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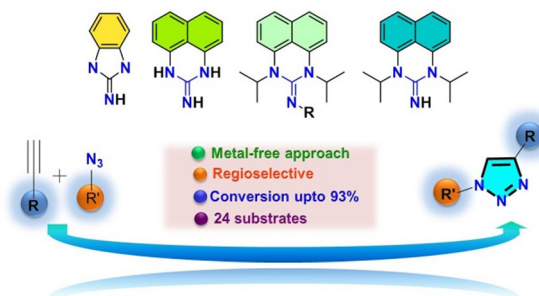


## COMMUNICATIONS

12699

**N-Heterocyclic imino-catalyzed 1,4-regioselective azide–alkyne cycloaddition (AAC): a metal-free approach**

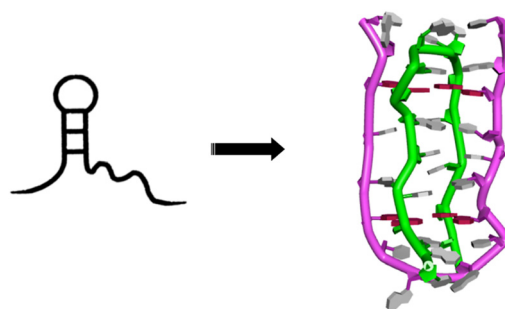
Shanmugam Revathi, Aditya L. Shinde,  
Mulimani K. Rajashekhar, Debasish Mandal,  
Amit Ranjan Maity, Somenath Garai and Tapas Ghatak\*



12703

**Unusual topological RNA G-quadruplex formed by an RNA duplex: implications for the dimerization of SARS-CoV-2 RNA**

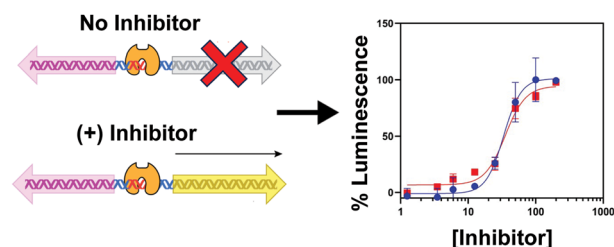
Shiyu Wang, Yi Song, Zhiyong He, Hisao Saneyoshi,  
Rie Iwakiri, Pengyu Xu, Chuanqi Zhao, Xiaogang Qu and  
Yan Xu\*



12707

**Development of a whole-cell biosensor for  $\beta$ -lactamase inhibitor discovery**

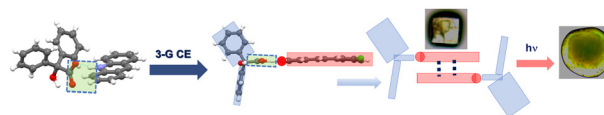
Mitchell A. Jeffs, Rachel A. V. Gray, Premeet M. Sheth  
and Christopher T. Lohans\*



12711

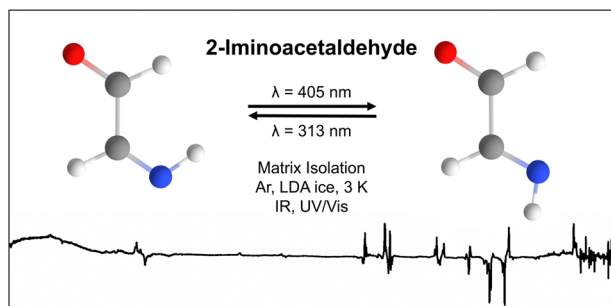
**Exploiting benzoic acid as a modular template: controlling photoreactivity and solid to liquid transition during photodimerization**

