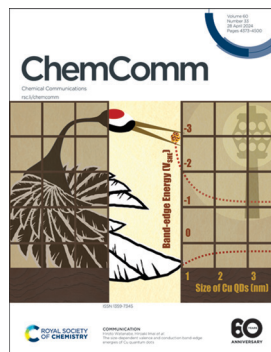


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### Cover

See Hiroto Watanabe, Hiroaki Imai *et al.*, pp. 4419–4422. Image reproduced by permission of Hiroaki Imai from *Chem. Commun.*, 2024, 60, 4419. Artwork by Hiroto Watanabe.



### Inside cover

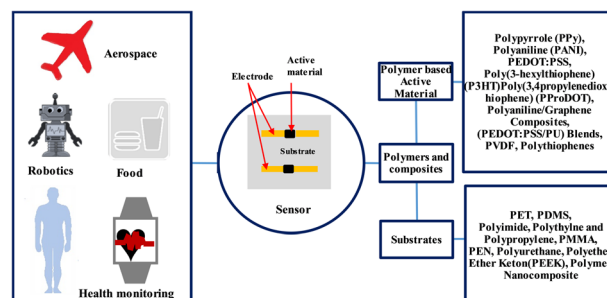
See Feng Bai, Yusen Li *et al.*, pp. 4423–4426. Image reproduced by permission of Yusen Li from *Chem. Commun.*, 2024, 60, 4423.

## FEATURE ARTICLES

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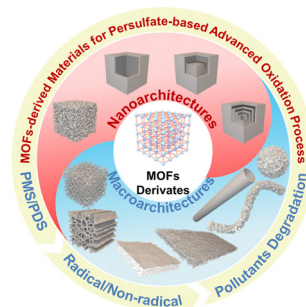
Shivank Sahu, Kamalesh Tripathy, Mitradip Bhattacharjee\* and Deepak Chopra\*



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Chengming Xiao, Xin Guo and Jiansheng Li\*



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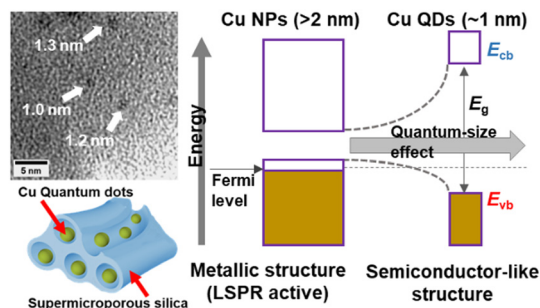


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### The size-dependent valence and conduction band-edge energies of Cu quantum dots

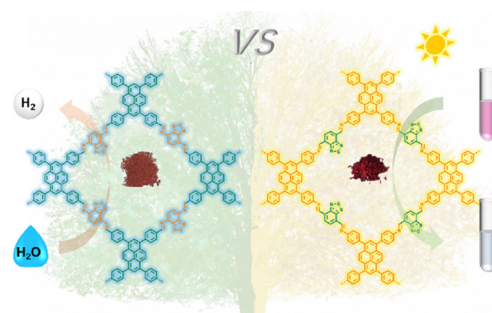
Takahiro Matsui, Hiroto Watanabe,\* Shoichi Somekawa, Sayaka Yanagida, Yuya Oaki and Hiroaki Imai\*



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### Covalent organic framework isomers with divergent photocatalytic properties

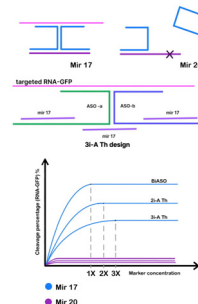
Xitong Ren, Mengyao Wen, Xiaobin Hou, Jiajie Sun, Feng Bai\* and Yusen Li\*



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### RNase H-dependent DNA threshold modulated by cancer marker concentration

