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Chemical Communications

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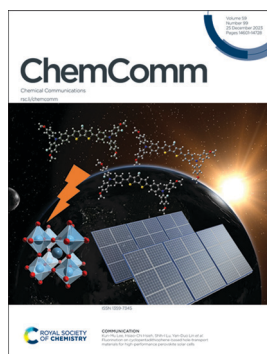
## IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(99) 14601-14728 (2023)



### Cover

See Katarzyna Rybicka-Jasińska, Dorota Gryko *et al.*, pp. 14649–14652. Image reproduced by permission of Klaudia Łuczak from *Chem. Commun.*, 2023, 59, 14649.



### Inside cover

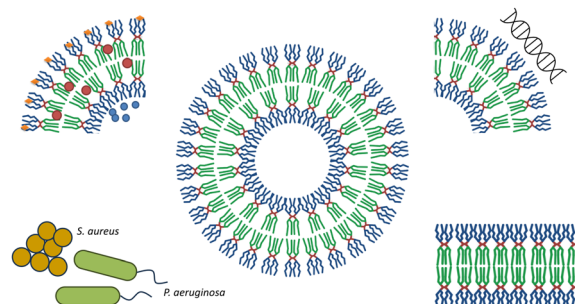
See Kun-Mu Lee, Hsiao-Chi Hsieh, Shih-I Lu, Yan-Duo Lin *et al.*, pp. 14653–14656. Image reproduced by permission of Yan-Duo Lin from *Chem. Commun.*, 2023, 59, 14653.

## HIGHLIGHT

14611

### Dendrimersomes: Biomedical applications

Barbara Klajnert-Maculewicz,\* Anna Janaszewska and Agata Majecka

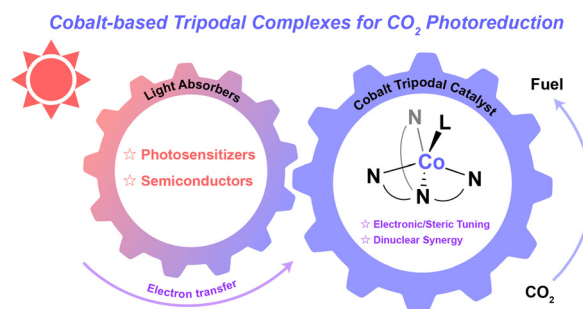


## FEATURE ARTICLES

14626

### Cobalt-based tripodal complexes as molecular catalysts for photocatalytic CO<sub>2</sub> reduction

Dong-Cheng Liu,\* Zhi-Mei Luo, Bruno M. Aramburu-Trošelj, Fan Ma and Jia-Wei Wang\*



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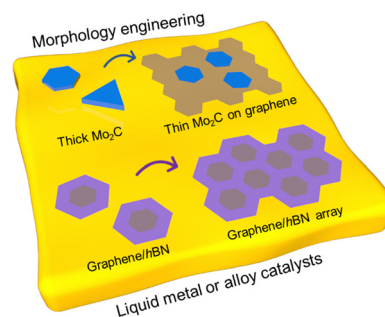


## FEATURE ARTICLES

14636

## Liquid metal catalyzed chemical vapor deposition towards morphology engineering of 2D epitaxial heterostructures

Lin Li, Qing Zhang,\* Hang Li and Dechao Geng\*

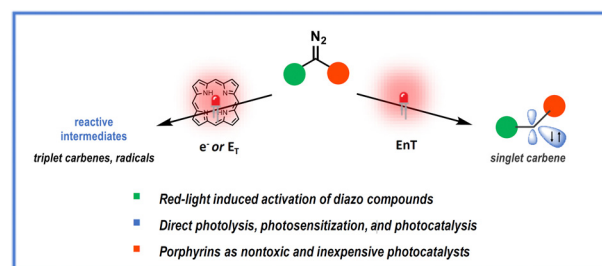


## COMMUNICATIONS

14649

## Unlocking the reactivity of diazo compounds in red light with the use of photochemical tools

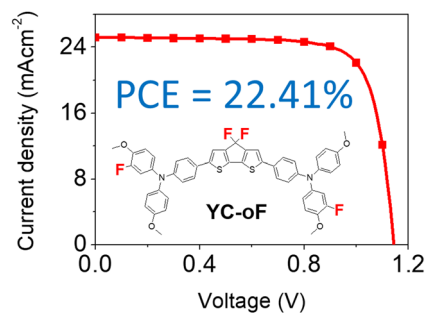
Katarzyna Orłowska, Klaudia Łuczak, Piotr Krajewski, João V. Santiago, Katarzyna Rybicka-Jasińska\* and Dorota Gryko\*



