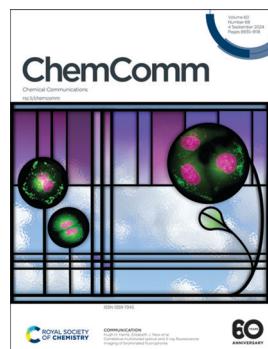




Cover

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Deepak Asthana *et al.*,  
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Inside cover

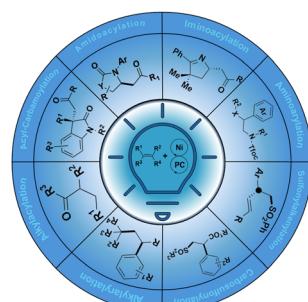
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See Hugh H. Harris,  
Elizabeth J. New *et al.*,  
pp. 9026–9029.  
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## HIGHLIGHTS

8946

# Recent advances in dual photoredox/nickel catalyzed alkene carbofunctionalised reactions

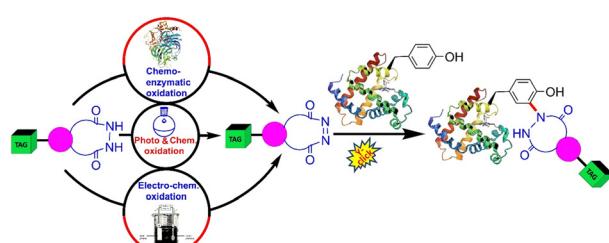
Anilkumar Kommoju, Kattamuri Snehita, Kandi Sowjanya,  
Saratchandra Babu Mukkamala and Kishor Padala\*



8978

## **Discovery and development of tyrosine-click (Y-click) reaction for the site-selective labelling of proteins**

Joydip Chatterjee, Ayan Bandyopadhyay,  
Mahesh Patabiraman and Rajib Sarkar\*



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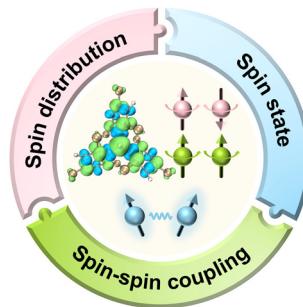


## FEATURE ARTICLES

8997

**Spin characteristics in conjugated stable diradicals**

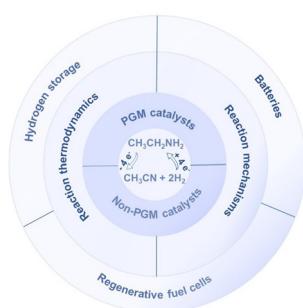
Dacheng Dai, Qian Zhan, Tianfang Shi,  
Dongsheng Wang\* and Yonghao Zheng\*



9007

**Advances in electrocatalytic dehydrogenation of ethylamine to acetonitrile**

Yanlin Zhu, Dezhen Wu, Jinyao Tang, Dakota Braaten,  
Bin Liu and Zhenmeng Peng\*

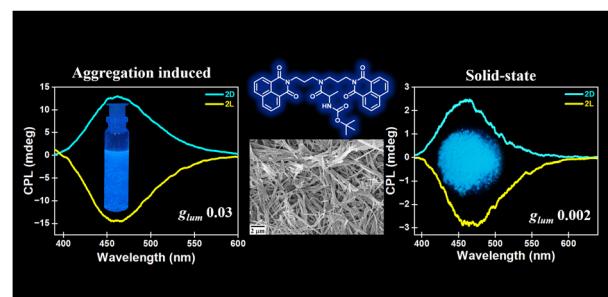


## COMMUNICATIONS

9022

**Aggregation-induced generation of circularly polarized luminescence in naphthaleneimide-based nanostructures with high dissymmetry factor**

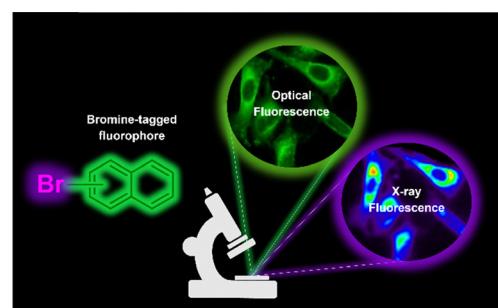
Aakash Ravikant Likhar, Arunima Cheran,  
Alisha Sengupta, Camelia Dutta, Jatish Kumar\* and  
Deepak Asthana\*



