# ChemComm

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### IN THIS ISSUE

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Inside cover See Ronald T. Raines et al., pp. 4451–4454. Image reproduced by permission of Ronald T. Raines from *Chem. Commun.*, 2023, **59**, 4451.

# HIGHLIGHT

#### 4405

Recent developments in nickel-catalyzed asymmetric cyclization and cycloaddition of carbonyl-alkynes, cyano-alkynes, and enynes

Jun Yan, Min Shi\* and Yin Wei\*



# FEATURE ARTICLES

# 4423

# Colorectal cancer therapy mediated by nanomedicines

Shaopeng Zhang, Hao Zhang, Peizhe Song, Daguang Wang\* and Yinghui Wang\*



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#### FEATURE ARTICLES

#### 4436

# Incorporation and modification of fatty acids in cyanobacterial natural products biosynthesis

Pedro N. Leão,\* Teresa P. Martins, Kathleen Abt, João P. A. Reis, Sandra Figueiredo, Raquel Castelo-Branco and Sara Freitas



#### COMMUNICATIONS

#### 4447

#### Zero-dimensional Cu(I)-based organometallic halide with green cluster-centred emission for high resolution X-ray imaging screens

Alaa M. Almushaikeh, Hong Wang, Luis Gutiérrez-Arzaluz, Jun Yin, Ren-Wu Huang, Osman M. Bakr and Omar F. Mohammed\*



# 4451

#### Bioorthogonal 4H-pyrazole "click" reagents

Nile S. Abularrage, Brian J. Levandowski, JoLynn B. Giancola, Brian J. Graham and Ronald T. Raines\*



#### 4455

#### Regioselective synthesis of phenanthridine-fused quinazolinones using a 9-mesityl-10-methylacridinium perchlorate photocatalyst

Rosalin Bhanja, Shyamal Kanti Bera and Prasenjit Mal\*



# COMMUNICATIONS



Manuel David Peris-Díaz,\* Alexey Barkhanskiy, Ellen Liggett, Perdita Barran\* and Artur Krężel\*

4400 | Chem. Commun., 2023, 59, 4397-4404

1200

CCS (Å<sup>2</sup>)

00 1100 1200 CCS (Å<sup>2</sup>)

#### 4475

# Liquid and solid-state tunable fluorescent carbon dots for trace water detection

Nan Li, Xuezhe Dong, Xugui Lv, Yunfei Li, Qingyu Ma,\* Ruifang Guan\* and Zheng Xie\*



#### 4479

### Three-in-one self-assembled metallo-nanophotosensitizers for photodynamic/chemodynamic/chemo multimodal synergistic cancer therapy

Shuang Chao, Ziyan Shen, Jiaming Ren, Zhilin Zhang, Xiaolin Chen, Yuxin Pei and Zhichao Pei\*



#### 4483

#### Single nanowire-based fluorescence lifetime thermometer for simultaneous measurement of intra- and extra-cellular temperatures

Yuan Wang, Qiaowen Zhao, Sen Liang, Mingliang Mei, Guangwei She, Wensheng Shi\* and Lixuan Mu\*



#### 4487

# Diastereo- and enantioselective synthesis of biaryl aldehydes bearing both axial and central chirality

Fen Huang, Ling-Fei Tao, Jiyong Liu, Linghui Qian\* and Jia-Yu Liao\*



Key features:

simultaneous construction of both axial and central chirality
wide substrate scope
excellent enantioselectivities
 100% atom economy
 simple procedure



<sup>1</sup>O<sub>2</sub>

Type II <sup>3</sup>O<sub>2</sub> Thanh Chung Pham, Dong Joon Lee, Do Hun Kim, Juyoung Yoon, Tran Dai Lam, Hwan Myung Kim\* and Songyi Lee\*

**Fwo-phot** 

GS

# COMMUNICATIONS

### 4507

### Partial guaternization promoted metal-organic frameworks for efficient photocatalytic removal of chromium(vi)

Xiaocong Tang, Xu Wu, Hao Wu, Xinyu Zhang, Mingbao Feng, Tong Ouyang, Huanting Wang and Ranwen Ou\*



#### 4511

#### Polyethyleneimine-functionalized PdOs bimetallene for enhanced oxygen reduction

Ziqiang Wang, Shan Xu, Min Li, Kai Deng, Hongjie Yu, You Xu, Xiaonian Li, Hongjing Wang\* and Liang Wang\*



### 4515

#### Particle size optimization of metal-organic frameworks for superior capacitive deionization in oxygenated saline water

Zhiyuan Xing, Xiaoxu Xuan, Haiyan Hu,\* Mohua Li,\* Huimin Gao, Azhar Alowasheeir, Dong Jiang, Liyang Zhu, Zhengtong Li, Yunging Kang, Jing Zhang, Xibin Yi, Yusuke Yamauchi\* and Xingtao Xu\*

#### 4519

#### Hierarchical iron-nickel oxyhydroxide nanosheets directly grown on porous TiFe<sub>2</sub>-based intermetallics for robust oxygen evolution

Qian Zhao, Zhenli He, Yuehui He, Yue Qiu, Zhonghe Wang and Yao Jiang\*







# COMMUNICATIONS



#### Lewis/Brønsted acid-mediated cyclization/ amidation of 1,6-enynes with nitriles: access to 3-enamide substituted dihydrobenzofurans

Zan Chen, Wenting Huang, Yu Su, Huanfeng Jiang and Wanging Wu\*





#### Cobalt catalyzed chemoselective reduction of nitroarenes: hydrosilylation under thermal and photochemical reaction conditions

Surajit Panda, Amareshwar Nanda, Rakesh R. Behera, Rahul Ghosh and Bidraha Bagh\*



# Determination of molecular hydration in solution via changes in magnetic anisotropy

Marcus J. Giansiracusa, Michele Vonci, Yasmin L. Whyatt, Carys Williams, Kevin Mason, David Parker,\* Eric J. L. McInnes\* and Nicholas F. Chilton\*



Carboxylate accepts H<sub>2</sub>O



Phosphinate shuns H<sub>2</sub>O

#### An attempt to confirm the contribution to ORR activity of different N-species in M-NC (M = Fe, Co, Ni) catalysts with XPS analysis

Zhuxin Li, Hongquan Yu, Yong Zhang, Danyang Wu, Yunxiang Bai, Shuhong Liu and Hong Zhao\*