

# ChemComm

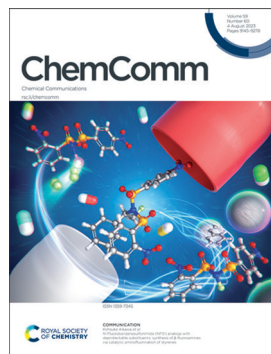
Chemical Communications

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## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(60) 9145-9278 (2023)



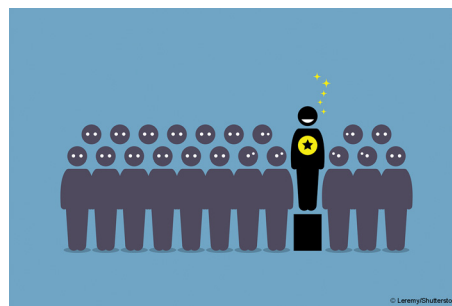
### Cover

See Kohsuke Aikawa *et al.*, pp. 9195–9198. Image reproduced by permission of Kohsuke Aikawa from *Chem. Commun.*, 2023, 59, 9195.

## EDITORIAL

9155

### Outstanding Reviewers for *ChemComm* in 2022

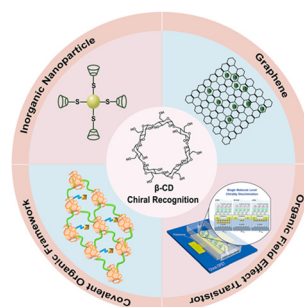


## HIGHLIGHT

9157

### Recent advances in $\beta$ -cyclodextrin-based materials for chiral recognition

Jiale Guo, Jinxing Hou, Juntao Hu, Yajiao Geng, Mengxue Li, Hui Wang, Jinli Wang and Quan Luo\*



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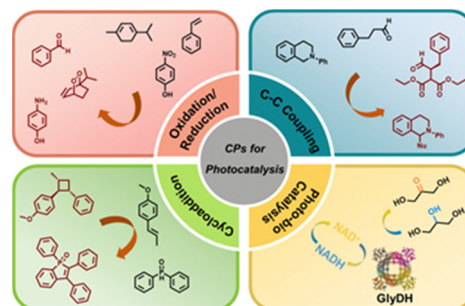


## FEATURE ARTICLES

9167

## Emerging conjugated polymers for heterogeneous photocatalytic chemical transformation

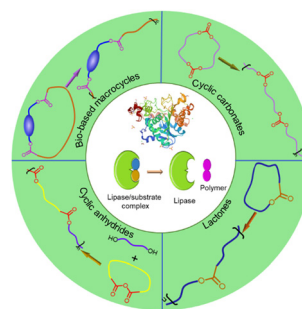
Hao Zhang, Wenxin Wei and Kai A. I. Zhang\*



9182

## Lipase-catalyzed ring-opening polymerization of natural compound-based cyclic monomers

Kaojin Wang, Caizi Li, Limin Man, Meng Zhang, Yong-Guang Jia and X. X. Zhu\*

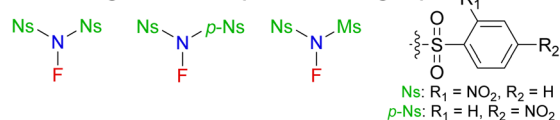


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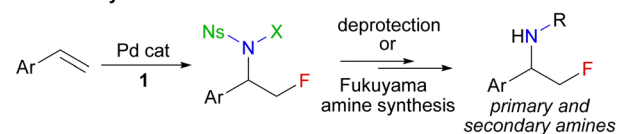
9195

N-Fluorobenzenesulfonimide (NFSI) analogs with deprotectable substituents: synthesis of  $\beta$ -fluoroamines via catalytic aminofluorination of styrenes

Yuki Ito, Akiya Adachi, Kohsuke Aikawa,\* Kyoko Nozaki and Takashi Okazoe

■ Novel N-F reagents **1** with deprotectable Ns group

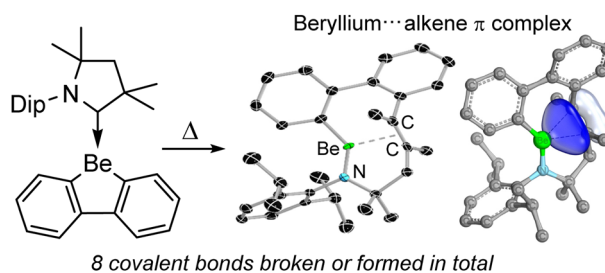
## ■ Pd-Catalyzed aminofluorination



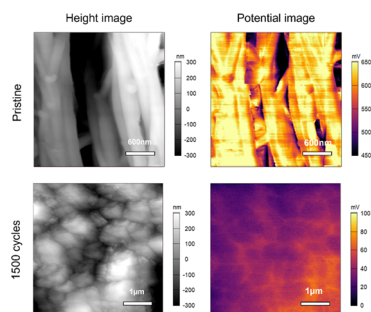
9199

## Dibenzoberylloles: antiaromatic s-block fluorene analogues

Tobias Tröster, Franziska Endres, Merle Arrowsmith, Lukas Endres, Felipe Fantuzzi and Holger Braunschweig\*



