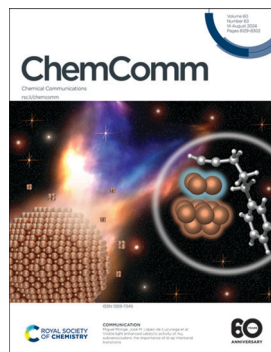


IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(63) 8129-8302 (2024)



Cover

See Miguel Monge, José M. López-de-Luzuriaga *et al.*, pp. 8204–8207. Ryo Mizuta Graphics is acknowledged for the artwork template. Image reproduced by permission of Alba Sorroche from *Chem. Commun.*, 2024, 60, 8204.



Inside cover

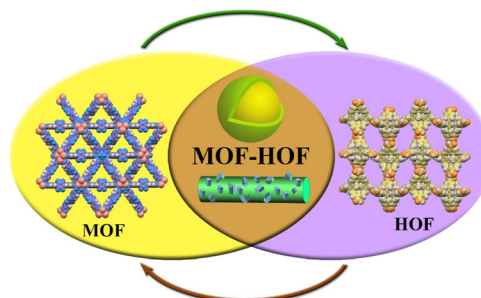
See Charles W. Machan *et al.*, pp. 8208–8211. Image reproduced by permission of Emma N. Cook from *Chem. Commun.*, 2024, 60, 8208.

HIGHLIGHT

8140

Interconversion and functional composites of metal–organic frameworks and hydrogen-bonded organic frameworks

Siwen Hu, He Zhao, Meng Liang, Jingjun Hao and Pengchong Xue*

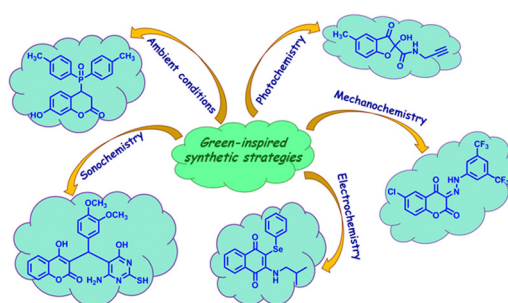


FEATURE ARTICLES

8153

Practice of green chemistry strategies in synthetic organic chemistry: a glimpse of our sincere efforts in green chemistry research

Goutam Brahmachari



Environmental Science: Atmospheres

GOLD
OPEN
ACCESS

Connecting communities
and inspiring new ideas

rsc.li/submittoEA

Fundamental questions
Elemental answers

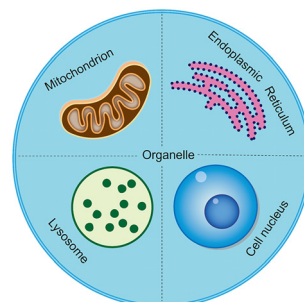


FEATURE ARTICLES

8170

Organelle-based immunotherapy strategies for fighting against cancer

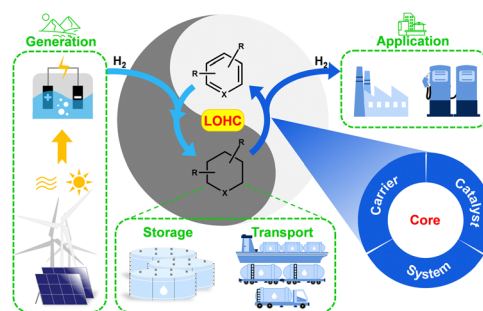
Yanhua Li, Yingying Song, Jiaqi Yin, Wei Pan, Na Li* and Bo Tang*



8186

Advances in liquid organic hydrogen carriers: developing efficient dehydrogenation strategies

Ruike Tan, Qing Ji, Yanni Ling and Lu Li*

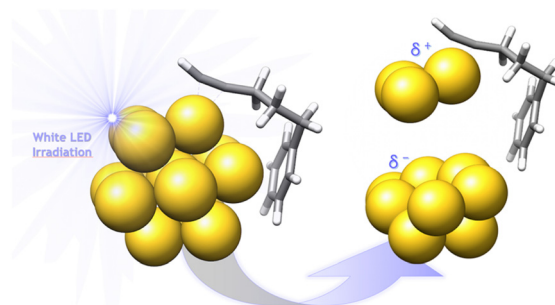


COMMUNICATIONS

8204

Visible light enhanced catalytic activity of Au_n subnanoclusters: the importance of d–sp interband transitions

