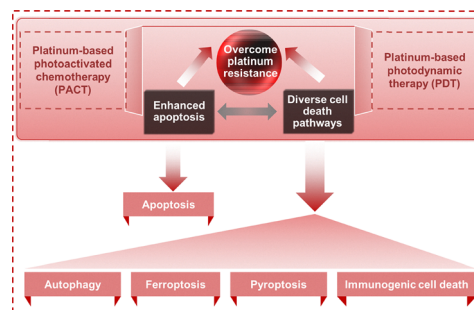
See Yutaka Amao *et al.*, pp. 8587–8614. Image reproduced by permission of Yutaka Amao from *Chem. Commun.*, 2026, 62, 8587.

## FEATURE ARTICLES

8533

### Beyond apoptosis: platinum phototherapeutics overcome resistance by triggering diverse cell death pathways

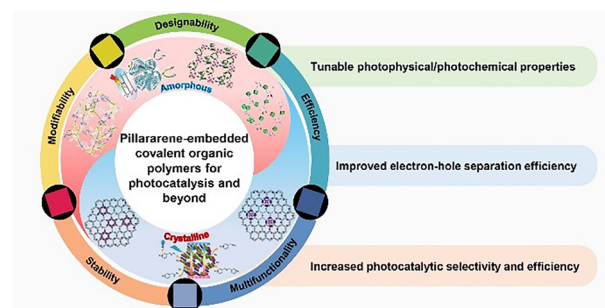
Shu Chen, Zhigang Wang\* and Guangyu Zhu\*



8551

### Pillararene-embedded covalent organic polymers for photocatalysis and beyond

Yutong Fang, Meng-Hao Li\* and Ying-Wei Yang\*



# Industrial Chemistry & Materials



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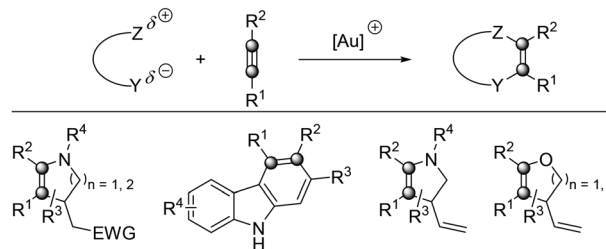


## FEATURE ARTICLES

8571

### Gold-catalyzed intermolecular annulations using alkynes as two-carbon synthons for the construction of aromatic and non-aromatic ring systems

Xiao-Qian Zhang, Ningbo Li, Pathan Mosim Amin, Jia-Xuan Yan, Yongliang Zhang\* and Youliang Wang\*

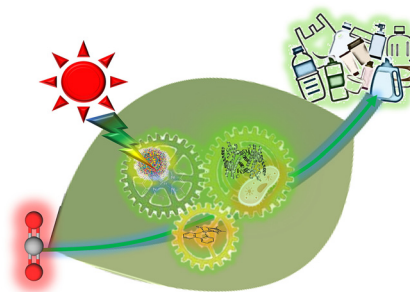


## REVIEW ARTICLES

8587

### CO<sub>2</sub>-based biodegradable plastics and their precursor production using photo-biocatalytic processes

Yu Kita, Mika Takeuchi and Yutaka Amai\*

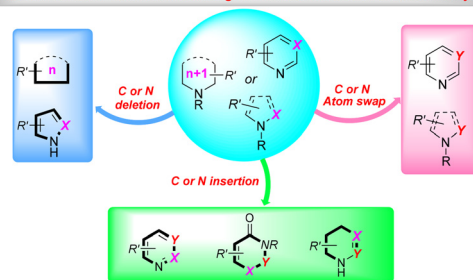


8615

### Transition-metal-free skeletal editing of five- and six-membered N-heterocycles

Liling Pan, Yong Huang, Xiaoqiang Sun and Ke Yang\*

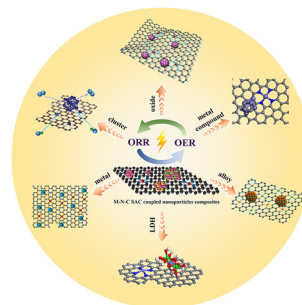
Transition-metal-free skeletal editing of five- and six-membered N-heterocycles