14653

## Fluorination on cyclopentadithiophene-based hole-transport materials for high-performance perovskite solar cells

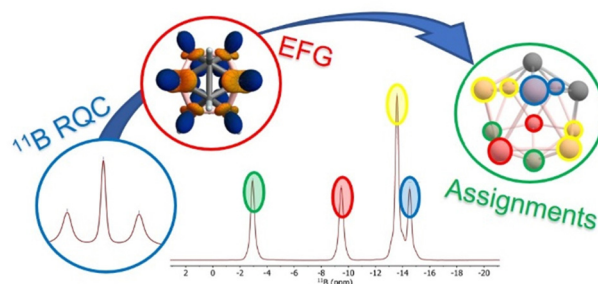
Gizachew Belay Adugna, Kun-Mu Lee,\* Hsiao-Chi Hsieh,\* Shih-I Lu,\* Yu-Chien Hsieh, June Hung Yang, Wei-Hao Chiu, Kang-Ling Liao, Yu-Tai Tao and Yan-Duo Lin\*



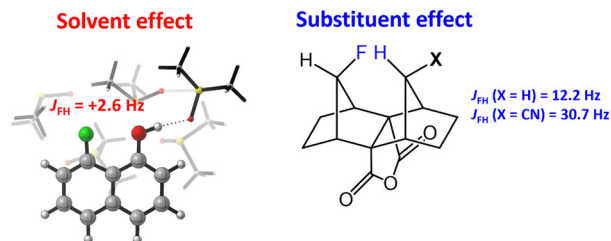
14657

Resonance and structural assignment in (car)borane clusters using <sup>11</sup>B residual quadrupolar couplings

Franziska Rüttger, Dietmar Stalke and Michael John\*



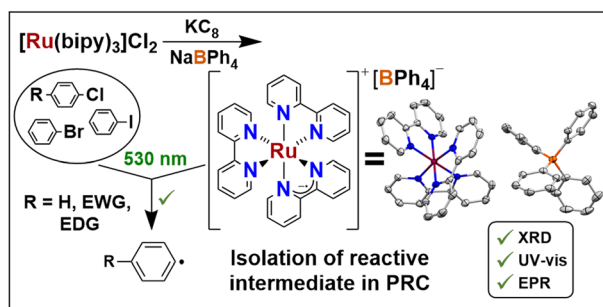
14661



### The pitfalls of using $J_{HF}$ spin–spin coupling constants to infer hydrogen bond formation in organofluorine compounds

Guilherme Cariello, Lucas A. Zeoly, Bruno A. Piscelli, Thomas Lectka\* and Rodrigo A. Cormanich\*

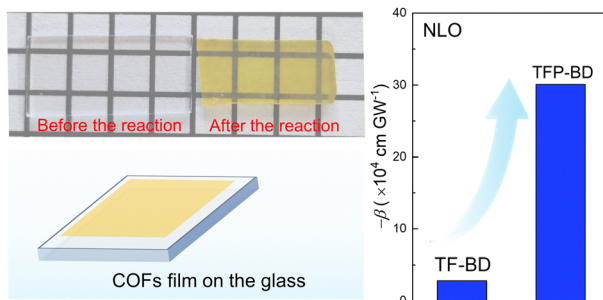
14665



### Isolation of the elusive $[Ru(bipy)_3]^+$ : a key intermediate in photoredox catalysis

Samuel J. Horsewill, Chengyang Cao, Noah Dabney, Eric S. Yang, Stephen Faulkner and Daniel J. Scott\*

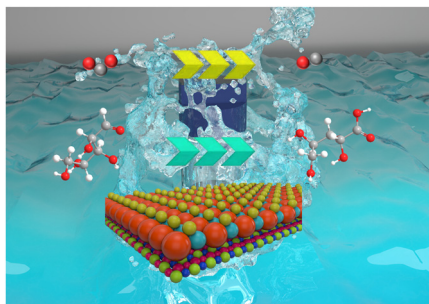
14669



### Towards high-performance nonlinear optical materials through embedding a D–A system into $\beta$ -ketoenamine-linked COFs

Mingyan Li, Jiahui Chu, Debo Ding, Tingting Li, Endian Su, Yinglin Song, Yun-Fang Yang, Yuanbin She\* and Jianhong Jia\*

14673



### Entropy engineering of La-based perovskite for simultaneous photocatalytic $CO_2$ reduction and biomass oxidation

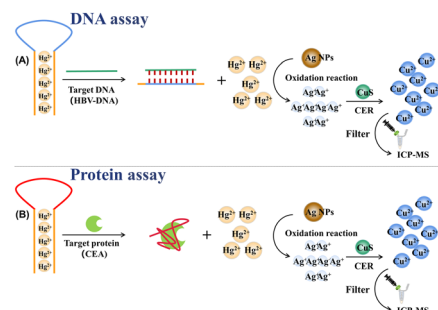
Mengchen Wang, Liming Li, Yong Li, Xuxia Shi, Hangxing Ren, Yuetao Sun, Kangning Liu, Wei Song, Huamin Li, Haibin Wang, Mei Han, Xi Wang, Christopher Dorma Momo Jr, Songhua Chen,\* Lihua Liu\* and Hongyan Liang\*



