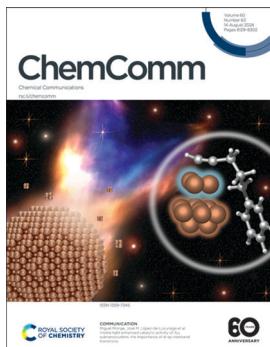


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Cover

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

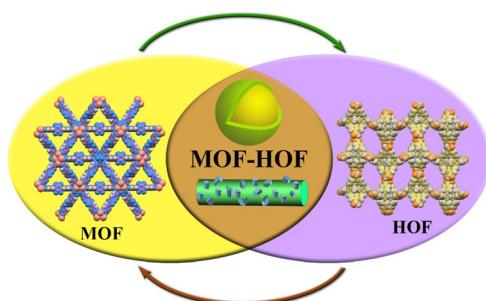
See Charles W. Machan et al., pp. 8208–8211. Image reproduced by permission of Emma N. Cook from *Chem. Commun.*, 2024, **60**, 8208.

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*

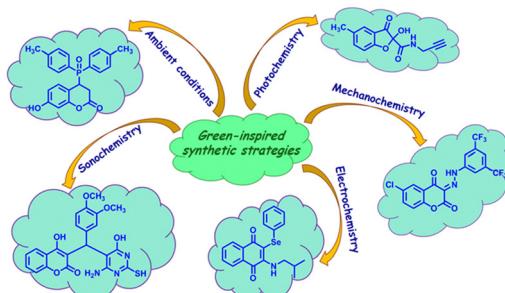


FEATURE ARTICLES

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

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Fundamental questions
Elemental answers



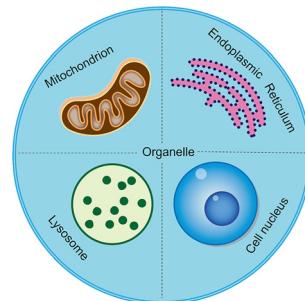
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FEATURE ARTICLES

8170

Organelle-based immunotherapy strategies for fighting against cancer

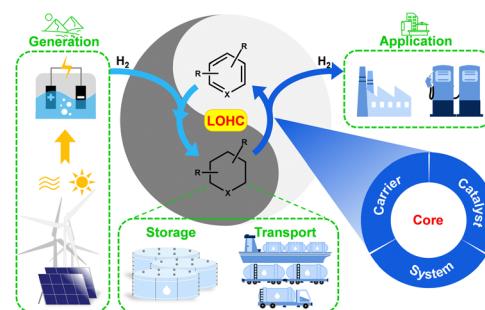
Yanhua Li, Yingying Song, Jiaqi Yin, Wei Pan, Na Li* and Bo Tang*



8186

Advances in liquid organic hydrogen carriers: developing efficient dehydrogenation strategies

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

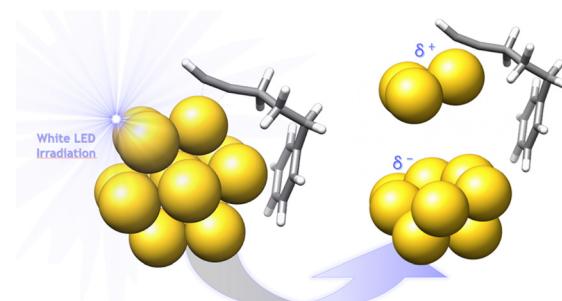


COMMUNICATIONS

8204

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

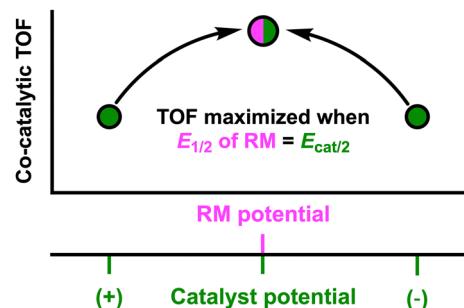
Alba Sorroche, Irene del-Campo, Alberto Casu, Andrea Falqui, Miguel Monge* and José M. López-de-Luzuriaga*



8208

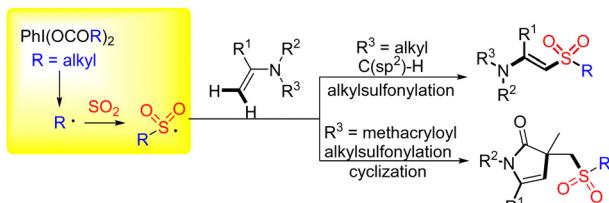
Improving co-electrocatalytic carbon dioxide reduction by optimizing the relative potentials of the redox mediator and catalyst