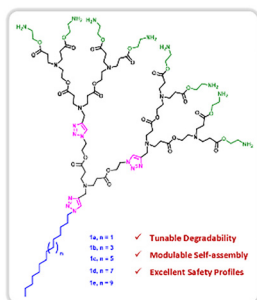
8633

### Recent advances in non-precious metal M–N–C-based composites as bifunctional electrocatalysts for rechargeable zinc–air batteries

Long Huang,\* Xiao Duan, Xue Wang and Ruchun Li\*



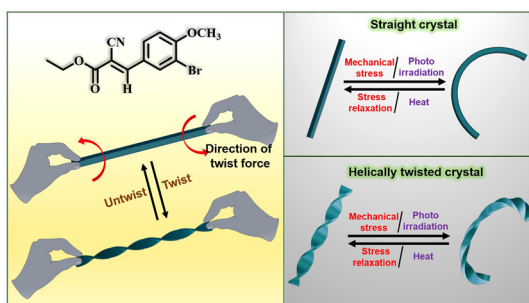
8657



### Amphiphilic poly(aminoester) dendrimers: click reaction-enabled synthesis, structure-governed self-assembly and degradation

Yonghui Ma, Junyue Zheng, Dandan Zhu, Xianhui Lin, Dan Yang, Aoxue Mei, Chi Ma, Haijuan Dong, Ling Peng\* and Xiaoxuan Liu\*

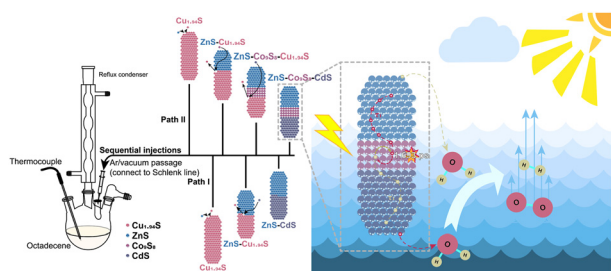
8661



### Helically twistable cyanoacrylate crystal with simultaneous photomechanical bending

Thiyagaraj Parthasarathy, Aritra Bhowmik, Manish Kumar Mishra\* and Soumyajit Ghosh\*

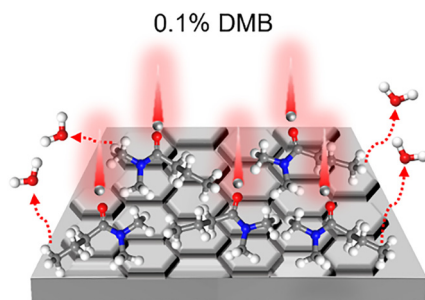
8665



### Boosting photocatalytic hydrogen evolution by ultrafast charge transfer in a ZnS–CdS Z-scheme heterojunction with an intercalated Co<sub>9</sub>S<sub>8</sub> layer

Wei Huang Lin, Ying Yang,\* Zhaozhe Chen, Si Xiao and Weijia Wang\*

8669



### Dynamic surface protection of a Zn anode by *N,N*-dimethylamide-based molecules for use in aqueous batteries

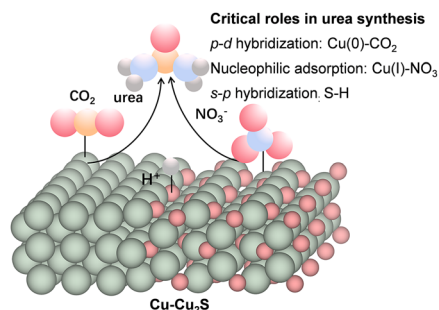
Jiaqi Zhu, Ziyi Gao, Guoli Zhang, Tong Qiu, Xiaoqi Sun\* and Xiao-Xia Liu\*



8673

## Revealing the synergistic effect of Cu–Cu<sub>2</sub>S during urea electrosynthesis

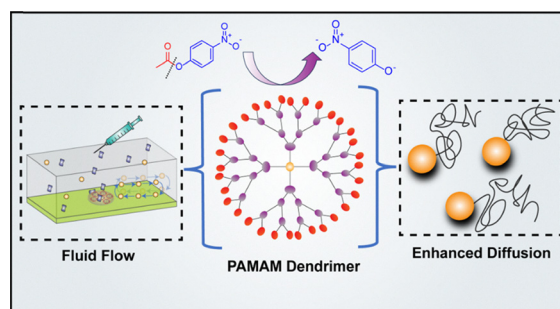
Yuhua Xie, Qi Xu, Shiao Zhu, Fang Luo\* and Zehui Yang\*