9026

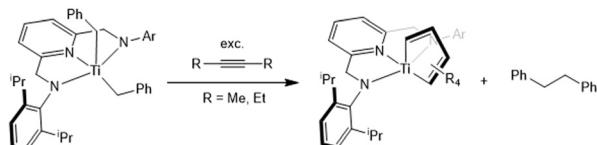
**Correlative multimodal optical and X-ray fluorescence imaging of brominated fluorophores**

Liam D. Adair, Marcus E. Graziotto, Terry Koh,  
Clinton J. Kidman, Bradley J. Schwehr, Mark J. Hackett,  
Massimiliano Massi, Hugh H. Harris\* and  
Elizabeth J. New\*



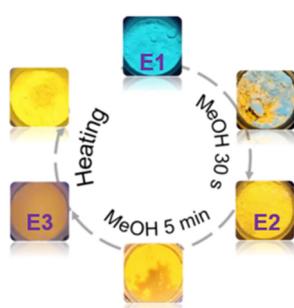
## COMMUNICATIONS

9030

*Coordination-Induced Reductive Elimination from Ti(IV)*• Novel Titanium Dibenzyl Complexes • Radical C(sp<sup>3</sup>)-C(sp<sup>3</sup>) Bond Formation •**Coordination-induced reductive elimination from a titanium(IV) complex**

Paul Fritzsche, Lucia Geyer, Corinna Czernetzki and Gabriele Hierlmeier\*

9034

**Solvent-induced structural regulation and luminescence switching of hybrid copper(I) halides for encryption and anti-counterfeiting applications**

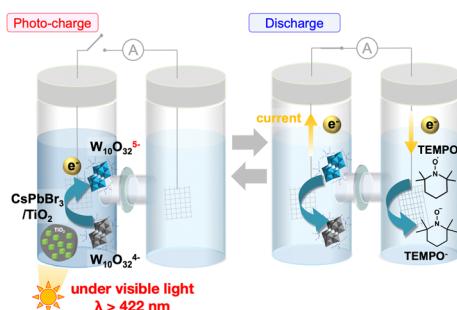
Xia Liu, Bohan Li, Jiance Jin, Lin Yang, Zhiguo Xia\* and Yan Xu\*

9038

**Replacing imidazole with benz-imidazole: a promising approach to enhance the electrocatalytic performance of imidazolium based surface active ionic liquids for greener electrosynthesis**

Nadia Hassan, Mohammad Yaseen Kuchey and Mohsin Ahmad Bhat\*

9042

**A photoelectrochemical capacitor using polyoxometalates coupled with semiconductor nanocrystals as the photosensitizer**

Yuji Akaishi,\* Gimpei Yoshimura, Yui Mokuge, Kona Sumi, Paravee Vas-Umnay, Yusuke Inomata and Tetsuya Kida\*

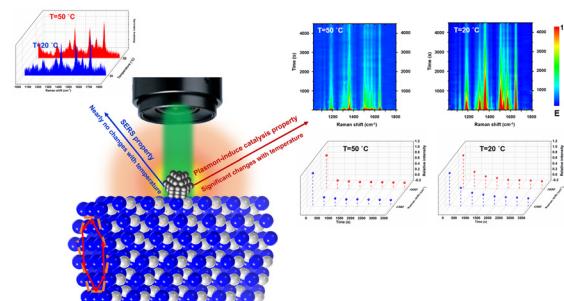


## COMMUNICATIONS

9046

**Thermal modulation of surface-enhanced Raman scattering and plasmon-induced catalysis in Ag nanoparticle/ZnO microrod composites**

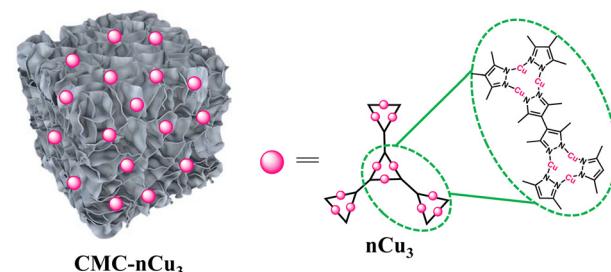
Yinong Wang, Rui Liu, Zhiyue Zhong, Jinpeng Liu, Xiao Feng, Lizhao Liu\* and Feng Jiang\*