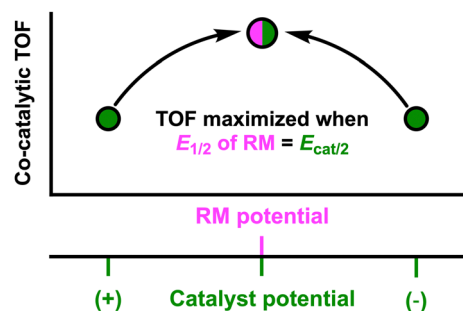
Alba Sorroche, Irene del-Campo, Alberto Casu, Andrea Falqui, Miguel Monge* and José M. López-de-Luzuriaga*



8208

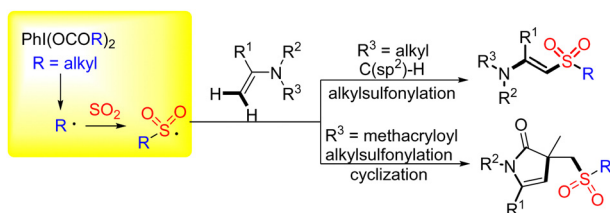
Improving co-electrocatalytic carbon dioxide reduction by optimizing the relative potentials of the redox mediator and catalyst

Amelia G. Reid, Ethan A. Zelenke, Megan E. Moberg, Diane A. Dickie and Charles W. Machan*



COMMUNICATIONS

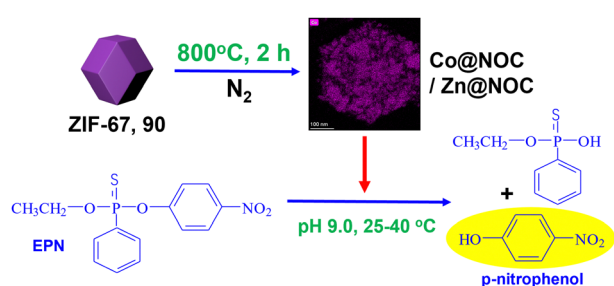
8212



Metal- and additive-free β-C(sp²)-H decarboxylative alkylsulfonylation of enamides from phenyliodine(III) dicarboxylates and sulfur dioxide

Wenyan Li, Cenxin Wang, Tonghao Zhu,* Gang Liu* and Jie Wu*

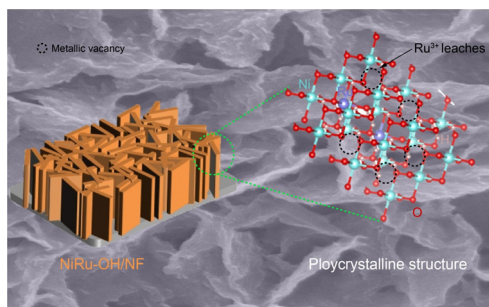
8216



Cobalt and zinc nanoparticles from pyrolysis of their MOF precursors exhibiting potent organophosphorus hydrolase-mimicking activities

Qiongfang Zhou, Rongqiu Yan, Yu Zhang and Chenghong Lei*

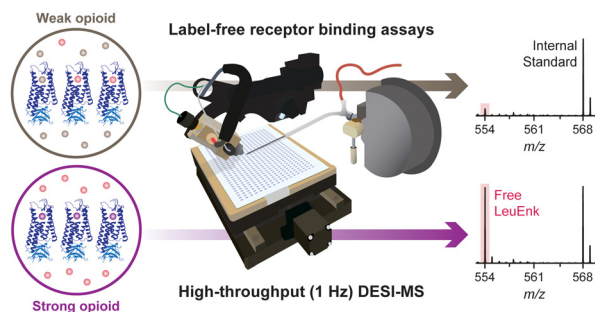
8220



Cation etching-induced deep self-reconstruction to form a polycrystalline structure for efficient electrochemical water oxidation

Jing Zhang, Jing Guo, Hugang Li, Hao Luo and Shuai Niu*

8224



High-throughput label-free opioid receptor binding assays using an automated desorption electrospray ionization mass spectrometry platform