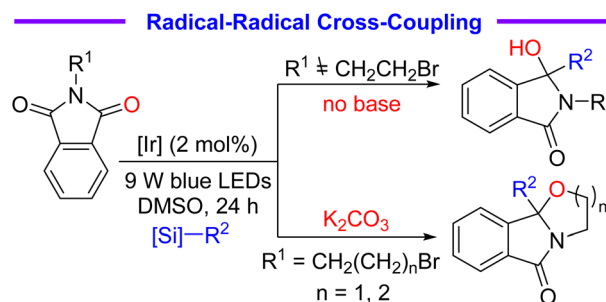
Moustapha A. Y. Nour, Valeriia S. Drozd, Evgenii A. Lemeshko, Lilia Tafran, Adeliia A. Salimova, Alexandra V. Kulikova and Ahmed A. Eldeeb\*



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### Photoredox-catalyzed radical–radical cross coupling of ketyl radicals with unstabilized primary alkyl radicals

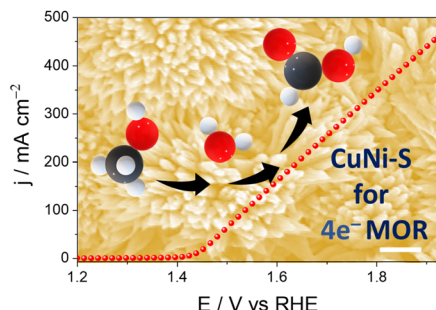
Shishen Feng, Hong Liu, Yan Li\* and Yewen Fang\*





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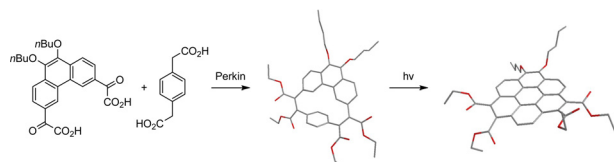
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### CuNi sulphidation maximizes MOR activity by expanding the accessibility of active sites!

Roshini Arulraj, Karthik Eswaran, Sara Fidha C. M., Rajini Murugesan, Silda Peters, Arthanareeswari Maruthapillai, Sethumathavan Vadivel,\* Rajendra Kumar Konidena,\* Tumpa Sadhukhan\* and Anantharaj Sengeni\*

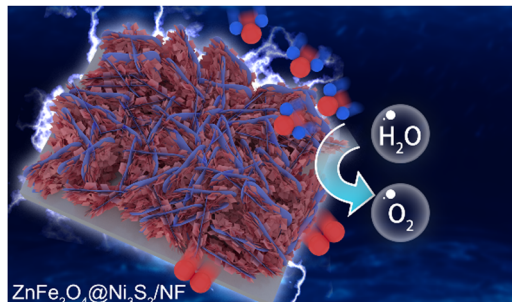
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Luc Soliman, Elsa Ramassamy, Katia Dujarric, Guillaume Naulet, Pierre Dechambenoit, Harald Bock and Fabien Durola\*

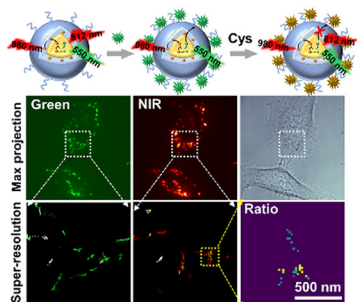
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### Heterostructured ZnFe<sub>2</sub>O<sub>4</sub>@Ni<sub>3</sub>S<sub>2</sub> nanosheet arrays on Ni foam as an efficient oxygen evolution catalyst

Haiqing Liu, Juhong Miao,\* Yubin Wang, Siyu Chen, Yujia Tang and Dongdong Zhu\*

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### A ratiometric upconversion nanoprobe enables super-resolution imaging sensing of biothiols in living cells

Hongqi Chen,\* Ruoxin Wang, Juanjuan Cheng, Lun Wang and Hua He\*



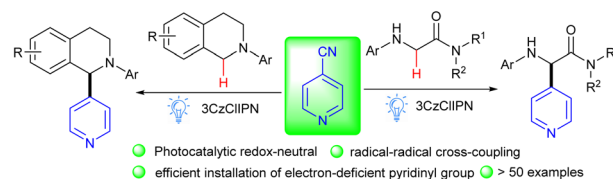


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### Photocatalytic redox-neutral $\alpha$ -C(sp<sup>3</sup>)-H pyridination of glycine derivatives and *N*-arylamines with cyanopyridines