9050

**Bioinspired molecular catalysts with a unique tricopper architecture for highly efficient oxygen reduction reaction**

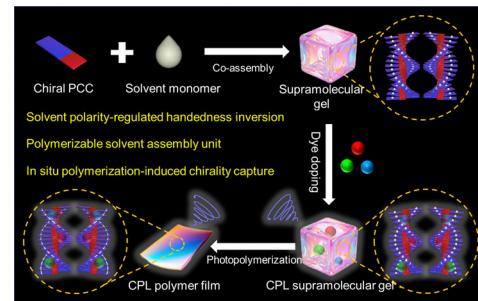
Peng-Peng Guo, Chao Xu, Kun-Zu Yang, Chen Lu, Hua-Min Chi, Ying Xu, Yong-Zhi Su, Xin Liu, Ping-Jie Wei and Jin-Gang Liu\*



9054

**Supramolecular chirality capture in solvent monomer-based co-assemblies *via* *in situ* photopolymerization**

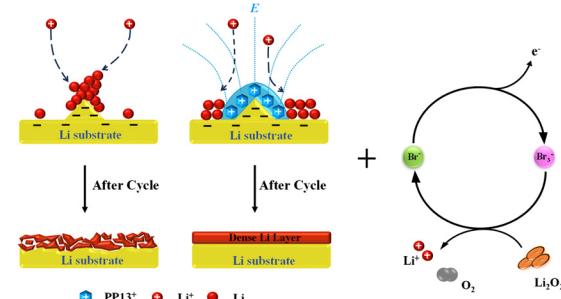
Zefeng Long, Shuyuan Zheng, Weiqiang Zhou\* and Guofeng Liu\*



9058

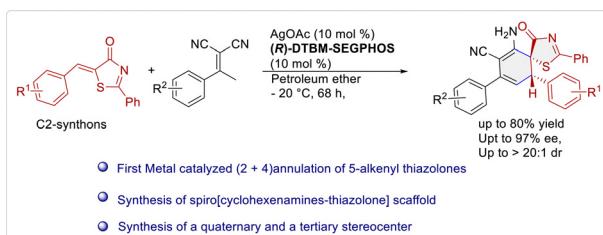
**Piperidine-based ionic liquid additive with electrostatic shielding and redox activity enabling advanced lithium–oxygen batteries**

Meng-Lin Gao, Qian-Yan Wang, Ya-Ling Liao, Wei-Rong Chen, Zhong-Yu Huang, Xin-Xin Zhuang and Xiao-Ping Zhang\*



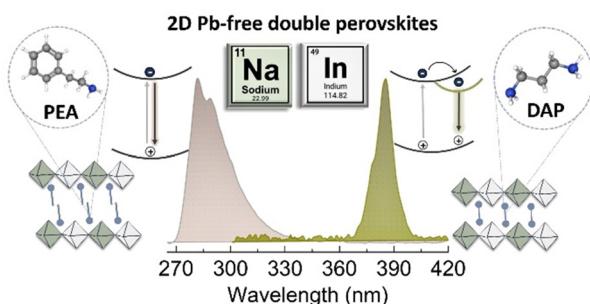
## COMMUNICATIONS

9062

**Ag(I)-catalyzed asymmetric (2+4) annulation reaction of 5-alkenyl thiazolones: synthesis of enantioenriched spiro[cyclohexenamines-thiazolones]**

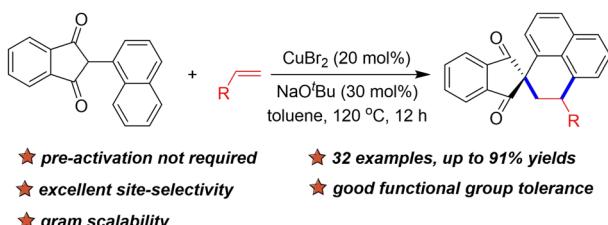
Kavita Choudhary, Akanksha Santosh Deshpande and Vinod K. Singh\*