Mollah Rohan Ahsan, Lavanya Singh, Harshit Varma and  
Arijit Mukherjee\*



## COMMUNICATIONS

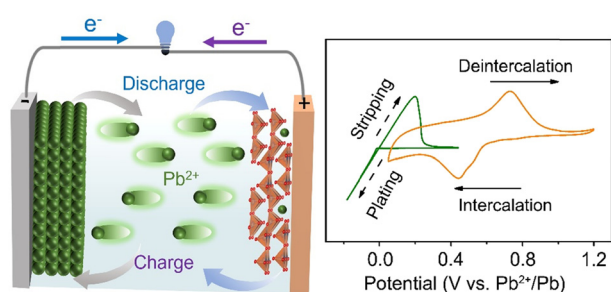
12715



## Spectroscopic identification of interstellar relevant 2-iminoacetaldehyde

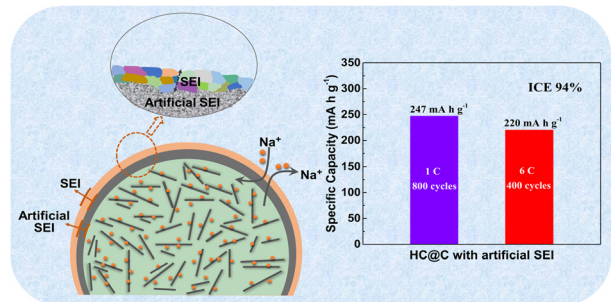
Vladimir D. Drabkin, Viktor Paczelt and André K. Eckhardt\*

12719

A  $\text{V}_2\text{O}_5$  cathode for aqueous rechargeable Pb-ion batteries

Ningbo Liu, Xiaoying Zhao, Xiaohan Wang, Qiaqia Li and Liubin Wang\*

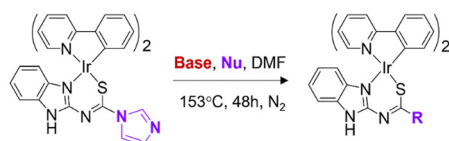
12723



## Pre-engineering artificial solid electrolyte interphase for hard carbon anodes for superior sodium storage performance

Lu Shi, Yadi Sun, Wei Liu, Fanjun Zhao, Ruixin Liu, Chengyu Dong,\* Guanggui Cheng and Jianning Ding\*

12727

Base:  $\text{Et}_3\text{N}$  or KHMDS.

8 Cyclometallated iridium(III) complexes with hydrogen bond-rich ligands (85–97% yield)

## High-yielding synthesis of cyclometallated iridium complexes with hydrogen bond-rich ligands

Marta Tomás Piqueras, Holly J. Howe, Sarah A. Englehart, Robert M. Williamson, Allyson M. Paul and Barry A. Blight\*

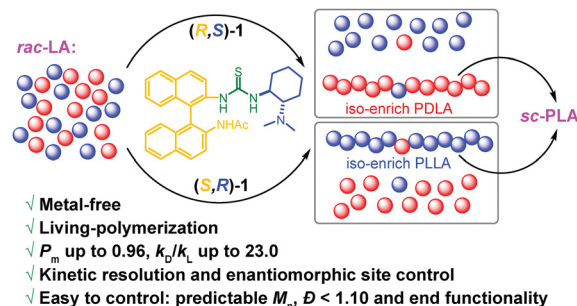


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12731

### Bifunctional thiourea-based organocatalyst promoted kinetic resolution polymerization of racemic lactide to isotactic polylactide

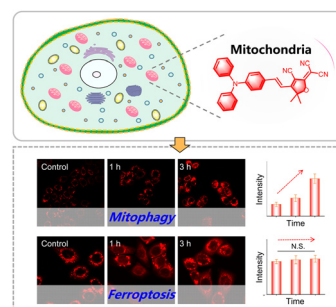
Jiang Dai, Wei Xiong, Dong-Yu Li, Zhongzheng Cai\* and Jian-Bo Zhu\*



12735

### A mitochondria-targeted far-red AIE fluorescent probe for distinguishing between mitophagy and ferroptosis in cancer cells

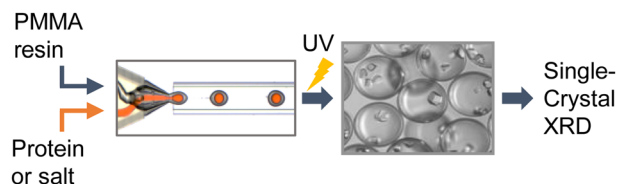
Liyuan Sun, Mengfei Zou, Longjie Du, Shugang Wang, Ru Ding, Keliang Lu,\* Jianchun Li and Jin Zhou\*