Yunfei Feng, Nicolás M. Morato, Kai-Hung Huang, Mina Lin and R. Graham Cooks*

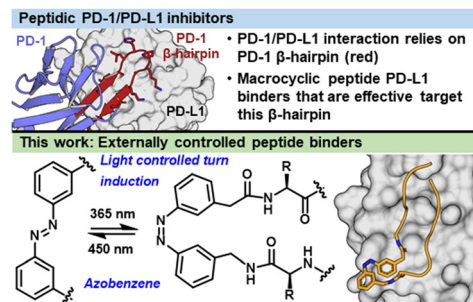


COMMUNICATIONS

8228

Light-activated azobenzene peptide inhibitor of the PD-1/PD-L1 interaction

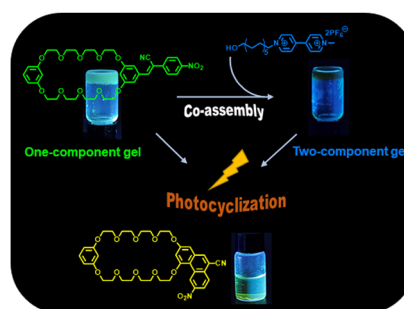
Deanne Hayward, Zoë R. Goddard,
Marco M. D. Cominetti, Mark Searcey and
Andrew M. Beekman*



8232

A crown ether embedded responsive π -gelator for transition from a one-component gel to a two-component gel

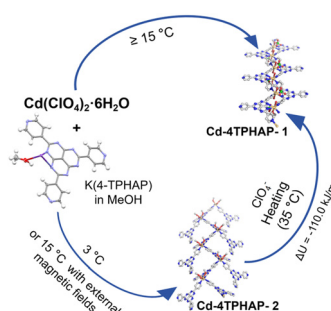
Simei Wu, Wei Tao, Tao Wang, Jieqiong Xu* and
Peifa Wei*



8236

Magnetic and thermodynamic control of coordination network crystallization using a hexaazaphenylene-based ligand

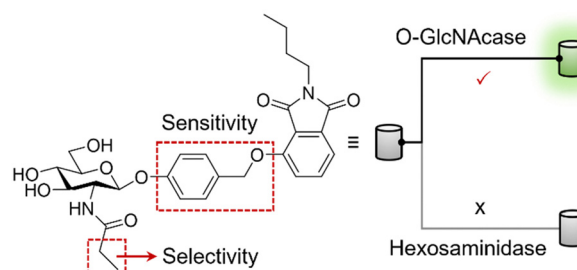
Qiao Jiang, Hiroaki Suzuki, Yuki Wada, Xiaohan Wang,
Yoichi Murakami, Takaya Matsumoto, Pavel M. Usov and
Masaki Kawano*



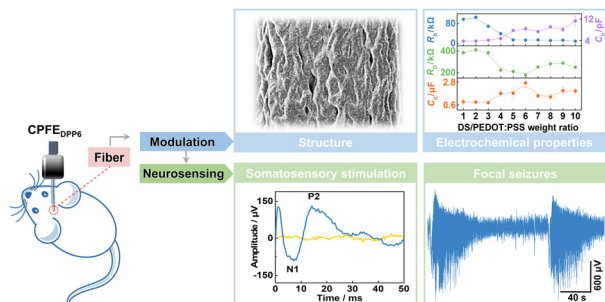
8240

Isoindoline-based fluorogenic probes bearing a self-immolative linker for the sensitive and selective detection of O-GlcNAcase activity

Yuan-Hao Wu, Guan-Jun Wang, Chen Guo,
Pei-Pei Wang, Jun-Yi Wang, Xi-Le Hu,* Yi Zang,*
Tony D. James,* Jia Li* and Xiao-Peng He*



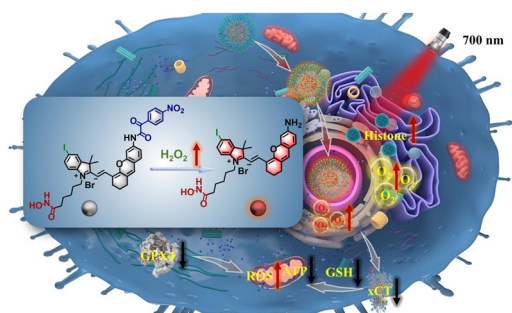
8244



Well-modulated interfacial ion transport enables D-sorbitol/PEDOT:PSS fibers to sense brain electrophysiological signals *in vivo*

