

## IN THIS ISSUE

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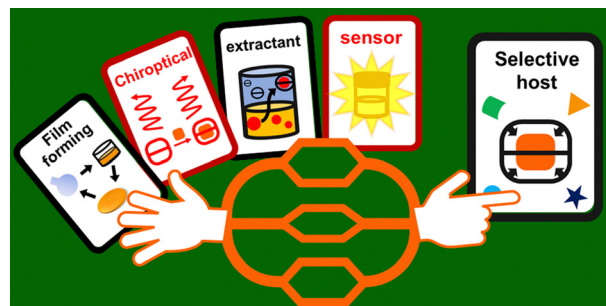
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## FEATURE ARTICLES

13668

### Recent applications of organic cages in sensing and separation processes in solution

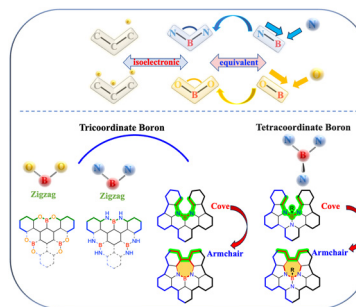
Sonia La Cognata and Valeria Amendola\*



13679

### Heteroatom-boron-heteroatom-doped $\pi$ -conjugated systems: structures, synthesis and photofunctional properties

Tinghao Ma, Jiaqi Dong and Deng-Tao Yang\*



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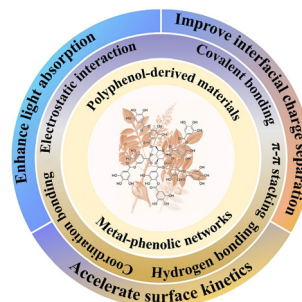


## FEATURE ARTICLES

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## Functions of metal–phenolic networks and polyphenol derivatives in photo(electro)catalysis

Xiao-Long Liu, Hai-Chao Wang, Tao Yang, Xin-Zheng Yue and Sha-Sha Yi\*

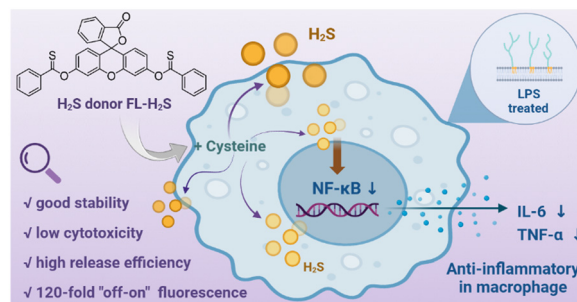


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A new dual functional H<sub>2</sub>S donor for fluorescence imaging and anti-inflammatory application

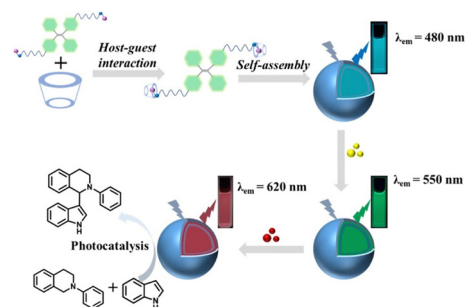
Shumei Huang, Zejun Li, Wenhui You, Guansheng Zheng, Huatang Zhang,\* Yin Jiang\* and Hongyan Sun\*



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## A cavitand-based supramolecular artificial light-harvesting system with sequential energy transfer for photocatalysis

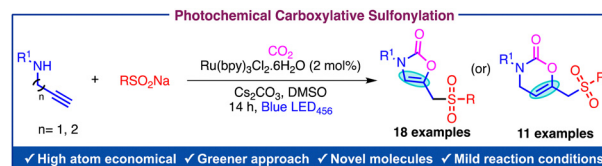
Qian Liu, Minzan Zuo, Kaiya Wang\* and Xiao-Yu Hu\*



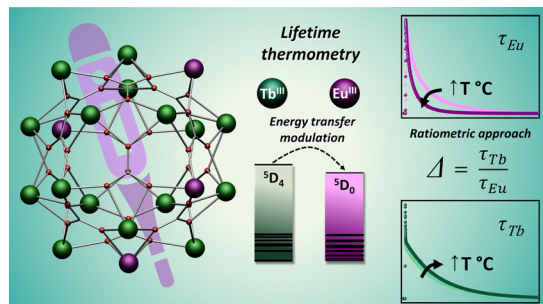
13711

Visible-light-induced bifunctionalisation of (homo)propargylic amines with CO<sub>2</sub> and arylsulfinates

Mandapati Bhargava Reddy and Eoghan M. McGarrigle\*



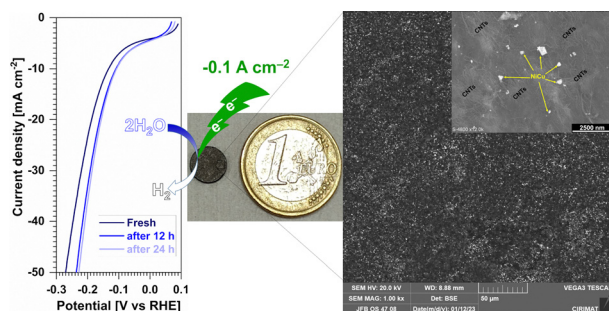
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### Intra-cluster energy transfer editing in a dual-emitting system to tap into lifetime thermometry

