

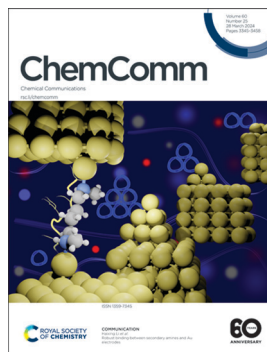
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ISSN 1359-7345 CODEN CHCOFS 60(25) 3345-3458 (2024)



Cover

See Zhiping Yin et al., pp. 3389–3392. Image reproduced by permission of Zhiping Yin from *Chem. Commun.*, 2024, 60, 3389.



Inside cover

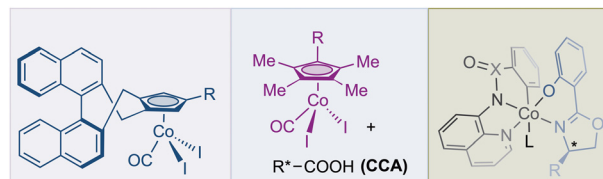
See Haixing Li et al., pp. 3393–3396. Image reproduced by permission of Waiyi Guo and Haixing Li from *Chem. Commun.*, 2024, 60, 3393.

HIGHLIGHT

3354

Enantioselective C–H bond functionalization under Co(III)-catalysis

Bholanath Garai, Abir Das, Doppalapudi Vineet Kumar and Basker Sundararaju*

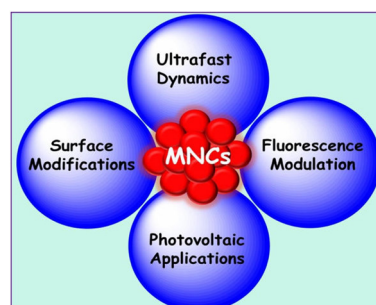


FEATURE ARTICLES

3370

Fluorescent metal nanoclusters: prospects for photoinduced electron transfer and energy harvesting

Soumyadip Bhunia,* Manish Mukherjee and Pradipta Purkayastha*



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FEATURE ARTICLES

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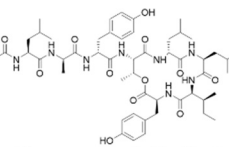
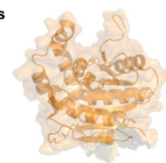
Thioesterases as tools for chemoenzymatic synthesis of macrolactones

André R. Paquette, Jordan T. Brazeau-Henrie and Christopher N. Boddy*

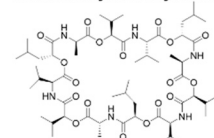
promising biocatalysts

- ✓ Substrate tolerant
- ✓ regio- and stereo-control
- ✓ Macrocyclization specific
- ✗ Sluggish kinetics
- ✗ Substrate intolerant for macrocyclization

Thioesterases



Chemoenzymatic Synthesis

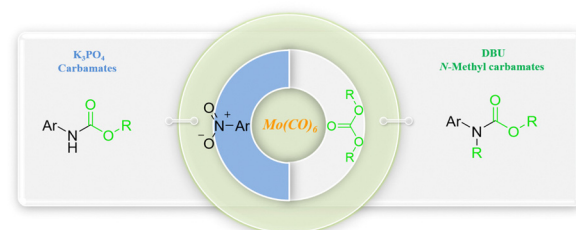


COMMUNICATIONS

3389

Divergent synthesis of carbamates and *N*-methyl carbamates from dimethyl carbonate and nitroarenes with $\text{Mo}(\text{CO})_6$ as a multiple promoter

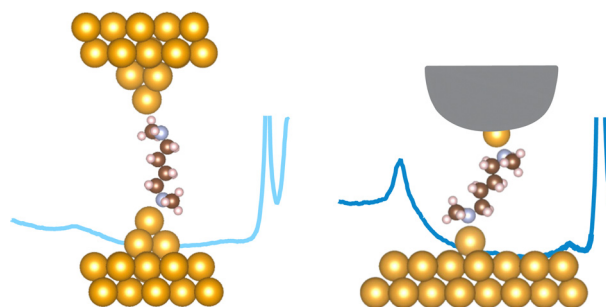
Tongshun An, Chenwei Liu, Weiheng Yuan, Xiaowen Qin and Zhiping Yin*



3393

Robust binding between secondary amines and Au electrodes

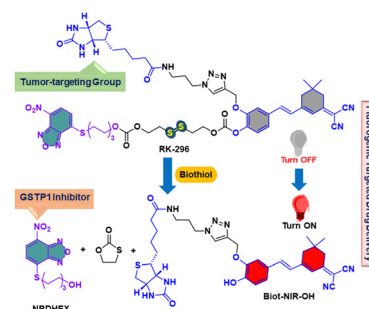
Weiyi Guo, Timothy Quainoo, Zhen-Fei Liu and Haixing Li*