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



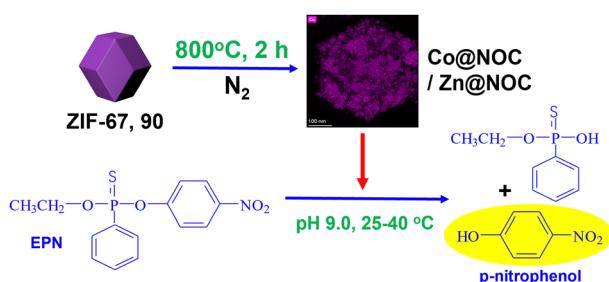
COMMUNICATIONS

8212

**Metal- and additive-free β -C(sp^2)-H decarboxylative alkylsulfonylation of enamides from phenyliodine(III) dicarboxylates and sulfur dioxide**

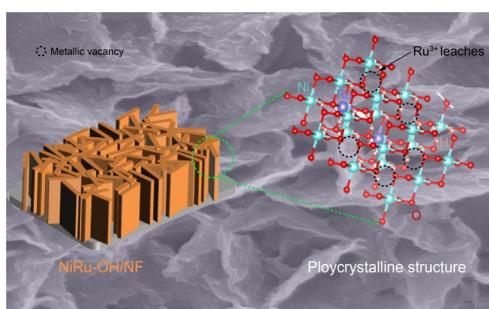
Wenyan Li, Cenxin Wang, Tonghao Zhu,* Gang Liu* and Jie Wu*

8216

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

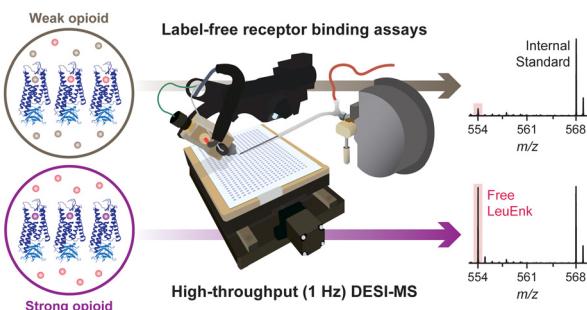
Qiongfang Zhou, Rongqiu Yan, Yu Zhang and Chenghong Lei*

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*

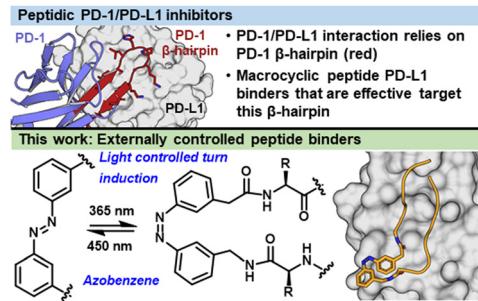


COMMUNICATIONS

8228

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

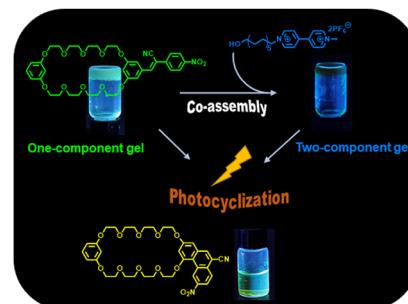
Deanne Hayward, Zoë R. Goddard,
Marco M. D. Cominetti, Mark Searcey and
Andrew M. Beekman*



8232

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

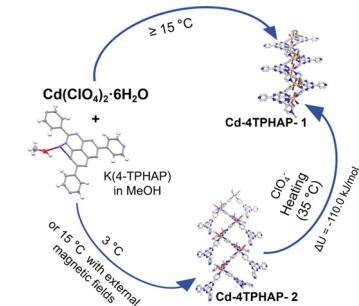
Simei Wu, Wei Tao, Tao Wang, Jieqiong Xu* and
Peifa Wei*



8236

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

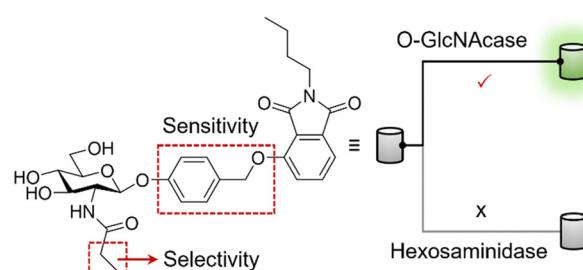
Qiao Jiang, Hiroaki Suzuki, Yuki Wada, Xiaohan Wang,
Yoichi Murakami, Takaya Matsumoto, Pavel M. Usov and
Masaki Kawano*



