

# ChemComm

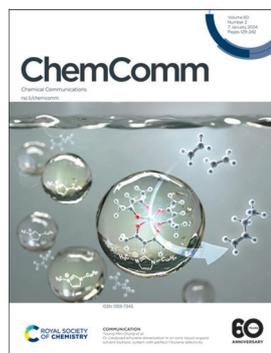
Chemical Communications

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## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(2) 129-242 (2024)



### Cover

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### Inside cover

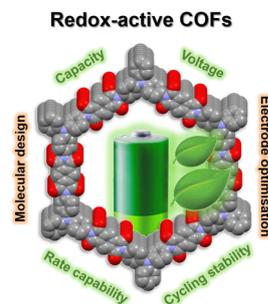
See Masafumi Ueda *et al.*, pp. 172–175. Image reproduced by permission of Masafumi Ueda from *Chem. Commun.*, 2024, 60, 172.

## HIGHLIGHT

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### Organic electrodes based on redox-active covalent organic frameworks for lithium batteries

Raquel Dantas, Catarina Ribeiro and Manuel Souto\*

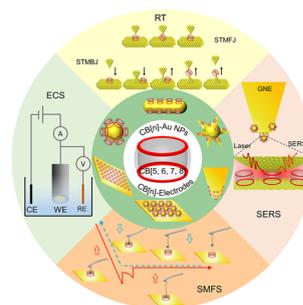


## FEATURE ARTICLE

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### Emerging sensing platforms based on Cucurbit[n]uril functionalized gold nanoparticles and electrodes

Tao Ma, Shuai Chang, Jin He\* and Feng Liang\*



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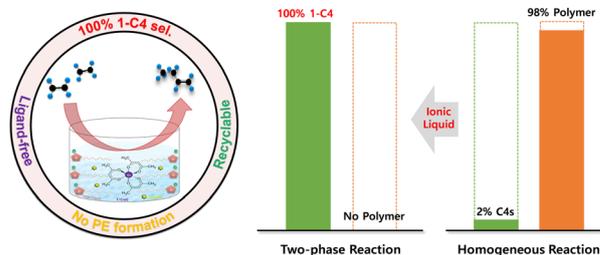
\*Visit [rsc.li/metrics-explainer](https://rsc.li/metrics-explainer) for more information

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### Cr-catalysed ethylene dimerization in an ionic liquid-organic solvent biphasic system with perfect 1-butene selectivity

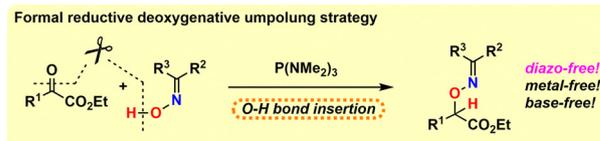
Nguyen Thi Kim Chau, Seungwhan Kim, Hyo-Jun Lee, Minjae Lee and Young-Min Chung\*



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### Synthesis of oxime ethers *via* a formal reductive O–H bond insertion of oximes to $\alpha$ -keto esters

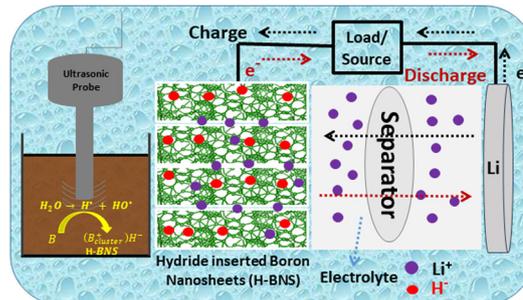
Norihiko Takeda, Ryoya Maeda, Motohiro Yasui and Masafumi Ueda\*



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### Sonochemically synthesized hydride-stabilized boron nanosheets *via* radical-assisted oxidative exfoliation for energy storage applications

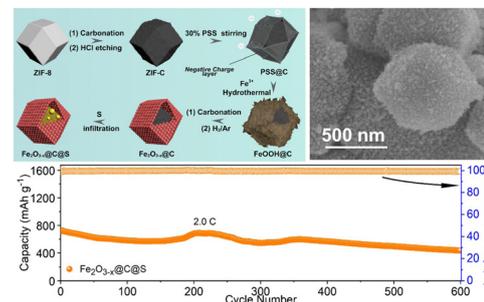
Anandhakumar Sukeri, Swati Panigrahi and Kothandaraman Ramanujam\*



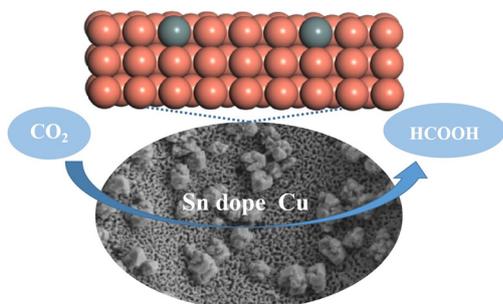
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### Core-shell oxygen-deficient $\text{Fe}_2\text{O}_3$ polyhedron serves as an efficient host for sulfur cathode

