# ChemComm

## Chemical Communications

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## IN THIS ISSUE

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#### Cover

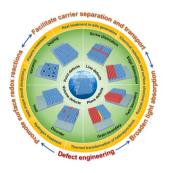
See Joshua Telser, Daniel J. Mindiola et al., pp. 10101-10104. Image reproduced by permission of Daniel J. Mindiola from Chem. Commun., 2023, 59, 10101.

## HIGHLIGHT

## 10044

Imperfect makes perfect: defect engineering of photoelectrodes towards efficient photoelectrochemical water splitting

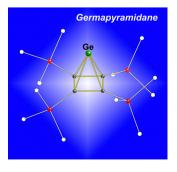
Xin Wang, Siqing Ma, Boyan Liu, Songcan Wang\* and Wei Huang\*



## FEATURE ARTICLES

Pyramidanes: newcomers to the anti-van't Hoff-Le Bel family

Vladimir Ya. Lee\* and Olga A. Gapurenko



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## FEATURE ARTICLES

#### 10087

Development of regiodivergent asymmetric reductive coupling reactions of allenamides to access heteroatom-rich organic compounds

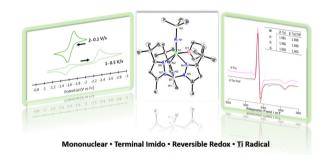
Stephen Collins and Joshua D. Sieber\*

## COMMUNICATIONS

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## A mononuclear, terminal titanium(III) imido

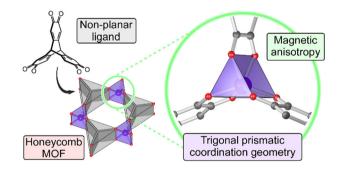
Jacob S. Mohar, Anders Reinholdt, Taylor M. Keller, Patrick J. Carroll, Joshua Telser\* and Daniel J. Mindiola\*



## 10105

Ideal trigonal prismatic coordination geometry of Co(II) in a honeycomb MOF with a triptycene-based ligand

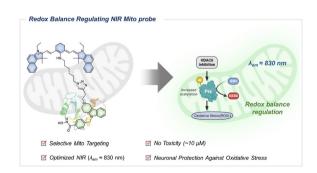
Yoshiaki Shuku, Rie Suizu, Masahisa Tsuchiizu\* and Kunio Awaga\*



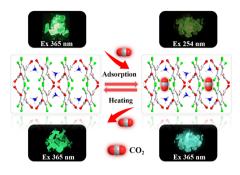
## 10109

## Mitochondrial NIR imaging probe mitigating oxidative damage by targeting HDAC6

Jungryun Kim, Paramesh Jangili,\* Jeongah Kim, Stephani Edwina Lucia, Jae Ryun Ryu, Renuka Prasad, Soyu Zi, Pilhan Kim,\* Woong Sun\* and Jong Seung Kim\*



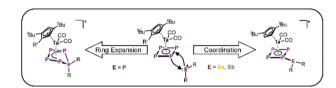
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## CO<sub>2</sub>-responsive tunable persistent luminescence in a hydrogen-bond organized two-component ionic crystal

Guowei Xiao, Yu-Juan Ma, Xiaoyu Fang, Changhai Xu\* and Dongpeng Yan\*

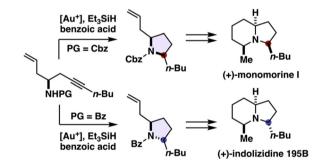
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## Ring expansion vs. addition - reactivity of a cyclo-P<sub>4</sub> complex towards pnictogenium cations

Christoph Riesinger, Alexander Erhard and Manfred Scheer\*

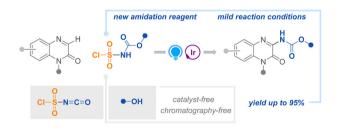
#### 10121



## Au-catalyzed stereodivergent synthesis of 2,5-disubstituted pyrrolidines: total synthesis of (+)-monomorine I and (+)-indolizidine 195B

Hayato Nakagawa and Haruhiko Fuwa\*

## 10125



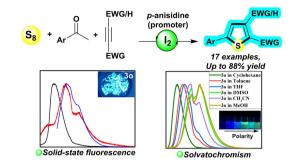
## N-Chlorosulfonyl carbamate-enabled, photoinduced amidation of quinoxalin-2(1H)-ones

Chu-Ping Yuan, Zhen-Zhen Xie, Yu Zheng, Jun-Tao He, Jian-Ping Guan, Hong-Bin Chen, Hao-Yue Xiang, Kai Chen\* and Hua Yang\*

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## Iodine-catalyzed three-component annulation: access to highly fluorescent trisubstituted thiophenes

