

# ChemComm

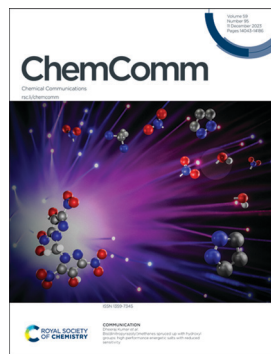
Chemical Communications

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## IN THIS ISSUE

ISSN 1359–7345 CODEN CHCOFS 59(95) 14043–14186 (2023)



### Cover

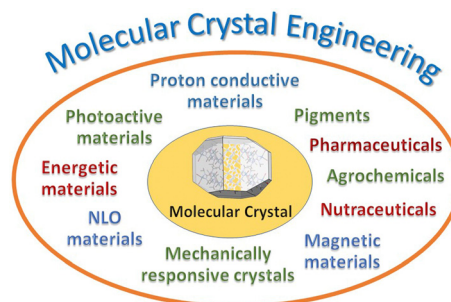
See Dheeraj Kumar *et al.*, pp. 14110–14113. Image reproduced by permission of Dheeraj Kumar from *Chem. Commun.*, 2023, 59, 14110.

## HIGHLIGHT

14052

### Crystal engineering: from promise to delivery

Dario Braga

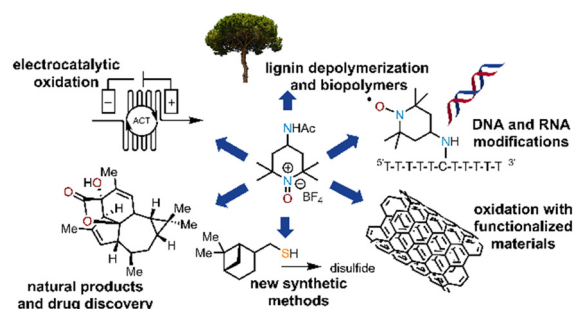


## FEATURE ARTICLES

14063

### Recent advancements in the use of Bobbitt's salt and 4-acetamidoTEMPO

Jean M. Bray, Shannon M. Stephens, Shayne M. Weierbach, Karen Vargas and Kyle M. Lambert\*



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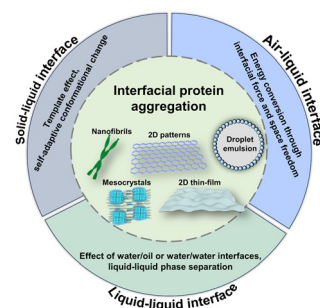


## FEATURE ARTICLES

14093

## Interface-mediated protein aggregation

Fei Tao, Qian Han and Peng Yang\*

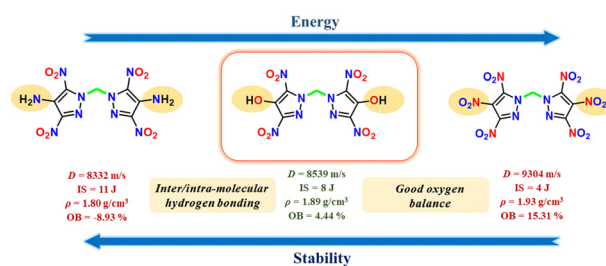


## COMMUNICATIONS

14110

## Bis(dinitropyrazolyl)methanes spruced up with hydroxyl groups: high performance energetic salts with reduced sensitivity

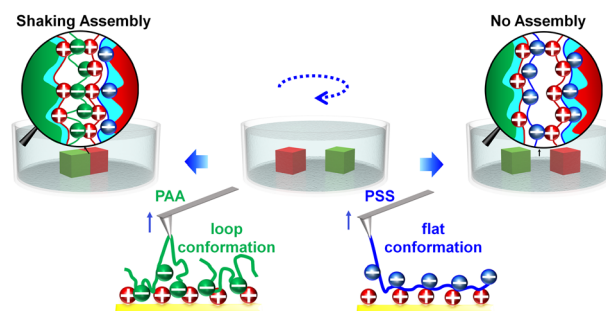
Prachi Bhatia, Krishna Pandey, Priyanka Das and Dheeraj Kumar\*



14114

## Polyelectrolyte chain conformation matters in macroscopic supramolecular self-assembly

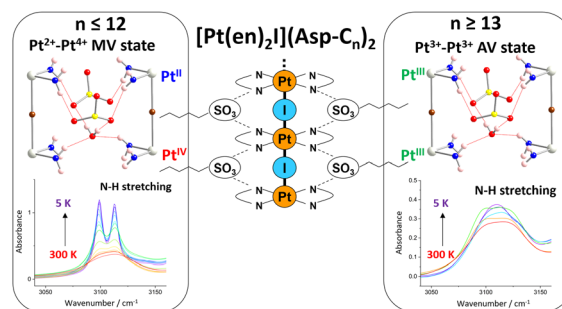
Qian Zhang, Cuiling Lin, Chen Chen, Liqun Zhang, Feng Shi\* and Mengjiao Cheng\*