8678

## Programmable dendritic systems for active fluidics and motility

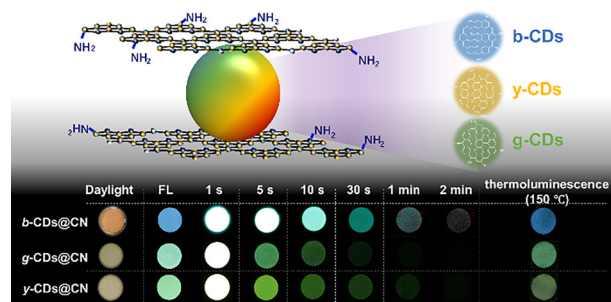
Kaushik Mondal, Devender Singh, Sudip Bera, Reek Mahapatra, Rekha Sangwan, Naveen Tiwari and Debabrata Patra\*



8682

## Unlocking metal-free multicolor thermoluminescence in carbon-dot composites via trap engineering

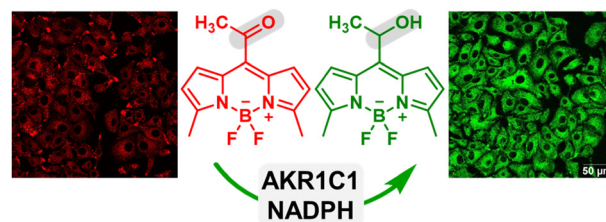
Jun Jiang, Kai Jiang,\* Zihan Cheng, Xiaomeng Wang, Jiaren Du and Hengwei Lin\*



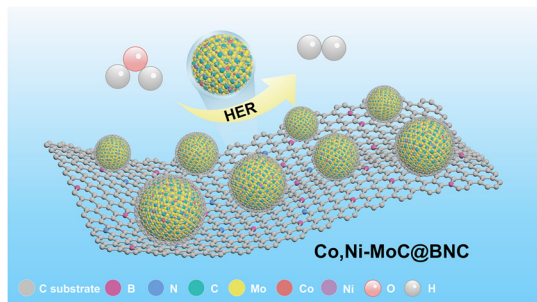
8687

## A meso-acyl-BODIPY-based fluorogenic probe for the selective monitoring of aldo-keto reductase 1C1 in living cells

Yeri Kim, Le Bich Hang Pham, Jae Yeol Lee, Jeeyeon Lee\* and Youngmi Kim\*



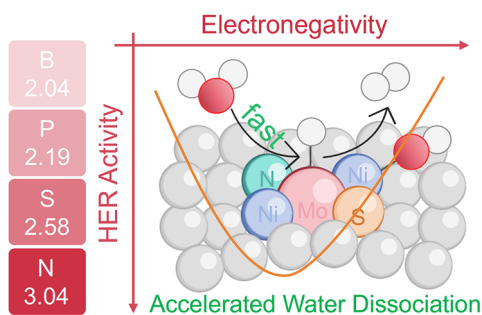
8691



### Simultaneous phase and electronic structure regulation of MoC *via* B,N-doping and bimetallic synergy for efficient hydrogen evolution

Tongzhou Hong, Fuxiang He, Jin Jia,\* Shaowei Zhang, Dandan Lu, Chenxin Li, Yuanyuan Zhu and Guang Zhu\*

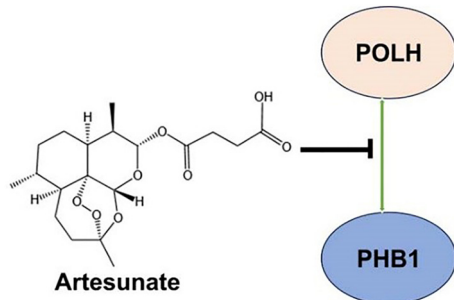
8696



### Doping-modulated water dissociation for energy-efficient hydrogen production

Dongxing Tan,\* Shuangfeng Li, Hengrui Kang, Ruize Li, Bari Wulan,\* Song Chen, Jing Wang and Yuanyuan Feng\*