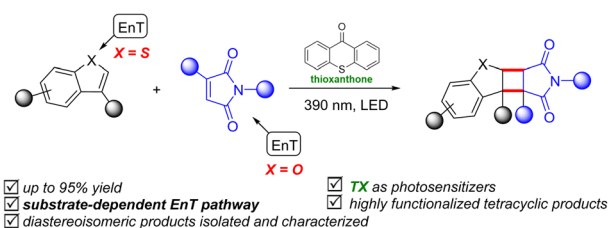
Changduo Pan,\* Dongdong Chen, Yangjian Cheng and Jin-Tao Yu\*



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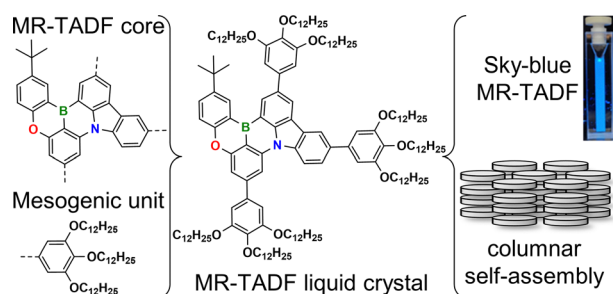
Zhi-Yu Liao, Fan Gao, Yu-Hang Ye, Qian-Hui Yu, Cui Yang, Qing-Yu Luo, Fei Du, Bin Pan, Wen-Wu Zhong\* and Wu Liang\*



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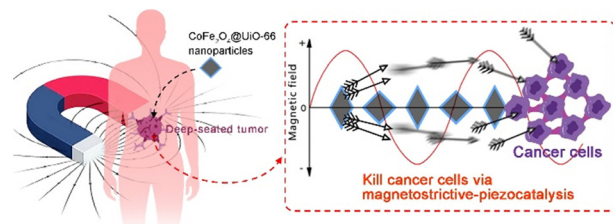
Julius A. Knöller,\* Burcu Sönmez, Tomas Matulaitis, Abhishek Kumar Gupta, Eli Zysman-Colman\* and Sabine Laschat\*



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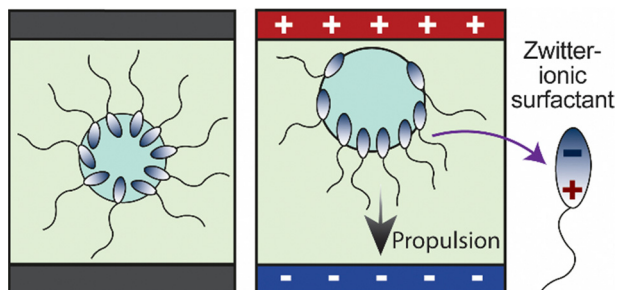
### Magnetostrictive-piezocatalytic CoFe<sub>2</sub>O<sub>4</sub>@UiO-66 nanohybrid and its potential for deep-seated tumor treatment

Qian Yu,\* Meiyu Li, Jiaojiao Zhang, Hong Liu, Long Zhang, Shun Li, Dengfeng Ge\* and Jianming Zhang\*



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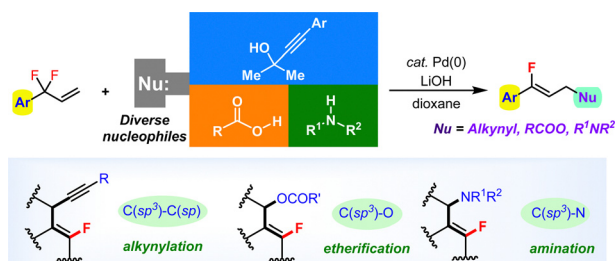
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Lotta Gustavsson, Bo Peng, Rémi Plamont\* and Olli Ikkala\*