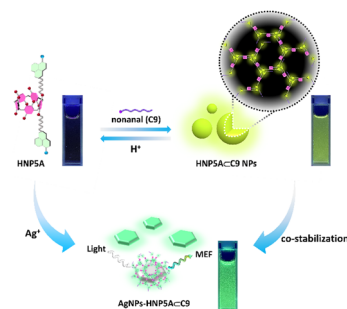
9203



### Cycle-dependent morphology and surface potential of germanium nanowire anode electrodes

Srikanth Kolagatla, Gearoid A. Collins, Jason I. Kilpatrick, Emrullah Kargin, Kevin M. Ryan and Brian J. Rodriguez\*

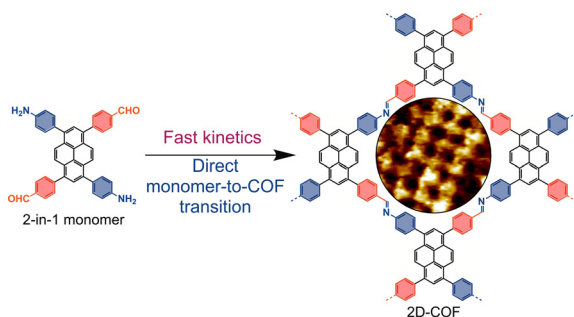
9207



### Supramolecular self-assembled polymeric nanospheres based on hydrazino naphthalimide functionalised pillar[5]arene for long chain aldehyde detection

Yanisa Sanguansap, Vithaya Ruangpornvisuti, Thassanant Atithep, Thanthapatra Bunchuay\* and Boosayarat Tomapatanaget\*

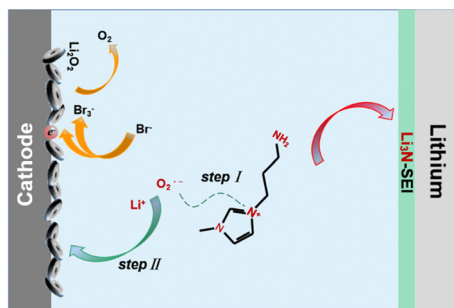
9211



### On the nucleation and fast reaction kinetics of 2D polymerisation with a 2-in-1 monomer

Niklas Herrmann, Cristina Martin, Samuel Eyley, Yusen Li, Nerea Bilbao, Victor Rubio-Giménez, Mark Van der Auweraer, Wim Thielemans, Long Chen,\* Kunal S. Mali\* and Steven De Feyter\*

9215



### Trifunctional imidazolium bromide: a high-efficiency redox mediator for high-performance Li–O<sub>2</sub> batteries

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

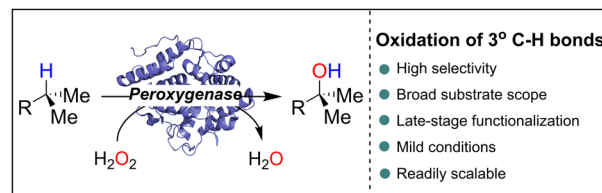


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9219

**H<sub>2</sub>O<sub>2</sub>-driven enzymatic oxyfunctionalization of tertiary C–H bonds**

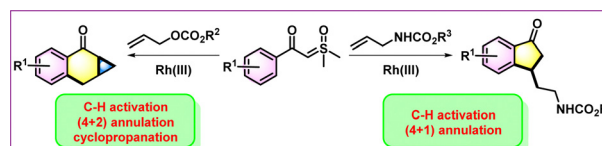
Yawen Huang, Huanhuan Li, Pengpeng Zhang, Yalan Zhang, Peigao Duan and Wuyuan Zhang\*



