# ChemComm

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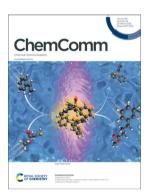
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ISSN 1359-7345 CODEN CHCOFS 59(24) 3477-3616 (2023)



#### Cover

See Samuel A. Johnson et al., pp. 3542–3545. Image reproduced by permission of Samuel A. Johnson from Chem. Commun., 2023, **59**, 3542.



### Inside cover

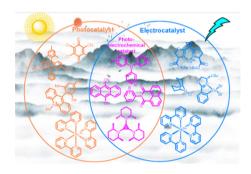
See Yugang Sun et al., pp. 3546–3549. Image reproduced by permission of Shea Stewart and Yugang Sun from Chem. Commun., 2023, **59**, 3546.

### **HIGHLIGHT**

# 3487

Contemporary photoelectrochemical strategies and reactions in organic synthesis

Ling Qian and Min Shi\*

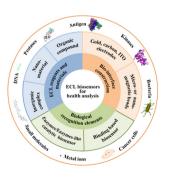


### FEATURE ARTICLES

### 3507

Recent advances and challenges in developing electrochemiluminescence biosensors for health analysis

Yuxi Wei, Honglan Qi and Chengxiao Zhang\*



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### FEATURE ARTICLES

### 3523

MOF-derived transition metal-based catalysts for the electrochemical reduction of CO<sub>2</sub> to CO: a mini review

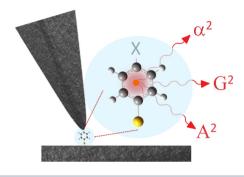
Jiaxin Li, Baogang Zhang, Baoxia Dong\* and Ligang Feng



#### 3536

# High spatial resolution ambient tip-enhanced (multipolar) Raman scattering

Patrick Z. El-Khoury



### **COMMUNICATIONS**

### 3542

Breaking bonds and breaking rules: inert-bond activation by [(iPr<sub>3</sub>P)Ni]<sub>5</sub>H<sub>4</sub> and catalytic stereospecific norbornene dimerization

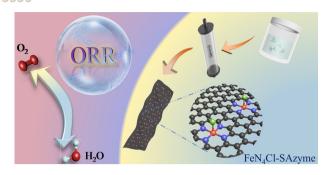
Junyang Liu, Manar M. Shoshani, Kethya Sum and Samuel A. Johnson\*

### 3546

# Triphenylphosphine oxide promoting visible-light-driven C-C coupling via desulfurization

Shea Stewart, Robert Maloney and Yugang Sun\*

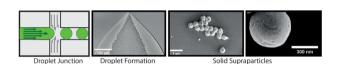
#### 3550



# Axial optimization of biomimetic nanoenzyme catalysts applied to oxygen reduction reactions

Jingjing Liu, Jingjing Jia, Huiying Wen, Sigi Li, Yingjie Wu, Qi Wang, Ziwang Kan, Yan Li, Xia Wu, Jingxiang Zhao,\* Song Liu\* and Bin Li\*

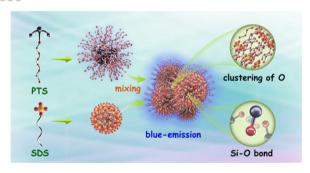
#### 3554



# Microfluidic synthesis of monodisperse and size-tunable CsPbBr<sub>3</sub> supraparticles

Julia Nette, Federico Montanarella, Chenglian Zhu, Taras V. Sekh, Simon C. Boehme, Maryna I. Bodnarchuk, Gabriele Rainò, Philip D. Howes, Maksym V. Kovalenko and Andrew J. deMello\*

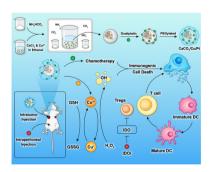
### 3558



# Clustering-enhanced, nonconventional photoluminescence from a silicone surfactant

Aoxue Xu, Hailong Liu, Gang Yi, Ning Feng and Hongguang Li\*

### 3562



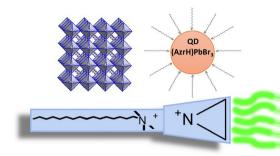
# A CaCO<sub>3</sub>-based synergistic immunotherapy strategy for treating primary and distal tumors

Kun Tang, Xia Zhang, Jiagi Yin, Wei Pan, Yanhua Li,\* Na Li\* and Bo Tang\*

#### 3566

# Quantum dots assembled from an aziridinium based hybrid perovskite displaying tunable luminescence

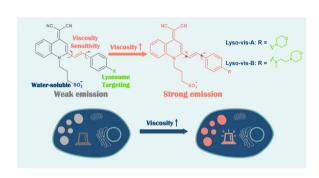
Oleksandr A. Semenikhin, Olesia I. Kucheriv, Liviu Sacarescu, Sergiu Shova and Il'ya A. Gural'skiy\*