12739

### Single crystal formation in core-shell capsules

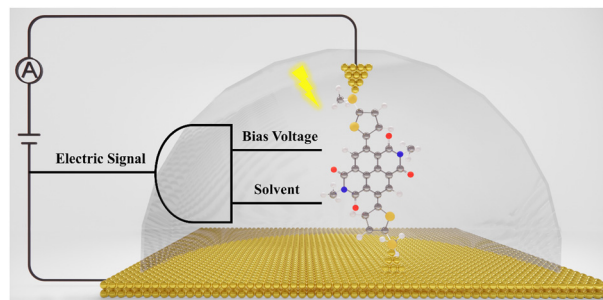
Marie Mettler, Adrien Dewandre, Nikolay Tumanov, Johan Wouters and Jean Septavaux\*



12743

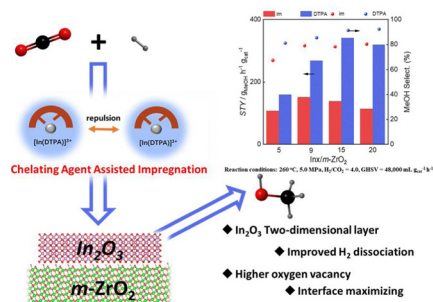
### Reversible electric switching of NDI molecular wires by orthogonal stimuli

Zhi Li, Rui Wang, Yunpeng Li, Yingjie Li, Chaoqi Ma, Jiawei Yang and Hongxiang Li\*





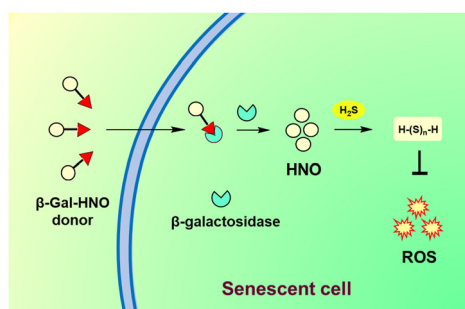
12747



## Towards maximizing the In<sub>2</sub>O<sub>3</sub>/m-ZrO<sub>2</sub> interfaces for CO<sub>2</sub>-to-methanol hydrogenation

Alin Luo, Haohao Chang, Feifan Gao, Yongmei Liu,\* Heyong He and Yong Cao\*

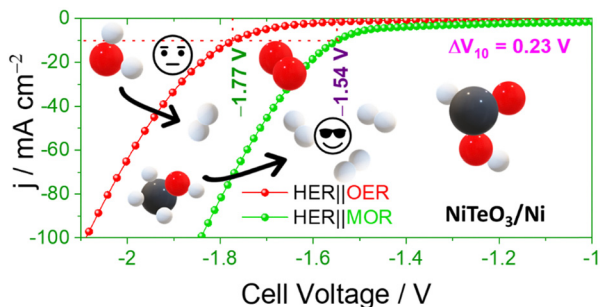
12751



## β-Galactosidase-activated nitroxyl (HNO) donors provide insights into redox cross-talk in senescent cells

Laxman R. Sawase, T. Anand Kumar, Abraham B. Mathew, Vinayak S. Khodade, John P. Toscano, Deepak K. Saini and Harinath Chakrapani\*

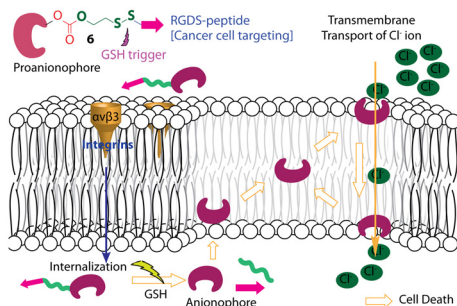
12755



## A tri-functional self-supported electrocatalyst featuring mostly NiTeO<sub>3</sub> perovskite for H<sub>2</sub> production via methanol–water co-electrolysis

Sengeni Anantharaj,\* Mochen Li, Roshini Arulraj, Karthik Eswaran, Sara Fidha C. M., Rajini Murugesan, Arthanareeswari Maruthapillai and Suguru Noda

12759



## Stimuli-responsive release of active anionophore from RGD-peptide-linked proanionophore

Soumya Srimayee, Saumya Ranjan Badajena, Nasim Akhtar, Mrinal Kanti Kar, Subhasis Dey, Purusottam Mohapatra\* and Debasis Manna\*