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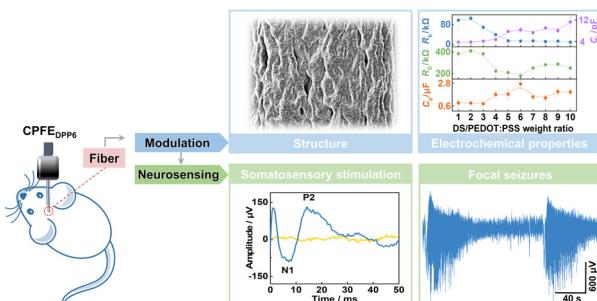
Isoindoline-based fluorogenic probes bearing a self-immolative linker for the sensitive and selective detection of O-GlcNAcase activity

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*



COMMUNICATIONS

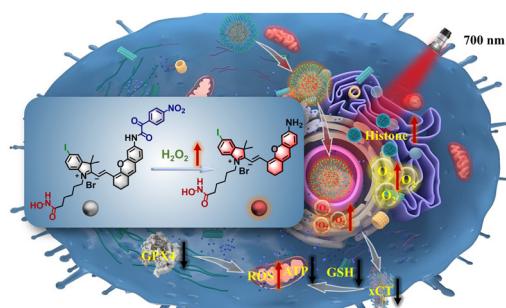
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Well-modulated interfacial ion transport enables D-sorbitol/PEDOT:PSS fibers to sense brain electrophysiological signals *in vivo*

Tianci Xu

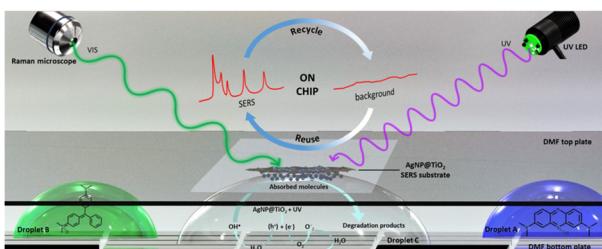
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Ferroptosis-inducing photosensitizers alleviate hypoxia tumor microenvironment for enhanced fluorescence imaging-guided photodynamic therapy

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

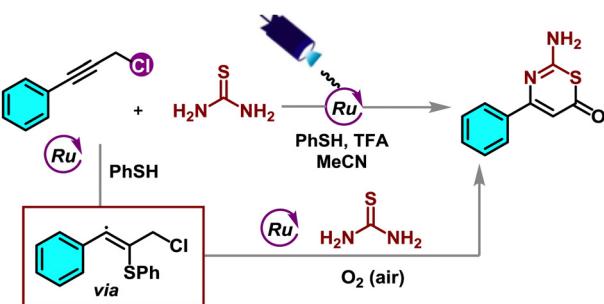
8252



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 Ganji, Sourav Kumar, Shabnam Raheem, Masood Ahmad Rizvi and Bhahwal Ali Shah*

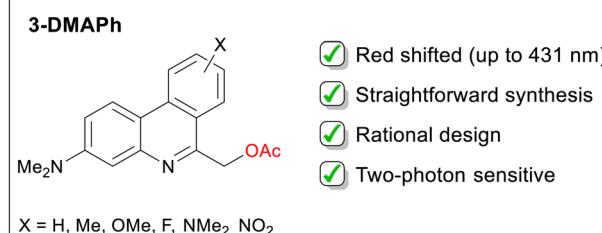


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Red-shifted two-photon-sensitive phenanthridine photocages: synthesis and characterisation

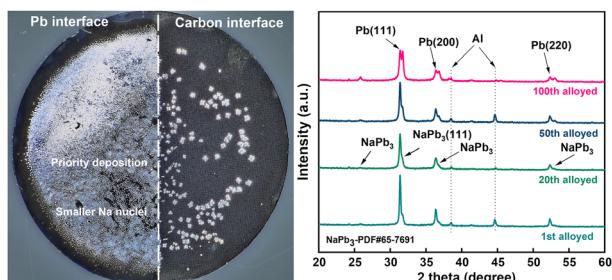
Céleste M. Attiach, Amit Kumar, Jonathan Daniel, Mireille Blanchard-Desce, Antoine Maruani* and Peter I. Dalko*