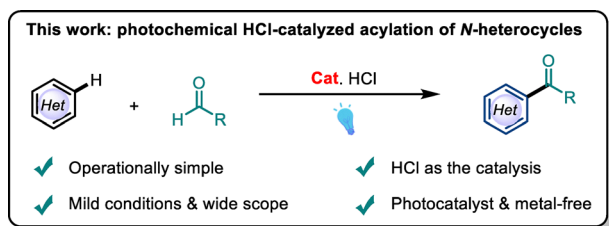
8700



### Chemical proteomics-based identification of artesunate as a POLH–PHB1 interaction disruptor

Donghui Ma, Jiawen Li, Qiao He, Xiaoxia Dai\* and Changjun You\*

8705



### Photoinduced HCl-catalyzed acylation of *N*-heterocycles

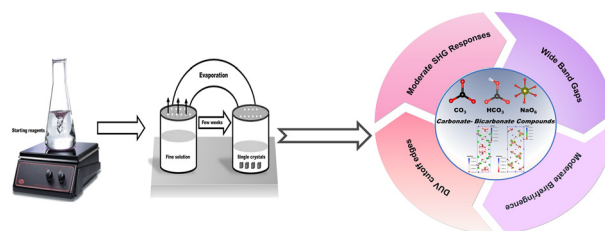
Yingzhen Liu, Meiqi Zhu\* and Dingyi Wang\*



8710

### Synthesis and characterization of mixed carbonate and bicarbonate materials as candidates for deep-UV applications

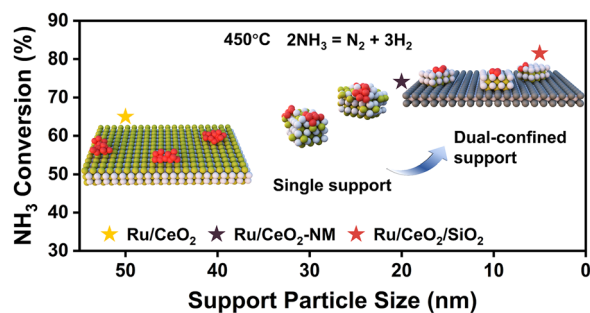
Muhammad Mujahid Iqbal, Hussin Elkik, Changyou Liu, Aqsa Munawar, Zilong Chen, Zhihua Yang, Fangfang Zhang\* and Shilie Pan\*



8714

### Dual confinement stabilizes highly dispersed Ru clusters for efficient and durable ammonia decomposition

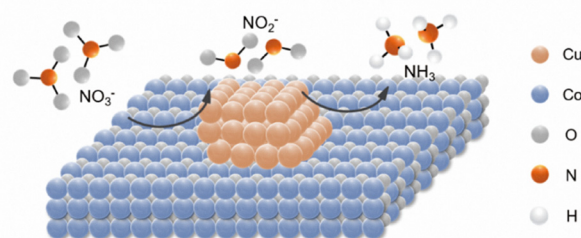
Haoran Wang, Qin Liu, Zhenhao Hou,\* Shaojun Qing and Wentuan Bi\*



8718

### Electronic structure regulation promotes tandem electrochemical nitrate reduction on Cu-modified porous CoO nanosheets

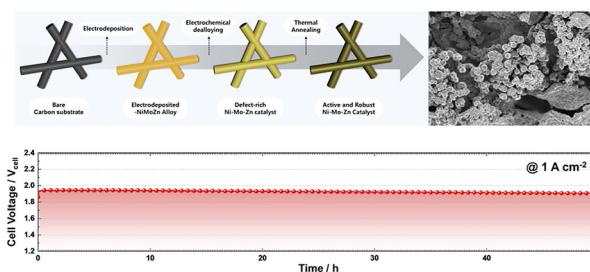
Yuanyuan Yang, Fuhao Qi, Xiaolu Liu, Yangzheng Zhao, Jingxiang Xu and Huan Wang\*



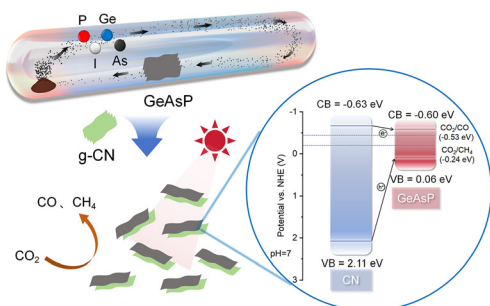
8723

### High-performance, acid-durable nonprecious ternary alloy cathode via Zn dealloying for proton exchange membrane water electrolysis