14677

### Cascade signal amplification using Hg<sup>2+</sup>-induced oxidation of silver nanoparticles and cation exchange reaction for ICP-MS bioassay

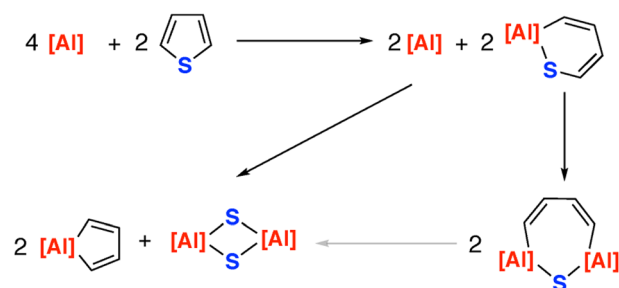
Yujing He, Jing Hu, Yunfei Tian\* and Xiandeng Hou\*



14681

### Ring-expansion and desulfurisation of thiophenes with an aluminium(i) reagent

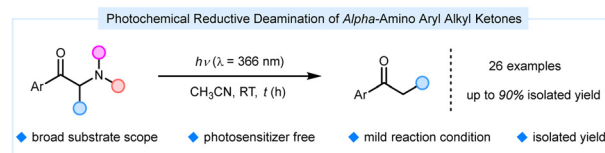
Jacob S. McMullen, Andrew J. P. White and Mark R. Crimmin\*



14685

### Photochemical reductive deamination of alpha-amino aryl alkyl ketones

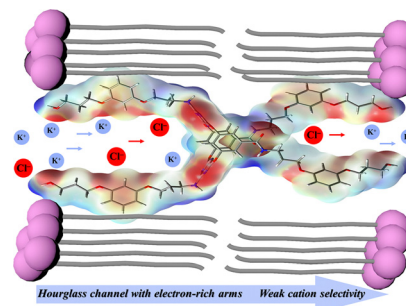
Ji-Yuan Liang, Yi-Wen Su and You-Quan Zou\*



14689

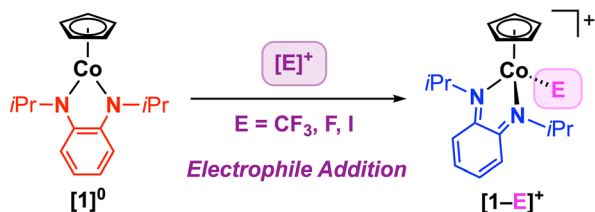
### Reversing the ion transport selectivity through arm modification of an artificial molecular hourglass

Wen-Long Huang, Xu-Dong Wang, Yu-Fei Ao, Qi-Qiang Wang and De-Xian Wang\*



14693

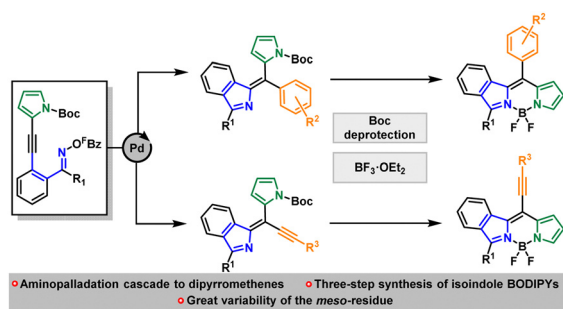
- Ligand-to-Substrate  $2e^-$  Transfer
- Concomitant **Co-E** Bond Formation



### Redox-active ligand promoted electrophile addition at cobalt

Minzhu Zou and Kate M. Waldie\*

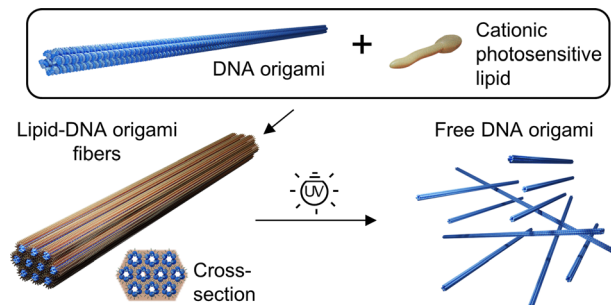
14697



### Access to isoindole-derived BODIPYs by an aminopalladation cascade

Heinrich F. von Köller, Finn J. Geffers, Pedram Kalvani, Adrian Foraita, Patrick-Eric J. Loß, Burkhard Butschke, Peter G. Jones and Daniel B. Werz\*