Jun Pu,\* Ziyang Huang, Jie Wang,\* Yun Tan, Shanshan Fan and Zhenghua Wang



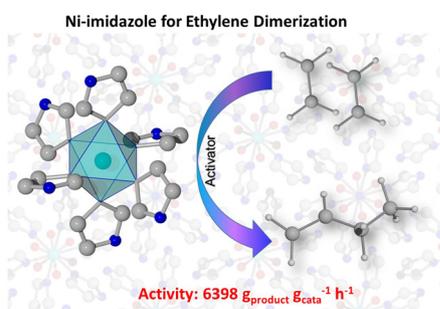
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### Dealloying-derived nanoporous Sn-doped copper with prior selectivity toward formate for CO<sub>2</sub> electrochemical reduction

Hefeng Yuan,\* Bohao Kong, Zehao Liu, Li Cui and Xiaoguang Wang\*

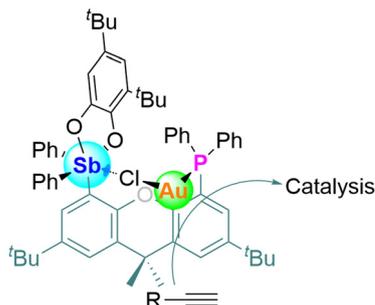
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### Facile preparation of a Ni-imidazole compound with high activity for ethylene dimerization

Zhaohui Liu, Guanxing Li, Mohammed R. Alalouni, Ziyin Chen, Xinglong Dong,\* Jianjian Wang and Cailing Chen\*

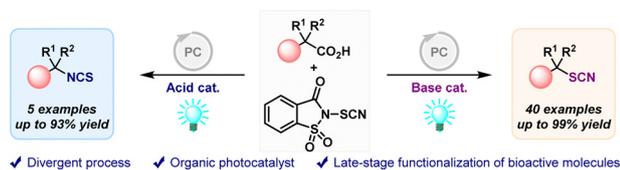
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Benyu Zhou, Shantabh Bedajna and François P. Gabbaï\*

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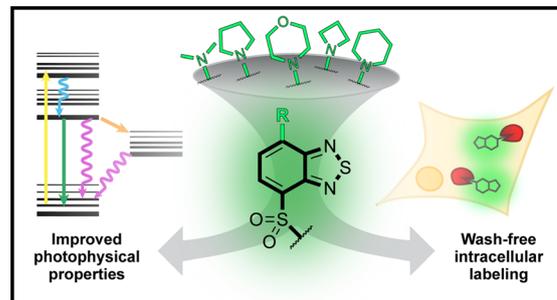
Jordan Vigier, Mélissa Gao, Philippe Jubault, H el ene Lebel\* and Tatiana Besset\*



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### Engineered fluorogenic HaloTag ligands for turn-on labelling in live cells

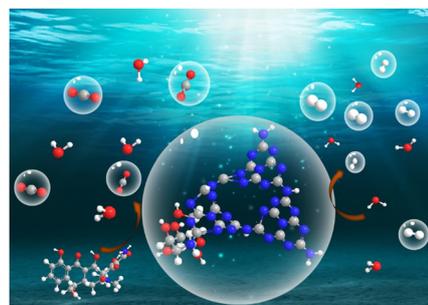
Bryan J. Lampkin\* and Joshua A. Kritzer\*



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### Critical role of hydrogen bonding between microcrystalline cellulose and g-C<sub>3</sub>N<sub>4</sub> enables highly efficient photocatalysis

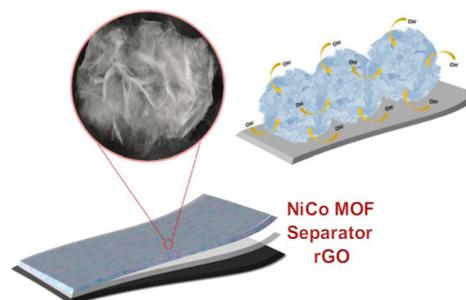
Zhaoqiang Wang, Guixiang Ding, Juntao Zhang, Xianqing Lv, Peng Wang, Li Shuai, Chunxue Li,\* Yonghao Ni\* and Guangfu Liao\*



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### A high valence binary metalorganic framework as an electrode material for aqueous asymmetric supercapacitors

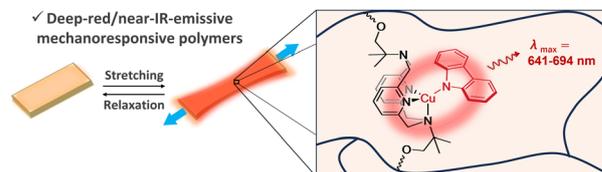
T. B. Naveen, D. Durgalakshmi,\* S. Balakumar and R. Ajay Rakkesh\*