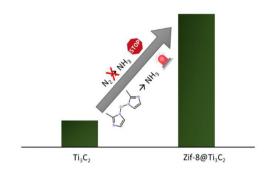
Deepan Babu Rajkumar, Karthiyayini Gnanaoli, Arulmozhi Puhazhendhi, Tamilselvi Arunachalam, Subbiah Nagarajan, Vellaisamy Sridharan, Soumya Sivalingam and C. Uma Maheswari\*



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## Reactivity of nitrogen atoms from Zif-8 structure deposited over Ti<sub>3</sub>C<sub>2</sub> MXene in the electrochemical nitrogen reduction reaction

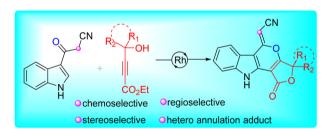
André L. A. Marinho,\* Clément Comminges, Aurélien Habrioux, Stéphane Célérier, Nicolas Bion and Cláudia Morais



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Rh-catalyzed chemo-, stereo- and regioselective C-H cascade annulation of indolyloxopropanenitriles for pyranoindoles

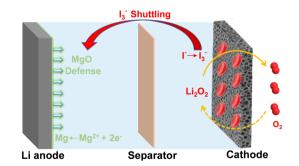
Ramesh Kotipalli, Undamatla Suri Babu, Jagadeesh Babu Nanubolu and Maddi Sridhar Reddy\*



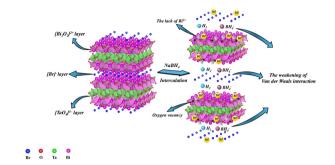
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Bifunctional electrolyte additive MgI<sub>2</sub> for improving cycle life in high-efficiency redox-mediated Li-O<sub>2</sub> batteries

Wei Li, Chuanchao Sheng, Lei Wang, Xinyi Sun, Xiaowei Mu, Ping He\* and Haoshen Zhou



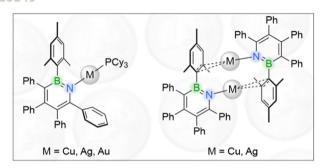
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## Wet-chemical intercalation of Bi<sub>4</sub>TaO<sub>8</sub>Br with self-adaptive structural deformation for enhanced photocatalytic performance

Ke Sa, Xiaorui Zhang, Zikang Zeng, Yujun Liang and Chuang Han\*

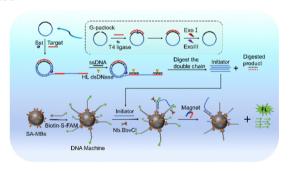
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## Coinage metal complexes of BN analogues of m-terphenyl ligands

Anna Lamprecht, Felix Lindl, Lukas Endres, Ivo Krummenacher and Holger Braunschweig\*

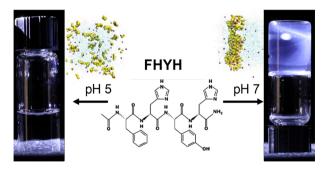
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## A specific and low background nucleic acids sensing strategy based on rolling circle amplification coupled with a magnetic DNA machine

Xiangde Lai, Xuan Zhao, Yanan Peng, Rui Zhang, Huajie Pang, Zhijun Gao, Dongxia Li, Peipei Cao, Qiumei Pu, Bin Qiao,\* Hua Pei\* and Qiang Wu\*

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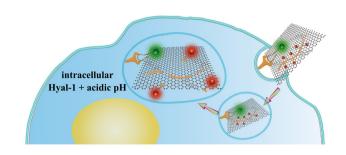
## Unbiased in silico design of pH-sensitive tetrapeptides

Yue Hu, Federica Rigoldi, Hui Sun, Alfonso Gautieri\* and Benedetto Marelli\*

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Real-time tracking of the intracellular delivery of a 2D nanosystem using a progressively activatable fluorescence platform for cancer diagnosis

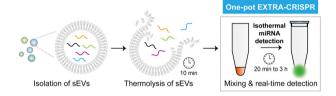
Xianghua Zhong, Qin Fu, Xinchao Liu and Peng Shi\*



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## Extraction-free, one-pot CRISPR/Cas12a detection of microRNAs directly from extracellular vesicles

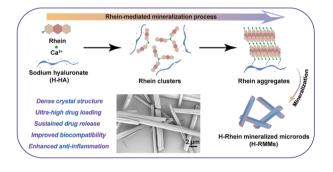
He Yan, Song Han, Steven Hughes and Yong Zeng\*



## 10169

## Microrod crystals formed via Rhein-mediated mineralization

Jiaying Liu, Zhenyan Zhang, Yu Yan, Xiaonong Zhang, Chunsheng Xiao\* and Xuesi Chen\*



## 10173

## Regulation of the surface activity of carbon anodes for rationalization of potassium storage

Xiaozhi Yuan, Yuli Xiong, Yu Liu, Xijun Wei,\* Feng Wei,\* Menglei Wang, Yang Cao, Gang Tao, Qingchun Zhang, Qi Wan and Yingze Song\*