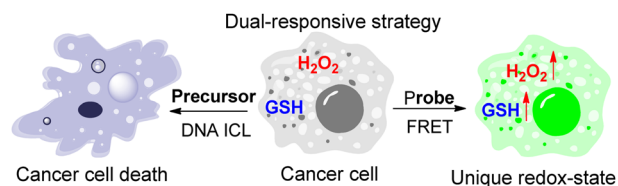
14701



### Assembly and optically triggered disassembly of lipid-DNA origami fibers

Sofia Julin, Nadine Best, Eduardo Anaya-Plaza, Eeva Enlund, Veikko Linko and Mauri A. Kostainen\*

14705



### Dual-responsive probe and DNA interstrand crosslink precursor target the unique redox status of cancer cells

Dehao Yu, Luo Wang, Jingao Li, Xuanwei Zeng, Yuanyuan Jia, Junyu Tian, Anahit Campbell, Huabing Sun\* and Heli Fan\*

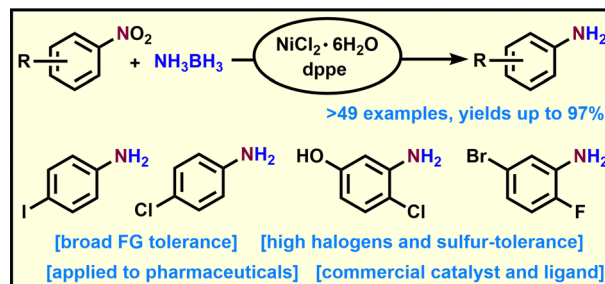


## COMMUNICATIONS

14709

**Homogenous nickel-catalyzed chemoselective transfer hydrogenation of functionalized nitroarenes with ammonia–borane**

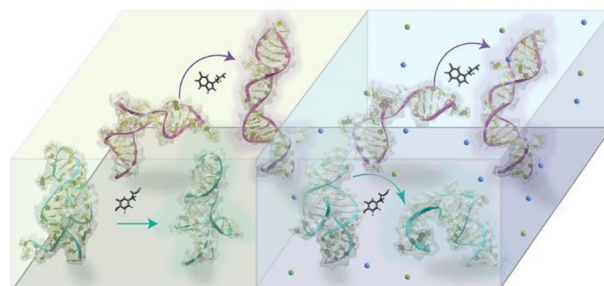
Chitrarekha Dewangan, Sandeep Kumawat, Tarun Bhatt and Kishore Natte\*



14713

**Theoretical analysis of divalent cation effects on aptamer recognition of neurotransmitter targets**

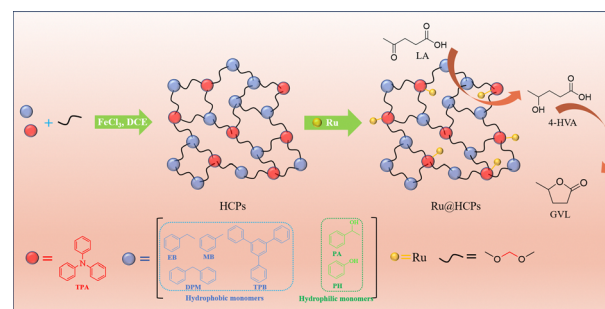
Ali Douaki, Annina Stuber, Julian Hengsteler, Dmitry Momotenko, David M. Rogers, Walter Rocchia, Jonathan D. Hirst, Nako Nakatsuka\* and Denis Garoli\*



14717

**Hydrogenation of levulinic acid to  $\gamma$ -valerolactone over hydrophobic Ru@HCP catalysts**

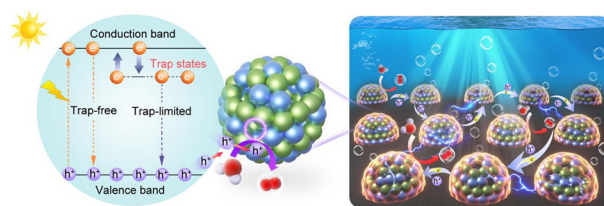
Xinbin Gong, Xiao Feng, Jieqi Cao, Yinwei Wang, Xiaoxia Zheng, Weiqiang Yu, Xinhong Wang\* and Song Shi\*



14721

**Suppressed charge recombination via defect engineering of confined semiconducting quantum dots for photoelectrocatalysis**

Ce Hu, Daojian Ye, Jie Ren, Congcong Wu, Chenya Zhao, Weiyang Xu, Hang Zhou, Ting Yu, Xingfang Luo\* and Cailei Yuan\*



## CORRECTION

14725

**Correction: Interface-mediated protein aggregation**

Fei Tao, Qian Han and Peng Yang\*