9066

**Self-trapped emissions in 2D lead-free halide perovskites driven by divalent spacer cations**

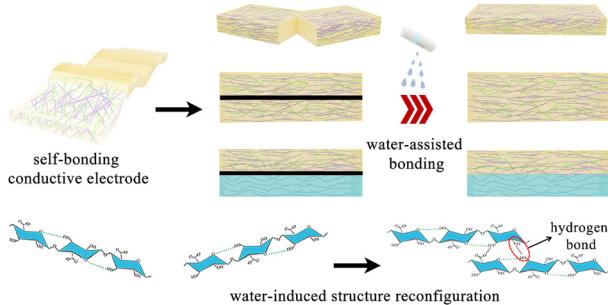
Andre L. M. Freitas,\* Aryane Tofanello, Naidel A. M. S. Caturello, Karla K. F. Barbosa and Fabio F. Ferreira

9070

**CuBr<sub>2</sub>-mediated dehydrogenative [4+2] annulation of 1-naphthyl-1,3-indandiones and alkenes**

Xu Zhang,\* Mengfan Chang, Tongtong Ni, Shuhan Liu, Wenguang Li and Xuefeng Xu

9074

**A self-bonding conductive electrode triggered by water-induced structure reconfiguration**

Wenjie Zhang,\* Zhouyang Qin, Lingxiao Yu, Jiabiao Lian, Junfeng Liu, Zhixia He and Zheng-Hong Huang\*

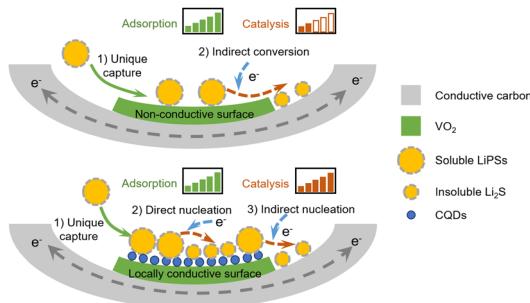


## COMMUNICATIONS

9078

**Locally boosted Li<sub>2</sub>S nucleation on VO<sub>2</sub> by loading carbon quantum dots for soft-packaged lithium–sulfur pouch cells**

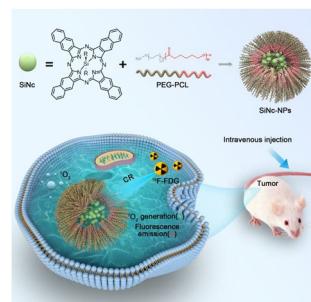
Ruoxuan Yang, Yunfeng Zhang, Xifang Chen,\* Lixian Song, Yue Hu\* and Yingze Song\*



9082

**Radiopharmaceutical-activated silicon naphthalocyanine nanoparticles towards tumor photodynamic therapy**

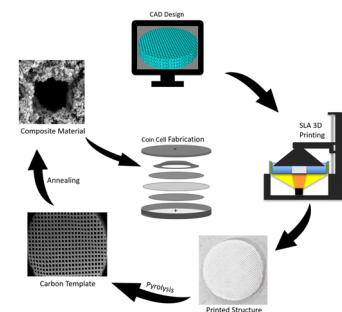
Tingting Wang, Jingchao Li, Xun Zhang, Chengao Li, Jiang Ming, Jian Li, Dongsheng Zhang, Jun Yang, Nian Liu\* and Xinhui Su\*



9085

**FeS<sub>2</sub> deposited on 3D-printed carbon microlattices as free-standing electrodes for lithium-ion batteries**

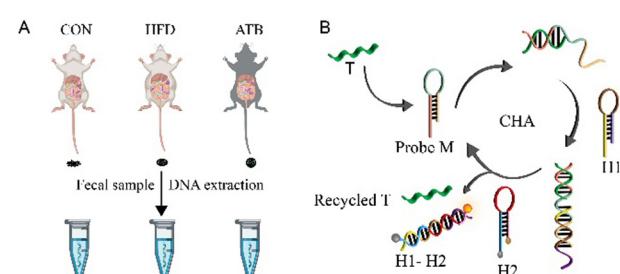
Cameron Romero, Zhi Liu, Kenneth Gordon, Xiaobo Lei, Karius Joseph, Emily Broussard, Daniel Gang, Zhen Wei and Ling Fei\*



9089

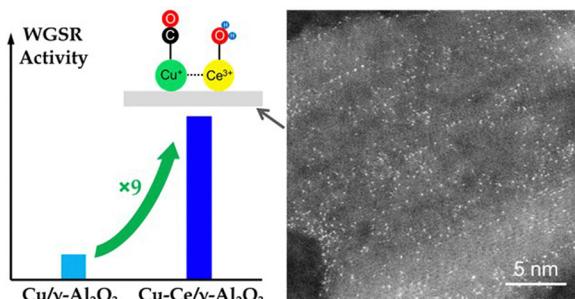
**A non-enzymatic, isothermal amplification sensor for quantifying the relative abundance of *Akkermansia muciniphila***