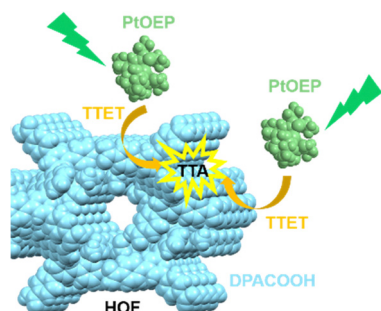
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### Palladium-catalyzed alkynylation of allylic *gem*-difluorides

Guo-ying Liu, Lu-ning Tang,\* Jun-hua Li, Sen Yang\* and Ming Chen\*

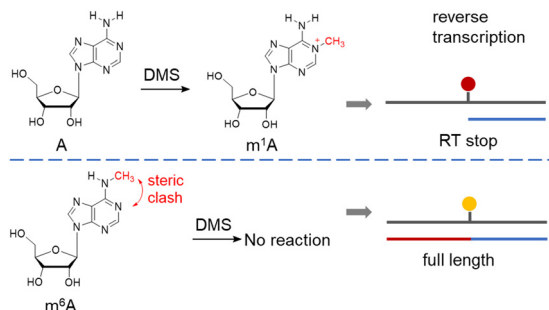
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### Crystalline hydrogen-bonded organic framework for air-tolerant triplet-triplet annihilation upconversion

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### Steric hindrance of *N*<sup>6</sup>-methyl in *m*<sup>6</sup>A and its application for specific loci detection

Xiaoyi Xie, Qi Wei, Jingyu Han, Xin Fang, Wei Yang, Xiang Zhou, Yafen Wang\* and Xiaocheng Weng\*

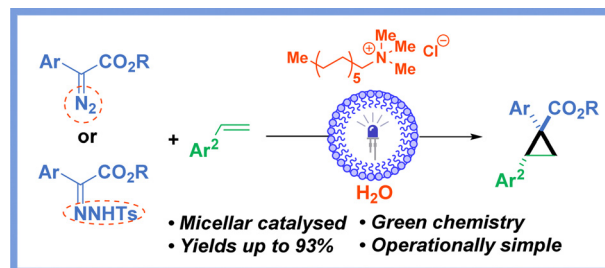


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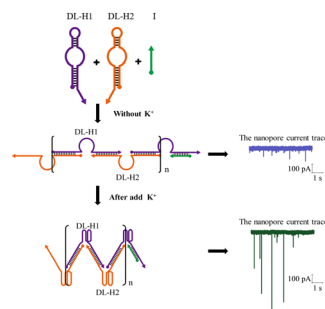
Joseph P. Milton, Adam Milanowski, Martin Andersson\* and Dorota Gryko\*



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## Nanopore sensitization based on a double loop hybridization chain reaction and G-quadruplex

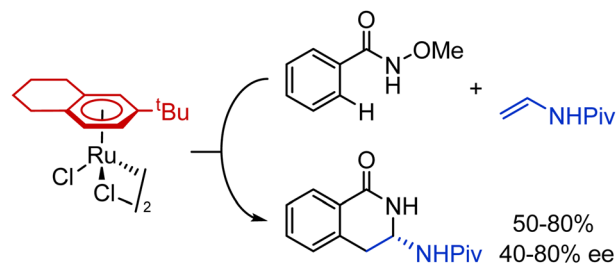
Yanru Li, Chunmiao Yu, Yesheng Wang, Jin Yu, Huaning Wang and Bingling Li\*



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Mikhail A. Boym, Roman A. Pototskiy, Evgeniya S. Podyacheva, Denis A. Chusov, Yulia V. Nelyubina and Dmitry S. Perekalin\*



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## Molecular recognition and proteoglycan mimic arrangement: modulating cisplatin toxicity

Saurabh Anand, Sandhya Mardhekar, Preeti Ravindra Bhoge, Sandeep Kumar Mishra and Raghavendra Kikkeri\*