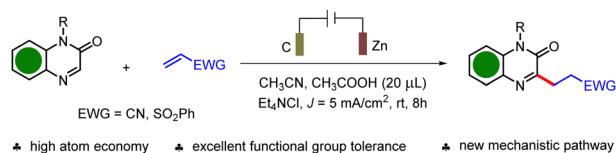


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12763

# Direct alkylation of quinoxalinones with electron-deficient alkenes enabled by a sequential paired electrolysis

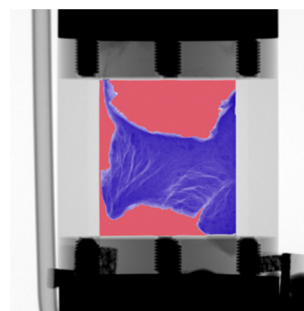
Huiqiao Wang, Ruoyu Liu, Qi Sun\* and Kun Xu\*



12767

# In situ real-time neutron imaging of gaseous H<sub>2</sub> adsorption and D<sub>2</sub> exchange on carbon-supported Pd catalysts

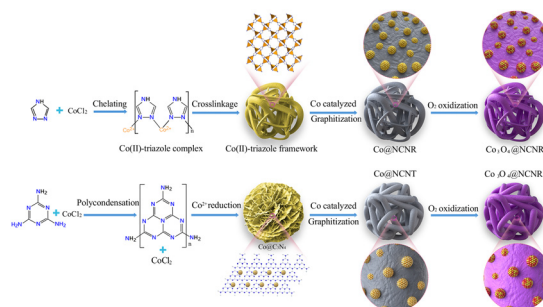
Hamish Cavaye, Christos E. Ballas, Winfried Kockelmann, David Lennon, Paul Collier, Andrew P. E. York, Peter W. Albers and Stewart F. Parker\*



12771

# A new synthesis strategy for nitrogen-doped carbon nanofibers with cobalt oxide nanoparticles as anodic electrode materials for lithium ion batteries

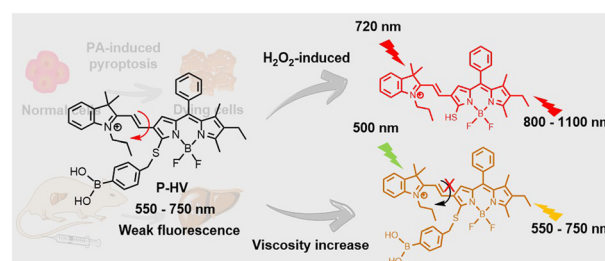
Feng-Ming Liu, Ming-Yang Zhao, Shuo Wang, Ming Chen,\* Xing Qian, Zhong-Yong Yuan, Yan Sun, Chun-Sheng Li and Rong Wan\*



12775

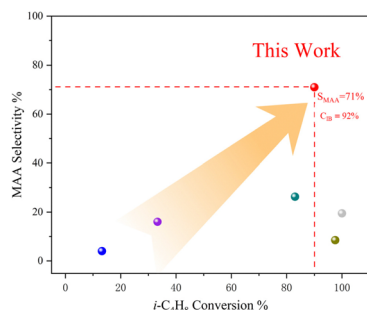
# A BODIPY-based fluorescent probe for simultaneous detection of H<sub>2</sub>O<sub>2</sub> and viscosity during the pyroptosis process

Yuan Mei, Ziyun Li, Kuanrong Rong, Zijuan Hai, Wenjian Tang\* and Qin-Hua Song\*



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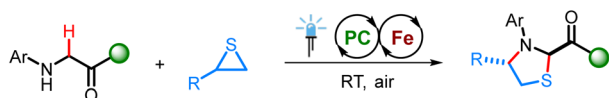
12779



### Efficient one-step oxidation of isobutylene to methacrylic acid over Mo–V–Te–Cs by integrating active lattice oxygen and suitable medium acidity

Xu Liu, Qingrong Wang, Jiaqi Zhou, Ming Bao\* and Jiasheng Wang\*

12783



- atom-economical
- wide substrate scope
- modification of dipeptides

### Direct annulation between glycine derivatives and thiranes through photoredox/iron cooperative catalysis

Shutao Wang, Yuan Gao, Yansong Hu, Jintao Zhou, Zhidang Chen, Zhao Liu and Yuan Zhang\*