Bing Liu, Chen Shi, Fan Wang, Fangling Xu, Jie Chao, Jiapeng Zhu,\* Dongliang Yang\* and Xiangyuan Ouyang\*



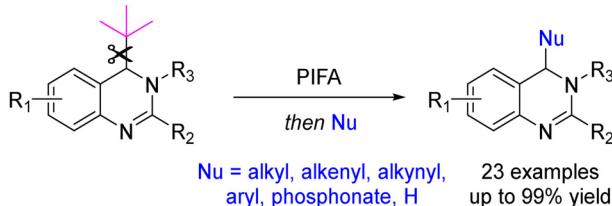
## COMMUNICATIONS

9093

**High-area alumina supported Cu–Ce atomic species for water–gas shift reaction**

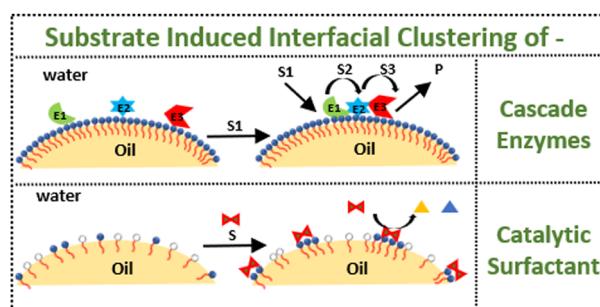
Yiwei Yu, Tie Wang, Ning Yan and Jingyue Liu\*

9097

**Constructing new bonds to carbon in dihydroquinazolines *via* hypervalent iodine(III)-mediated C(sp<sup>3</sup>)–C(sp<sup>3</sup>) bond functionalization**

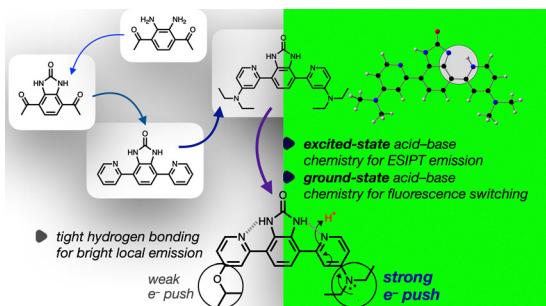
Haley M. Carlson, Abigail R. Marshall, Kaylin M. Burton and R. Adam Mosey\*

9101

**Substrate-induced assembly of cascade enzymes and catalytic surfactants: nanoarchitectonics at the oil-in-water droplet interface**

Priyanka, Manpreet Kaur and Subhabrata Maiti\*

9105

**Urea-fused and  $\pi$ -extended single-benzene fluorophores with ultralarge Stokes shifts**

Taehyeon Choi, Heechan Kim, Younghun Kim and Dongwhan Lee\*

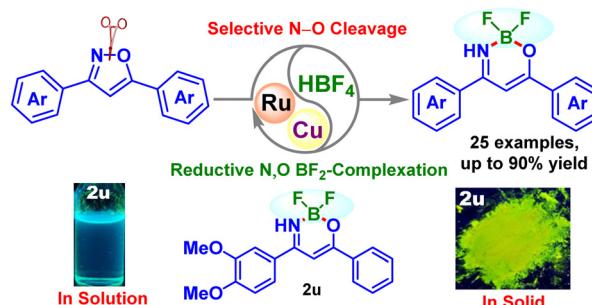


## COMMUNICATIONS

9109

**Harnessing reductive  $\text{BF}_2$ -complexation via Ru(II)-catalyzed N–O cleavage of isoxazoles**

Pritishree Panigrahi, Subhendu Ghosh,  
Tamanna Khandelia, Gyanesh Tripathi,  
Raju Mandal and Bhisma K. Patel\*



9113

**Physical adsorption of  $\text{OH}^-$  causes anomalous charging at oxide–water interfaces**

Yingchun Zhang, Yong-Bin Zhuang, Xiandong Liu,\*  
Jun Cheng,\* Johannes Lützenkirchen\* and Xiancai Lu