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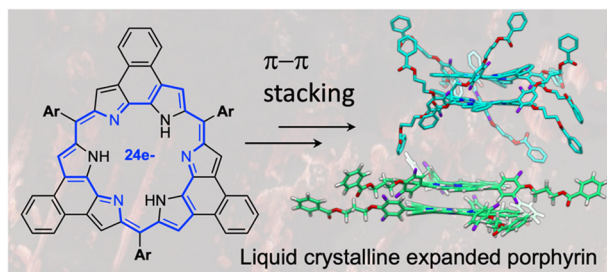
Stimuli-responsive biotin-anchored prodrug for the targeted delivery of anti-cancer agent NBDHEX with turn-on NIR fluorescence

Rahul Kesarwani, Nikita Pal and Krishna P. Bhabak*



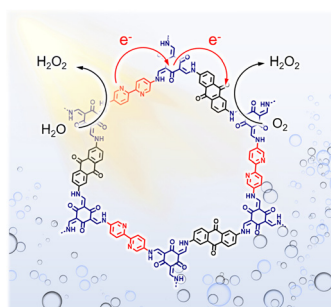
COMMUNICATIONS

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**Columnar liquid crystals based on antiaromatic expanded porphyrins**

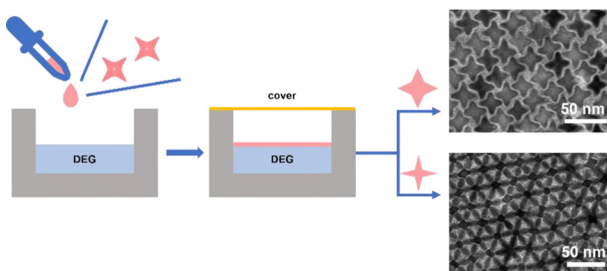
Duong D. Nguyen, Jorge Labella,* Juan Laforga-Martín, César L. Folcia, Josu Ortega, Tomás Torres,* Teresa Sierra* and Jonathan L. Sessler*

3405

**A multicomponent triformylphoroglucinol-based covalent organic framework for overall hydrogen peroxide photosynthesis**

Erchong Chai, Lanting Huang, Lei Jiao, Zhiwei Xiao, Xiang Zhang* and Yaobing Wang*

3409

**Controllable synthesis of star-shaped FeCoMnO_x nanocrystals and their self-assembly into superlattices with low-packing densities**

Zhe Xia, Yutong Gao, Qingfu Cai, Yajun Wang,* Dong Yang,* Tongtao Li* and Angang Dong*

3413



- Mild reaction conditions
- Late-stage modification of pharmaceuticals
- Broad functional groups tolerance
- Readily available amination reagents

Photoredox-catalyzed unsymmetrical diamination of alkenes for access to vicinal diamines

Jie Liu, Lu Guo, Zhang Chen, Yu Guo,* Wei Zhang, Xue Peng, Zhen Wang* and Yao-Fu Zeng*

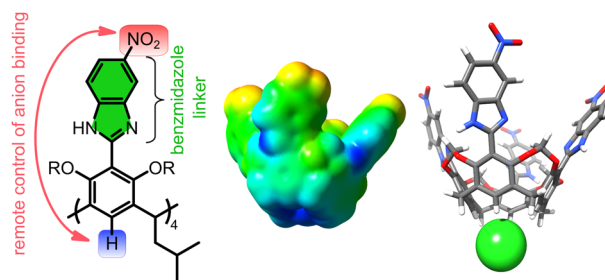


COMMUNICATIONS

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Remote control of anion binding by CH-based receptors

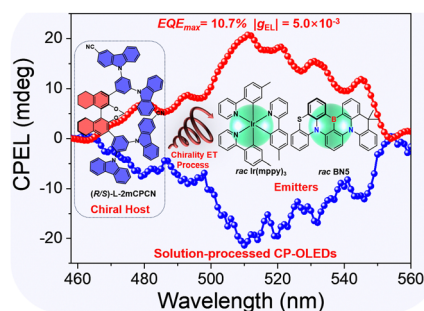
Paulina Jurek, Marek P. Szymański and Agnieszka Szumna*



3421

A chiral bipolar host for efficient solution-processed circularly polarized OLEDs via a chirality energy transfer process

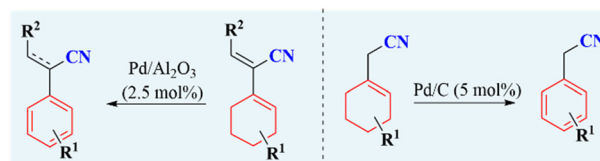
Qiwei Dong, Binghong He, Wenjian Qiao, Weiguo Zhu,* Pengfei Duan* and Yafei Wang*