Claudia Manuela Santos Calado, Diogo Alves Gálico and Muralee Murugesu\*

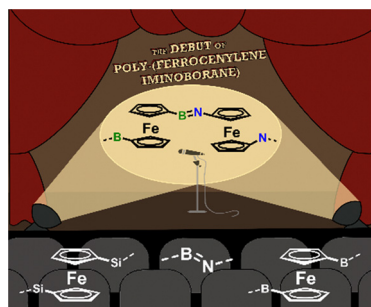
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### Spark plasma sintered catalytic nickel–copper alloy and carbon nanotube electrodes for the hydrogen evolution reaction

Jean-Félix Boué, Cédric Espinet, Simon Amigues, David Mesguich, David Cornu, Yaovi Holade,\* Julien Cambedouzou\* and Christophe Laurent\*

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### Poly(ferrocenylene iminoborane): an inorganic–organic hybrid polymer comprising a backbone of moderately interacting ferrocenes

Vivien Zeh, Johannes S. Schneider, Jonas Bachmann, Ivo Krummenacher, Holger Braunschweig and Holger Helten\*

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### Carborane-based heteromolecular extended networks driven by directional C–Te···N chalcogen bonding interactions

Maxime Beau, Olivier Jeannin, Marc Fourmigué,\* Emmanuel Aubert, Enrique Espinosa, Sunhee Lee, Won-Sik Han and le-Rang Jeon\*

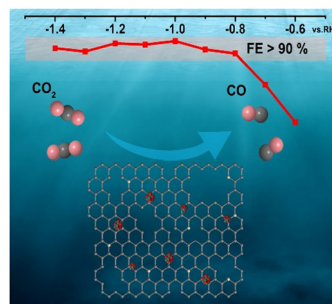


## COMMUNICATIONS

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### Facile synthesis of supported CuNi nano-clusters as an electrochemical CO<sub>2</sub> reduction catalyst with broad potential range

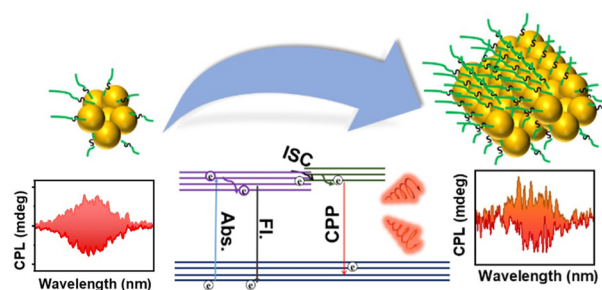
Jiale Wang, Fan Li, Runhua Li, Qian Xiang,  
Wencong Zhang, Chengyi Song, Peng Tao,  
Wen Shang, Tao Deng, Hong Zhu and Jianbo Wu\*



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### Dual emissive optically active gold nanoclusters endowed with circularly polarized phosphorescence

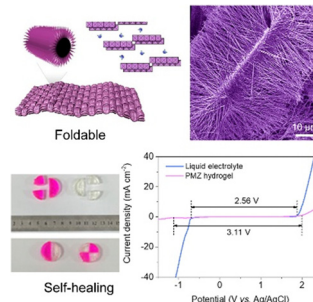
Camelia Dutta, Sonia Maniappan and Jatish Kumar\*



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### A foldable self-healing rocking chair zinc-ion battery using a three-dimensional zinc metal-free anode

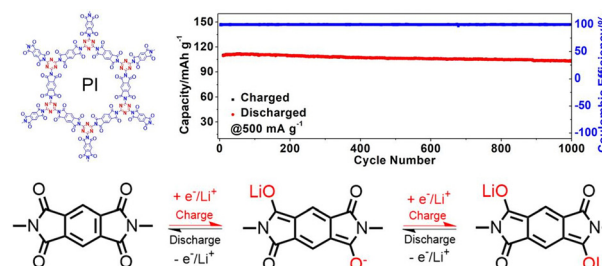
Jiawei Long, Tianli Han, Xirong Lin, Yajun Zhu and  
Jinyun Liu\*



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### Fabrication of porous polyimide as cathode for high performance lithium-ion battery

Xianyu Liu,\* Mingxun Xie, Yunxia Wei, Yongliang Guo  
and Zheng Liu

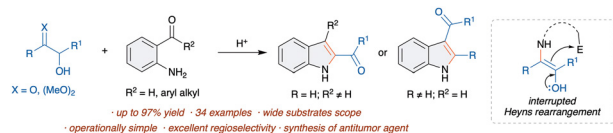




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## An interrupted Heyns rearrangement approach for the regioselective synthesis of acylindoles