Tianci Xu

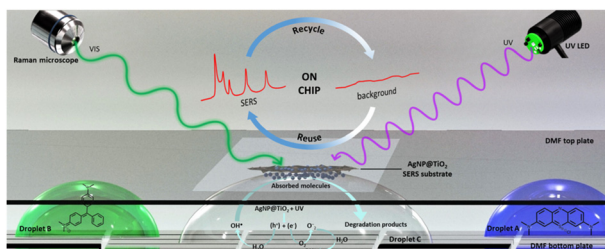
8248



Ferroptosis-inducing photosensitizers alleviate hypoxia tumor microenvironment for enhanced fluorescence imaging-guided photodynamic therapy

Linhao Zhang, Maomao He, Xiang Xia, Zhiyuan Ma, Chengyuan Lv, Ran Wang, Wenkai Liu, Jiangli Fan, Xiaojun Peng and Wen Sun*

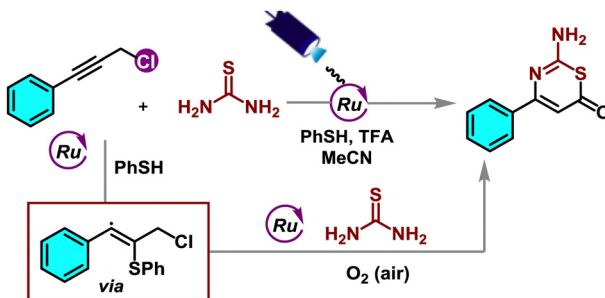
8252



Integration of a recyclable silver substrate for *in situ* surface-enhanced Raman spectroscopy in digital microfluidics

Sebastian Fehse, Anish Das* and Detlev Belder*

8256



Modular access to sulfur substituted analogues of isocytosine *via* photoredox catalysis

Faheem Fayaz, Majid Ahmad Ganie, Sourav Kumar, Shabnam Raheem, Masood Ahmad Rizvi and Bhahwal Ali Shah*

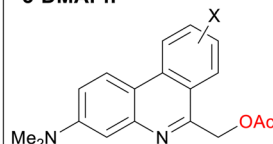


COMMUNICATIONS

8260

Red-shifted two-photon-sensitive phenanthridine photocages: synthesis and characterisation

Célest M. Attiach, Amit Kumar, Jonathan Daniel, Mireille Blanchard-Desce, Antoine Maruani* and Peter I. Dalko*

3-DMAPh

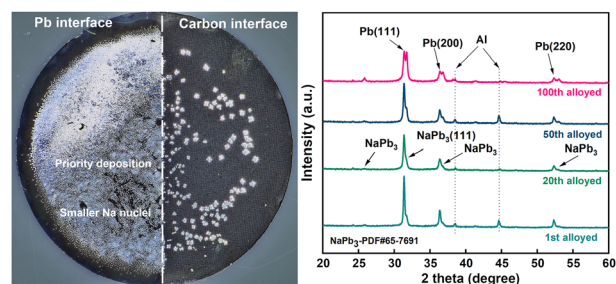
X = H, Me, OMe, F, NMe₂, NO₂

- ✓ Red shifted (up to 431 nm)
- ✓ Straightforward synthesis
- ✓ Rational design
- ✓ Two-photon sensitive

8264

Retarded sodium alloying interface reaction for stable anode-less sodium metal batteries

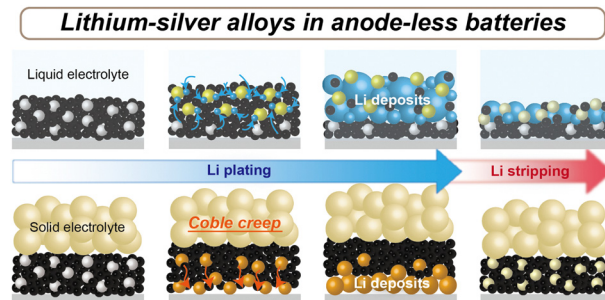
Hao Wu, Chunlin Xie, Mingze Zhang, Jiapeng Zou, Runxin Feng, Hongqin Lu, Qi Zhang, Yougen Tang and Haiyan Wang*



8268

Lithium–silver alloys in anode-less batteries: comparison in liquid- and solid-electrolytes