### 3570

# Water-soluble fluorescent probes for differentiating cancer cells and normal cells by tracking lysosomal viscosity

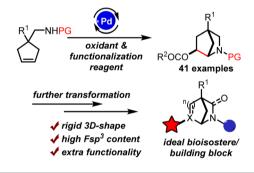
Minghui Liu, Jintao Weng, Shumei Huang, Wenjin Yin, Huatang Zhang,\* Yin Jiang,\* Liu Yang\* and Hongyan Sun\*



### 3574

# Construction of oxygenated 2-azabicyclo[2.2.1]heptanes via palladium-catalyzed 1,2-aminoacyloxylation of cyclopentenes

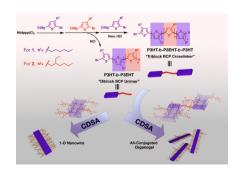
Haipin Zhou, Rui Pan, Menghua Xu, Jiao Ma, Aijun Lin\* and Heguan Yao\*



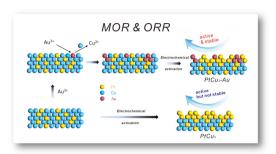
### 3578

# Semi-conductive micellar networks of all-conjugated diblock and triblock copolymer blends

Junyoung Kim, Wooyeol Chung, Dogyun Kim, Junwoo Kang, Carlos Fitzgerald Grandes Reyes, Jisu Jeong and Kyoung Taek Kim\*



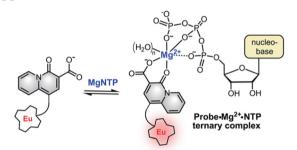
### 3582



# Au-modified PtCu nanodendrites as a highly stable and active electrocatalyst

Yuelin Gu, Weiyi Guo, Jinggi Bao, Yunxia Li and Linfang Lu\*

#### 3586



Lanthanide-based luminescent probes for biological magnesium: accessing polyphosphate-bound Mg<sup>2+</sup>

Brismar Pinto-Pacheco, Qitian Lin, Claudia W. Yan, Symara de Melo Silva and Daniela Buccella\*

# Luminescent detection of biomolecule-bound Mg2+

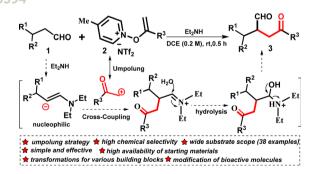
### 3590

### Pd(OAc)<sub>2</sub> (10 mol%) OBoc (R, R)-Trost ligand (11 mol%) Et<sub>3</sub>N (1.0 equiv) 1,4-dioxane, 25 °C up to 92% yield up to 90% ee

### Pd-Catalyzed intermolecular asymmetric allylic dearomatization of 1-nitro-2-naphthols with MBH adducts

Qing-Xia Zhang, Jia-Hao Xie, Qing Gu and Shu-Li You\*

# 3594



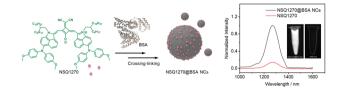
An umpolung strategy for chemically selective intermolecular cross-enolate-type coupling of N-alkenoxypyridinium salts with aldehydes

Guichao Dong, Mengfei Jiang, Nan Wu,\* Shengxiang Zhang, Huilong Zhu and Zhou Xu\*

#### 3598

# Maximal emission beyond 1200 nm dicyanovinylfunctionalized squaraine for in vivo vascular imaging

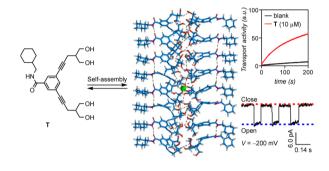
Yigang Wang, Mingda Wang, Guomin Xia,\* Yang Yang, Leilei Si, Hua Wang and Hongming Wang\*



#### 3602

# Self-assembled anion channel formation by bis(1,3-propanediol)-linked meta-dipropynylbenzenebased small molecules

Rashmi Sharma, Amal Vijay, Sandip Chattopadhayay, Arnab Mukherjee\* and Pinaki Talukdar\*



### 3606

# Highly diastereo- and enantioselective C2 addition of 5*H*-oxazol-4-ones to $\gamma$ -keto- $\alpha$ , $\beta$ -unsaturated esters

Li Lin,\* Mei Wang, Jiawei Zhou, Fei Li and Huiyun Liu

#### 3610

# A K<sup>+</sup>-selective channel with a record-high K<sup>+</sup>/Na<sup>+</sup> selectivity of 20.1

Lei Jin, Chang Sun, Zhongyan Li, Jie Shen\* and Huaqiang Zeng\*

# CORRECTION

3614

# Correction: Masking thiol reactivity with thioamide, thiourea, and thiocarbamate-based MBPs

Hyeonglim Seo, Alysia J. Kohlbrand, Ryjul W. Stokes, Jeewon Chung and Seth M. Cohen\*