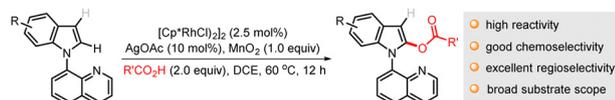
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### Deep-red photoluminescent mechanoresponsive polymers with dynamic Cu<sup>I</sup>-arylamide mechanophores

Tatiana Gridneva, Ayumu Karimata, Richa Bansal, Robert R. Fayzullin, Serhii Vasylevskyi, Andrew Bruhacs and Julia R. Khusnutdinova\*



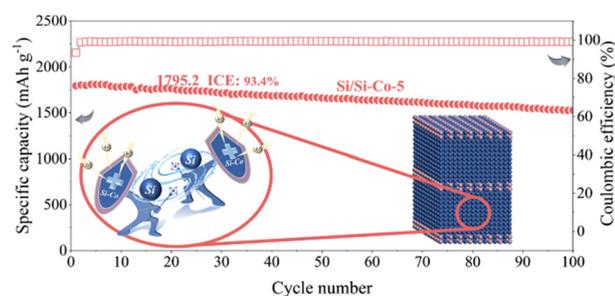
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### Rh(III)-catalyzed selective C2 C–H acyloxylation of indoles

Chaoying Fang, Li Li, Haitao Yang, Caiyang Kong, Jitan Zhang,\* Meihua Xie\* and Jiaping Wu\*

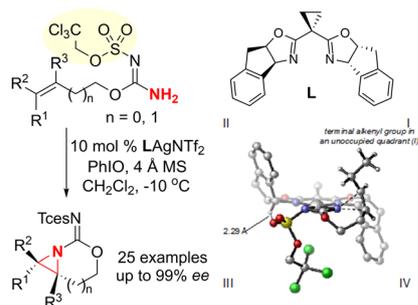
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### Interfacial engineering of Si anodes by confined doping of Co toward high initial coulombic efficiency

Yuanyuan Han, Haoyu Fu, Guihuan Chen,\* Xiaoshan Wang, Yue Zhao, Xiang Sui, Zhiqiang Zhao, Xiancheng Sang, Qinghao Li and Qiang Li\*

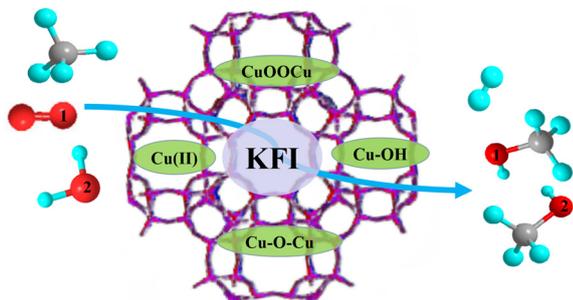
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### Chemo- and enantioselective intramolecular silver-catalyzed aziridinations of carbamimidates

Tuan Anh Trinh, Yue Fu, Derek B. Hu, Soren A. Zappia, Iliia A. Guzei, Peng Liu and Jennifer M. Schomaker\*

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### Continuous selective conversion of methane to methanol over a Cu-KFI zeolite catalyst using a water–O<sub>2</sub> mixture as the oxygen source

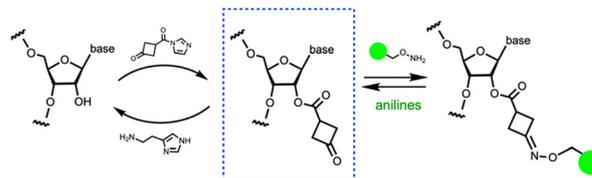
Hailong Zhang,\* Jiaxiu Guo and Yi Cao\*



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### Efficient post-synthesis incorporation and conjugation of reactive ketones in RNA *via* 2'-acylation

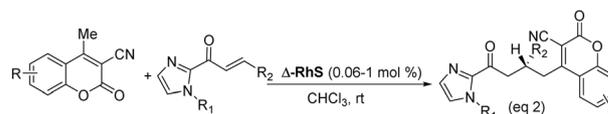
Ryuta Shioi, Lu Xiao, Linglan Fang and Eric T. Kool\*



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### Catalytic asymmetric conjugate addition of coumarins to unsaturated ketones catalyzed by a chiral-at-metal Rh(III) complex

Xiangjie Chen, Yujie Zhao, Cheng Huang, Zhifei Zhao, Weiwei Zhao\* and Shi-Wu Li\*



- ▾ 23 examples, 41-99% yields, 84-99% ee
- ▾ mild reaction conditions and broad scope
- ▾ high enantioselectivity and lower catalyst loading