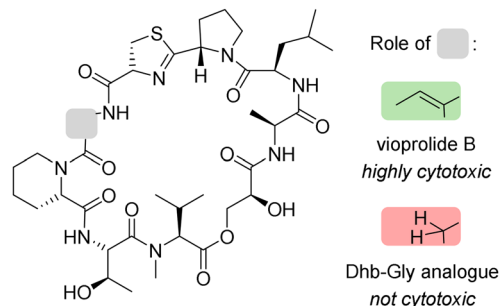
Ju-Hyeon Lee, Jeong Yeon Heo, Ji Young Kim, Ki Yoon Bae, Samick Son and Ji Hoon Lee*



8272

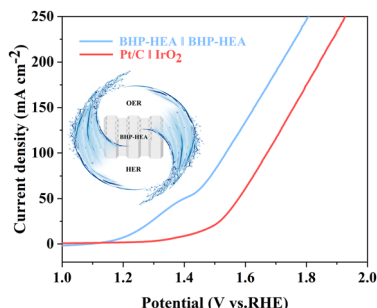
Synthesis and biological evaluation of vioprolide B and its dehydrobutyrine-glycine analogue

Noé Osorio Reineke, Franziska A. V. Elsen, Hanusch A. Grab, Dietrich Mostert, Stephan A. Sieber and Thorsten Bach*



COMMUNICATIONS

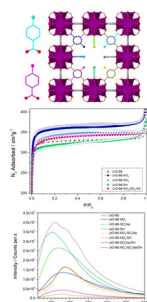
8276



Biomimetic hierarchical porous high entropy alloy for significantly enhancing overall seawater splitting

Wei Wang, Weiqi Wang, Jun Cheng,* Xing Lu* and Yunzhuo Lu*

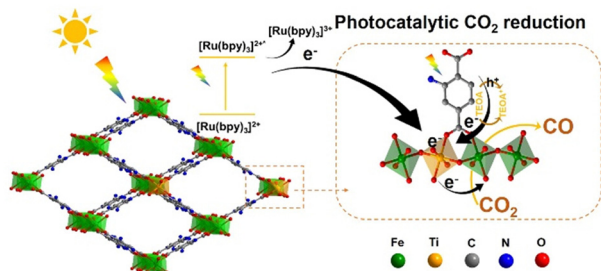
8280



Tuning the electronic properties of Zr UiO-66 through defect-functionalised multivariate modulation

Carmen Rosales-Martínez, Marcelo Assis,* Celia Castillo-Blas* and Isabel Abánades Lázaro*

8284

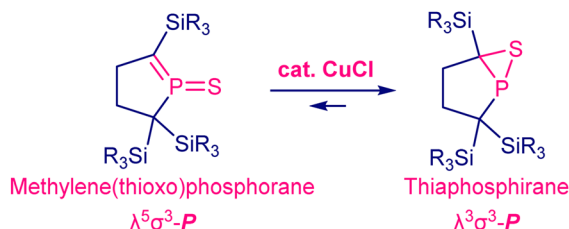


Engineering valence-mismatched Ti⁴⁺ into Fe-based metal–organic-frameworks for enhanced photocatalytic CO₂ reduction

Rui Li, Xiang Xue, Minqi Wu, Xuan Zuo, Huilin Hu, Guangshan Zhou, Wang Zhang,* Jun Pan* and Xiangliang Pan*

8288

Catalytic Valence Isomerization Associated with Formal Oxidation State Changes



Metal-catalyzed valence isomerization of a methylene(thio)phosphorane to a thiaphosphirane

Shintaro Ishida,* Yusuke Yoshida and Takeaki Iwamoto*

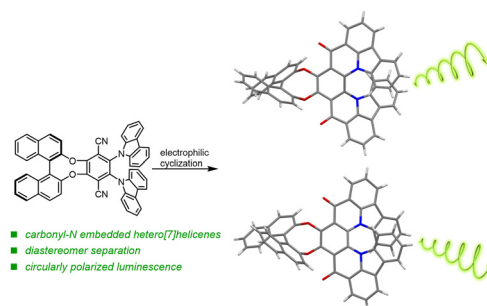


COMMUNICATIONS

8292

Synthesis and resolution of multi-chiral carbonyl-N embedded hetero[7]helicenes for efficient circularly polarized luminescence

Yuxiang Wang,* Qi Liao, Yabin Feng, Yiran Wang, Yunzhi Li* and Qi Meng*



8296

Co(III)-catalyzed regioselective benzannulation of substituted pyridones with 1,6-diynes via dual C–H bond activation

Suresh Kumar Yadav and Masilamani Jeganmohan*