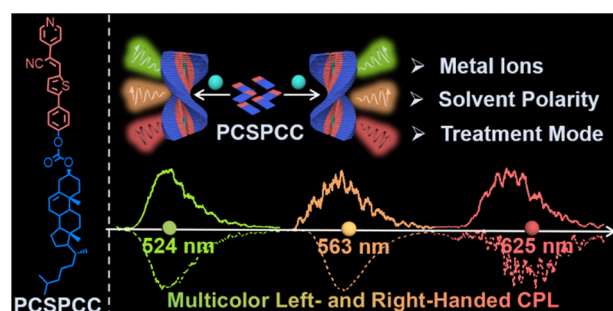
Minakshi Altia and Pazhamalai Anbarasan\*



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## Multicolor circularly polarized luminescence inversion of metal–organic supramolecular polymers

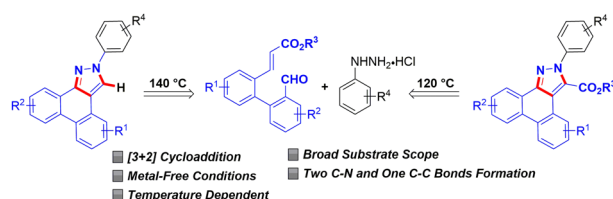
Kuo Fu and Guofeng Liu\*



13755

## Transition metal-free and temperature dependent one-pot access to phenanthrene-fused heterocycles via a 1,3-dipolar cycloaddition pathway

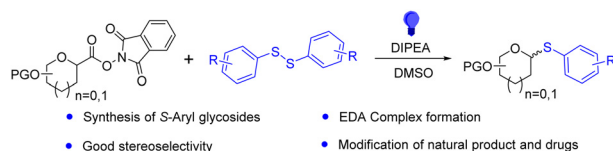
Mokilla Ramachandra Reddy, Eerappa Rajakumara and Gedu Satyanarayana\*



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## Visible-light-mediated synthesis of non-anomeric S-aryl glycosides via a photoactive electron-donor–acceptor complex

Le Zhang, Shiyun He, Jinyu Hou, Meiling Ye, Jian Chen, Guanghui Lv, Tianle Huang, Zhongzhen Yang\* and Yong Wu\*

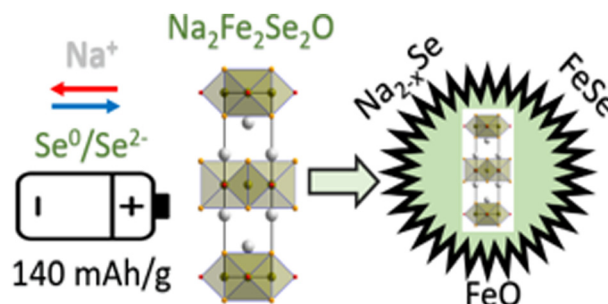


## COMMUNICATIONS

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**Na<sub>2</sub>Fe<sub>2</sub>Se<sub>2</sub>O: a double anti-perovskite with prevalence of anionic redox activity in Na-ion batteries**

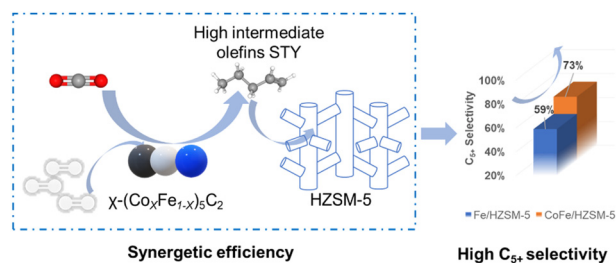
Mikhail V. Gorbunov,\* Thomas Doert and Daria Mikhailova



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**Bifunctional CoFe/HZSM-5 catalysts orient CO<sub>2</sub> hydrogenation towards liquid hydrocarbons**

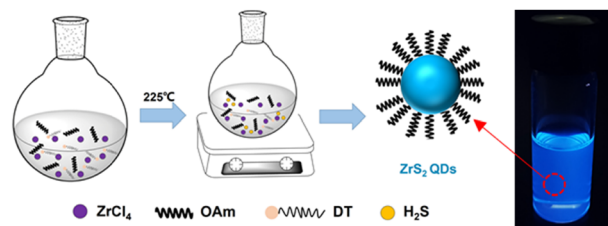
Kai Wang, Na Liu, Jian Wei,\* Yang Yu, Jixin Zhang, Joshua Iseoluwa Orege, Lifei Song, Qingjie Ge and Jian Sun\*



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**Facile synthesis of wide bandgap ZrS<sub>2</sub> colloidal quantum dots for solution processed solar-blind UV photodetectors**

Zan Wang, Yunjiao Gu, Fenghua Liu and Weiping Wu\*



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**A high-performance crystalline Ti<sub>2</sub>O<sub>1.3</sub>(PO<sub>4</sub>)<sub>1.6</sub>/TiO<sub>2</sub> carbon-coated composite as an anode for lithium-ion batteries**

Yayun Zheng, Yuefo Yi, Ziyi Yang, Wenbin Zhou, Yichao Wang and Zhengfei Chen\*