9223

**Divergent reactivity of sulfoxonium ylide with allyl carbonate and allyl carbamate**

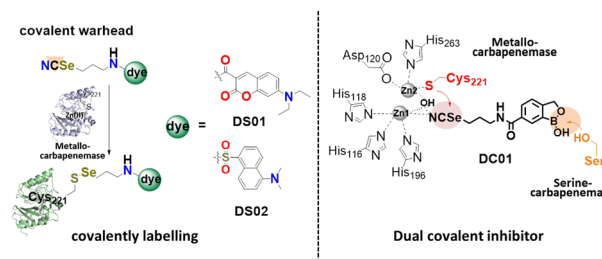
Vinayak Hanchate, Sudharshan Nagabhushana Reddy, Anil Kumar and Kandikere Ramaiah Prabhu\*



9227

**A dual covalent binder for labelling and inhibiting serine and metallo-carbapenemases**

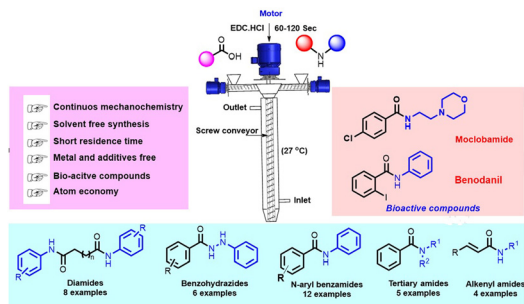
Cheng Chen,\* Yinsui Xu, Peter Oelschlaeger, Jürgen Brem, Lu Liu, Dongmei Wang, Hongzhe Sun and Ke-Wu Yang\*



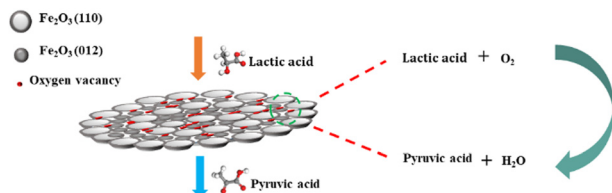
9231

**Direct amidation of acids in a screw reactor for the continuous flow synthesis of amides**

Ranjit S. Atapalkar and Amol A. Kulkarni\*



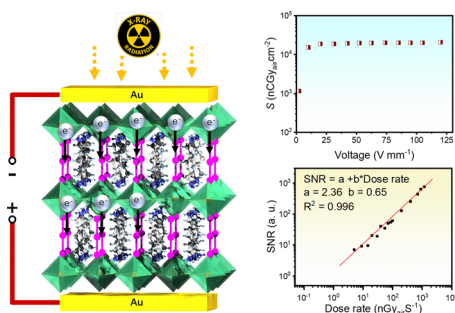
9235



### Boosted oxidative dehydrogenation of lactic acid into pyruvic acid on polyvinylpyrrolidone modified $\text{Fe}_2\text{O}_3$

Zhendi Jia, Congming Tang, Kai Ma and Xinli Li\*

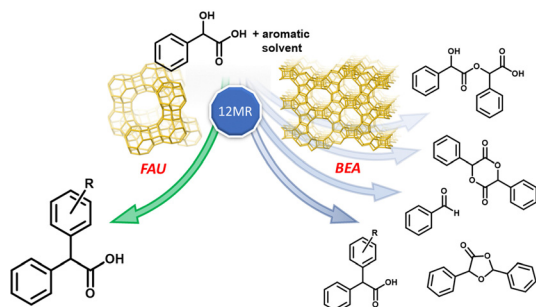
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### OD triiodide hybrid halide perovskite for X-ray detection

Yuyin Wang, Shaoya Zhang, Yinan Wang, Jishuang Yan, Xinran Yao, Man Xu, Xiao-wu Lei, Guoming Lin\* and Cheng-yang Yue\*

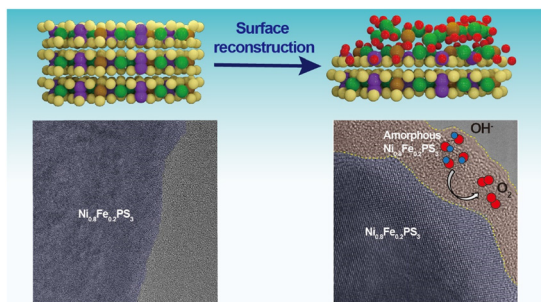
9243



### Selective alkylation of mandelic acid to diarylacetic acids over a commercial zeolite

Samuel G. Meacham and Russell A. Taylor\*

9247



### Unraveling the surface self-reconstruction of Fe-doped Ni-thiophosphate for efficient oxygen evolution reaction

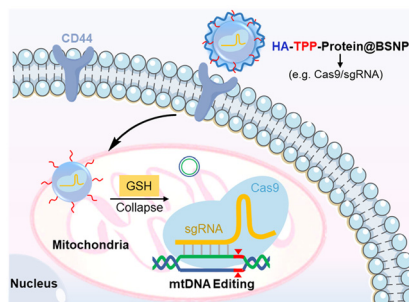
Balakrishnan Kirubasankar, Yo Seob Won, Soo Ho Choi, Jae Woo Kim, Laud Anim Adofo, Soo Min Kim\* and Ki Kang Kim\*