Chan Hee Lee, Kyeong-Rim Yeo and Soo-Kil Kim\*



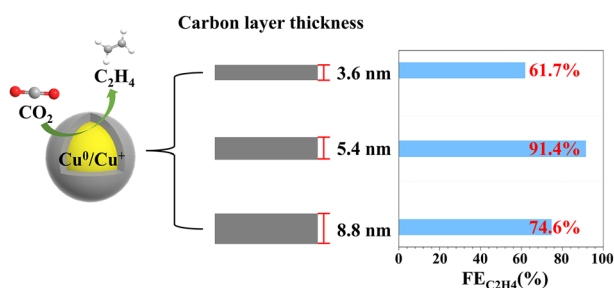
8728



### GeAsP: a new two-dimensional layered material for highly efficient photocatalytic CO<sub>2</sub> reduction

Jiaqi Song, Qingwei Wang, Yong Ke, Yunyan Wang, Yun Li, Yanjie Liang, Feiping Zhao, Xiaoyu Huang, Xiaobo Min,\* Liyuan Chai and Cong Peng\*

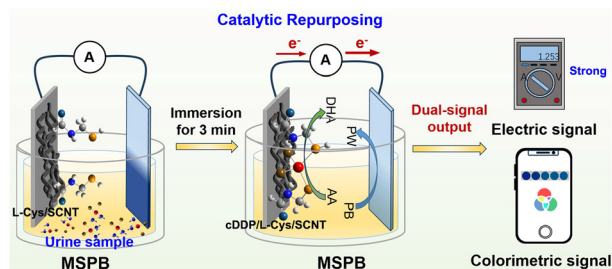
8733



### Nitrogen-doped carbon layer thickness modulates the Cu<sup>0</sup>/Cu<sup>+</sup> interface for selective and stable CO<sub>2</sub> electroreduction to ethylene

Jwwei Liu, Qiang Zhang,\* Shenjie Zhang, Conglin Chen, Jiaxin Jiang, Yayun Luo, Weiming Yang and Junqiang Xu

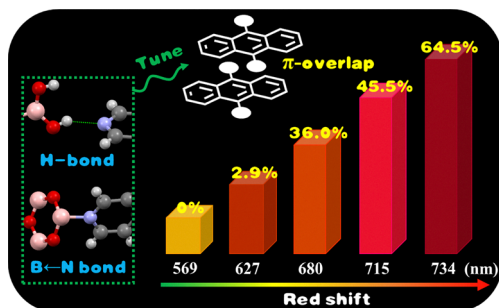
8738



### A multiplexed self-powered biosensor for ultrasensitive on-site detection of trace cisplatin *via* catalytic repurposing

Linlin Wang,\* Mengjie Jing, Dongyan Lu, Yuxin Wang, Mingming Luo, Guang Chen\* and Qianhao Min\*

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### Competitive supramolecular assembly tunes anthracene emission over 165 nm *via* controlled π-overlap

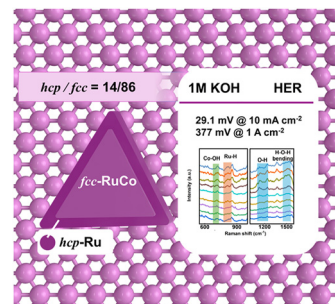
Jieqiong Xu, Jie Zhou, Wenyan Yang, Shengyong Deng and Peifa Wei\*



8748

### Interface engineering of fcc-RuCo@hcp-Ru core-shell nanoplates for efficient industrial alkaline hydrogen evolution

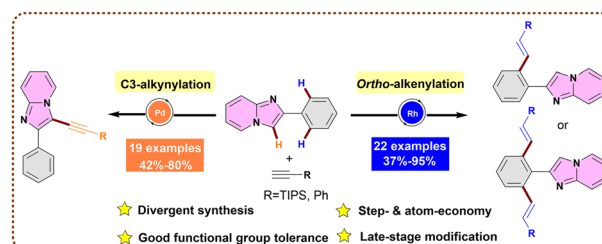
Shihuan Hong, Ning Song, Wenli Zhang, Deping Wang, Lichun Liu,\* Hongjun Dong, Yang-Yang Yu\* and Chunmei Li\*