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

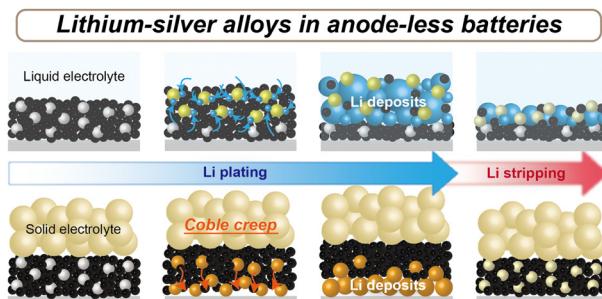
Hao Wu, Chunlin Xie, Mingze Zhang, Jiapeng Zou, Runxin Feng, Hongqin Lu, Qi Zhang, Yougen Tang and Haiyan Wang*



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

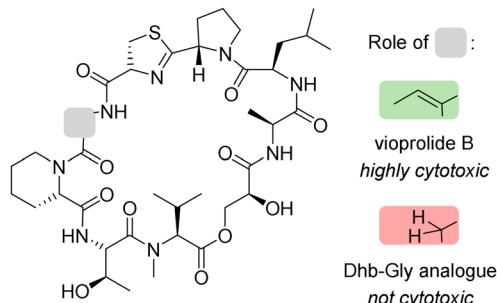
Ju-Hyeon Lee, Jeong Yeon Heo, Ji Young Kim, Ki Yoon Bae, Samick Son and Ji Hoon Lee*



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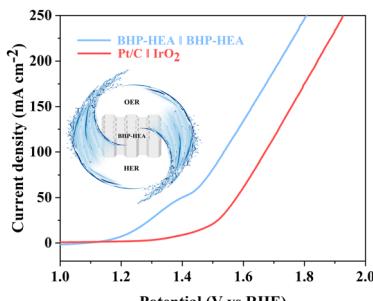
Synthesis and biological evaluation of vioprolide B and its dehydrobutyryne-glycine analogue

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



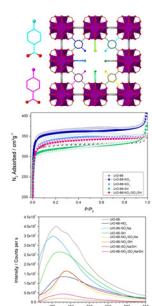
COMMUNICATIONS

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

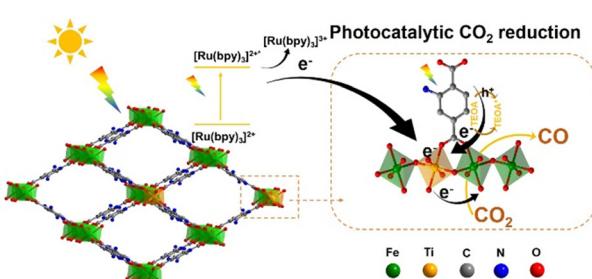
Wei Wang, Weiqi Wang, Jun Cheng,* Xing Lu* and Yunzhuo Lu*

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

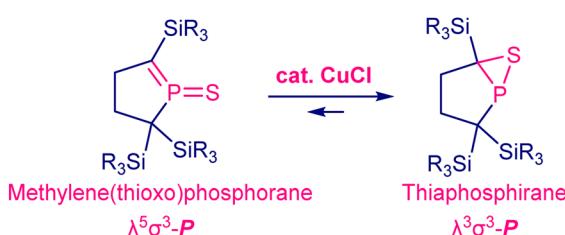
Carmen Rosales-Martínez, Marcelo Assis,* Celia Castillo-Blas* and Isabel Abánades Lázaro*

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*

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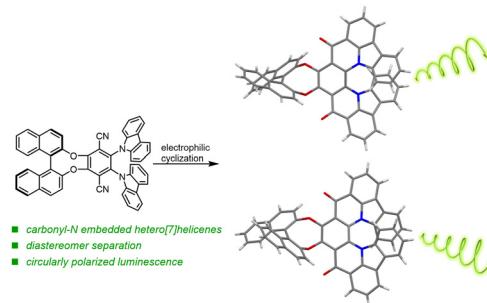
Catalytic Valence Isomerization Associated with Formal Oxidation State Changes**Metal-catalyzed valence isomerization of a methylene(thioxo)phosphorane to a thiaphosphirane**

Shintaro Ishida,* Yusuke Yoshida and Takeaki Iwamoto*



COMMUNICATIONS

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Synthesis and resolution of multi-chiral carbonyl-N embedded hetero[7]helicenes for efficient circularly polarized luminescenceYuxiang Wang,* Qi Liao, Yabin Feng, Yiran Wang,
Yunzhi Li* and Qi Meng*

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

Suresh Kumar Yadav and Masilamani Jeganmohan*