9251

### Cell-type-specific CRISPRization of mitochondrial DNA using bifunctional biodegradable silica nanoparticles

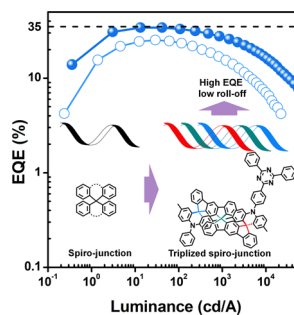
Linye Jiang, Bizhong Zhou, Huijuan Qian, Hongfeng Wang, Yuxi Wang, Weijiao Fan, Guowan Zheng\* and Jingyan Ge\*



9255

### Multi-spiro junctions enable efficient thermally activated delayed fluorescent emitter

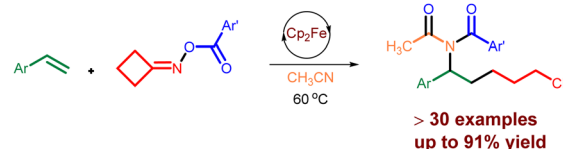
Yang Liu, Yulin Xu, Hao Peng, Jingsheng Miao, He Liu\* and Chuluo Yang\*



9259

### Ferrocene catalyzed redox-neutral difunctionalization of alkenes using cycloketone oxime esters: access to distal imido-nitriles

Durga Golagani, Sriram Ajmeera, William Erb,\* Florence Mongin and Srirama Murthy Akondi\*

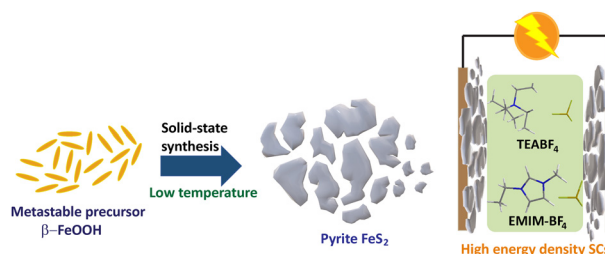


- ▶ Ferrocene catalysis
- ▶ Redox-neutral and mild conditions
- ▶ 100% atomic utilization
- ▶ Late-stage functionalization

9263

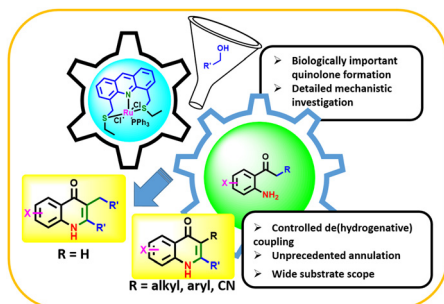
### Low temperature synthesis of crystalline pyrite FeS<sub>2</sub> for high energy density supercapacitors

Savithri Vishwanathan and H. S. S. Ramakrishna Matte\*



## COMMUNICATIONS

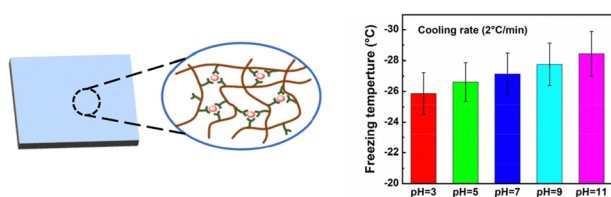
9267



### Ruthenium-catalyzed dehydrogenative cyclization to synthesize polysubstituted 4-quinolones under solvent-free conditions

Bitan Sardar, Debjyoti Pal, Rajashri Sarmah and Dipankar Srimani\*

9271



### Tuning ice nucleation with pH-modulated Fe<sup>3+</sup> cross-linked hydrogel surfaces

Xiao Meng, Yunhe Diao, Ranran Zhu, Fan Zhang, Xuying Liu, Jinzhou Chen and Huige Yang\*

## CORRECTION

9275

### Correction: Unorthodox crystalline drug salts *via* the reaction of amine-containing drugs with CO<sub>2</sub>

Mohammad Soltani, Brandon L. Mash, Julian Henseler, Sharhazad Badri, Matthias Zeller, E. Alan Salter, Andrzej Wierzbicki, Alexandra C. Stenson and James H. Davis\*