8752

### Catalyst-controlled regio- and chemodivergent C–H functionalization of imidazopyridines with TIPS-protected terminal alkynes

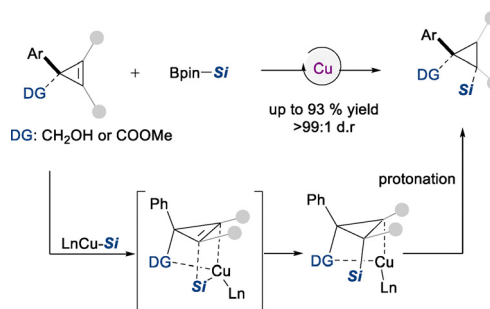
Tiantian Zhu, Qiang Zhang, Xianling Li, Taoyuan Liang, Shuangliang Zhao\* and Zhuan Zhang\*



8756

### Oxygen-directed, copper-catalyzed, diastereoselective protosilylation of cyclopropenes

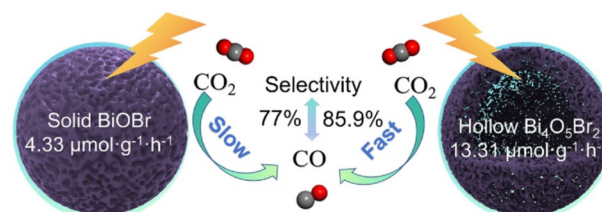
Yueyuan Wang, Longtao Huang,\* Shizhao Xu and Luqing Lin\*



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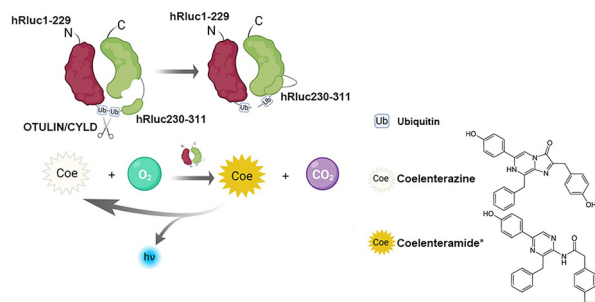
### Hollow Bi₄O₅Br₂ spheres enable high-density bismuth exposure for enhanced photocatalytic CO₂-to-CO conversion

Yong Li, Jingya Jiao, Han Zhang, Xingqun Li, Zhongqiu Wu, Quan Zhang\* and Hui Xu



## COMMUNICATIONS

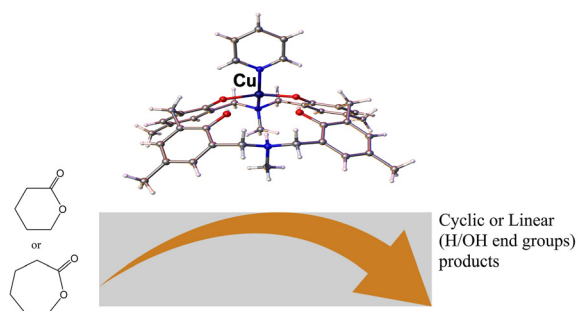
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### Lighting up the linear ubiquitin code: a bioluminescent sensor for M1-specific deubiquitinase activity and drug discovery

Yuxin Zheng, Manman Zhang, Wutao Xie, Xiaogang Niu, Congjun Xu, Hongbin Zhai and Hao Huang\*

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### Copper and manganese diazacalix[4]arene complexes: structural and cytotoxicity studies and use in ring opening polymerization of $\epsilon$ -caprolactone and $\delta$ -valerolactone

Azaria C. Razieh, Harry C. Sample, Emily B. Hobson, Anja Mueller, Timothy J. Prior and Carl Redshaw\*

## CORRECTIONS

8774

### Correction: Iridium-catalyzed intramolecular asymmetric allylic amination of anthranilic acid derivatives: enantioselective construction of chiral benzodiazepinones

Yunru Wu, Bendu Pan, Long Jiang, Rihui Cao and Liqin Qiu\*

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### Correction: Catalysis meets machine learning: a guide to data-driven discovery and design

Eleonora Casillo, Thomas Scattolin\* and Steven P. Nolan\*