3425

Palladium-catalyzed dehydrogenation of α -cyclohexene-substituted nitriles to α -aryl nitriles

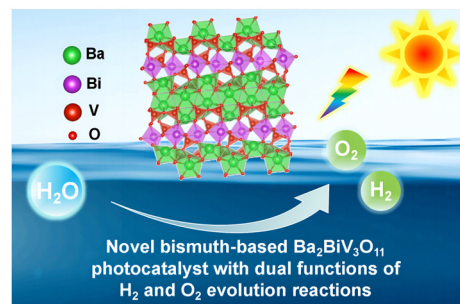
Yinglin Zhao, Zhida Zhang, Zehuan Qi and Renhua Liu*



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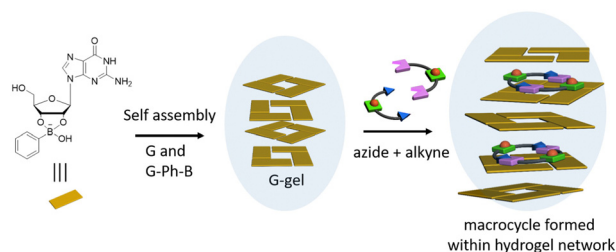
Development of a novel $\text{Ba}_2\text{BiV}_3\text{O}_{11}$ photocatalyst with dual functions of both water oxidation and proton reduction performance

Xuejiao Du, Mingxue Xing, Yang Xu, Conghui Zhao, Zhaochi Feng and Beibei Dong*



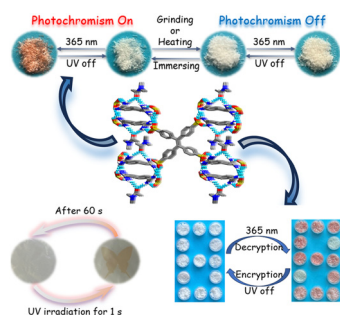
COMMUNICATIONS

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**Guanosine-based hydrogel as a supramolecular scaffold for template-assisted macrocyclization**

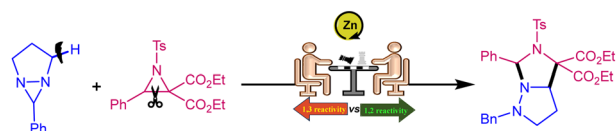
Binayak Lala, Ritapa Chaudhuri, Thumpati Prasanth, Ines Burkhart, Harald Schwalbe and Jyotirmayee Dash*

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**A solvent-controlled photoresponsive ionic hydrogen-bonded organic framework for encryption applications**

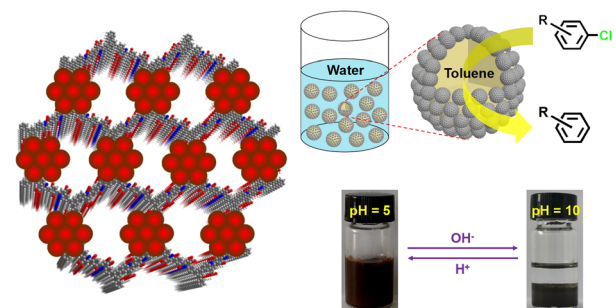
Ming-Feng Huang, Li-Hui Cao* and Bin Zhou

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**Redox-neutral zinc-catalyzed cascade [1,4]-H shift/annulation of diaziridines with donor–acceptor aziridines**

Swati Samantaray, Prabhat Kumar Maharana, Subhradeep Kar, Sharajit Saha and Tharmalingam Punniyamurthy*

3445

**Pd NP-loaded covalent organic framework for pH-switched Pickering emulsion catalytic dechlorination**

Han-Hui Wang, Fei Li, Bing-Jian Yao* and Yu-Bin Dong*

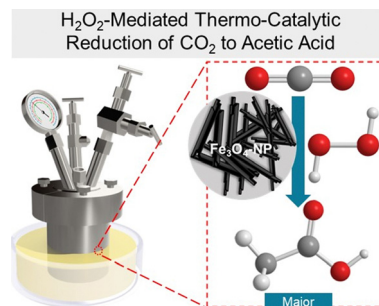


COMMUNICATIONS

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Fenton-mediated thermocatalytic conversion of CO₂ to acetic acid by industrial waste-derived magnetite nanoparticles

Jaidev Kaushik, Nicky Kumar Lamba, Vishrant Kumar, Amit Kumar Sonker* and Sumit Kumar Sonkar*



3453

Key role of subsurface doping in optimizing active sites of IrO₂ for the oxygen evolution reaction

Xindi Han, Lei Shi, Hui Chen* and Xiaoxin Zou*