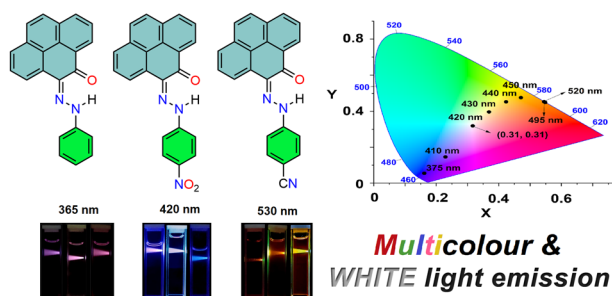
14118

Chemical pressure-induced Pt<sup>III</sup>-I Mott-Hubbard nanowire, [Pt(en)<sub>2</sub>l](Asp-C<sub>n</sub>)<sub>2</sub>·H<sub>2</sub>O (13 ≤ n), detected via polarized infrared spectroscopy

Shohei Kumagai, Takefumi Yoshida, Hiroaki Iguchi, Masanori Wakizaka, Nobuto Funakoshi, Masahiro Yamashita\* and Shinya Takaishi\*



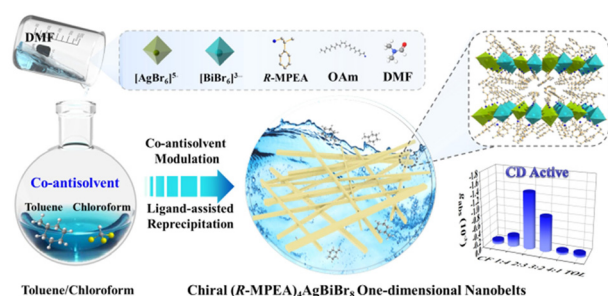
14122



### Excitation wavelength-dependent multi-coloured and white-light emissive pyrene-based hydrazones: suppression of Kasha's rule

Naveen Kumar M, Deikrisha Lyngdoh Lyngkhoi, Sudhakar Gaikwad, Jayanta Samanta, Rafiq Ahamed, Snehadrinarayan Khatua\* and Susnata Pramanik\*

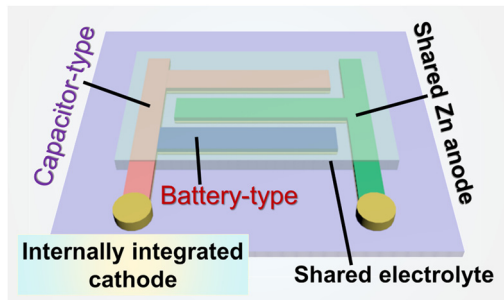
14126



### Two-dimensional lead-free silver-bismuth double perovskite nanobelts with intrinsic chirality via co-antisolvent modulation strategy

Xuexia Yu, Rong Lu, Pengfei Zhang, Shun Wang, Yihuang Chen\* and Shuang Pan\*

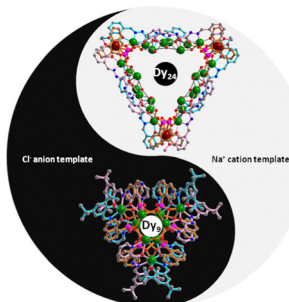
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### Design of internally integrated in-plane electrodes for superior flexible hybrid zinc-ion capacitor devices

Simiao Zhao, Haojie Li, Jiakuan Bai, Hui Ma, Yifan Dong and Xiaocong Tian\*

14134



### Double-stranded metallo-triangles: from anion-templated nonanuclear to cation-templated tetraicosanuclear dysprosium clusters

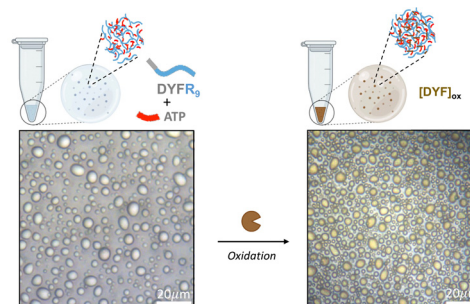
Yanan Liu, Xiao Sun, Peiqiong Chen, Xiaojuan Li, Fu-Ping Huang,\* Hou-Ting Liu\* and Haiquan Tian\*



14138

### Localized and regulated peptide pigment formation inside liquid droplets through confined enzymatic oxidation

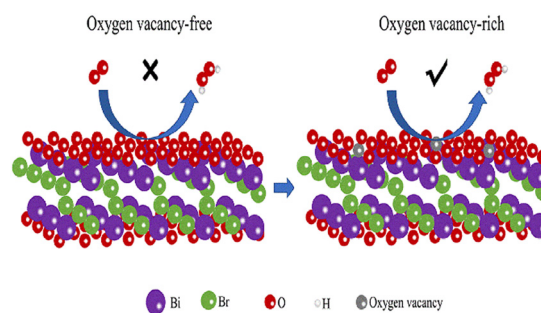
Kenny Barriaes, Salma Kassem, Deborah Sementa, Alfredo Vidal Ceballos, Tong Wang, Shadman Khandaker, Rinat R. Abzalimov, Ankit Jain, Shana Elbaum-Garfinkle and Rein V. Ulijn\*



14142

### Oxygen vacancy-promoted photocatalytic H<sub>2</sub>O<sub>2</sub> production over bismuth oxybromide nanosheets

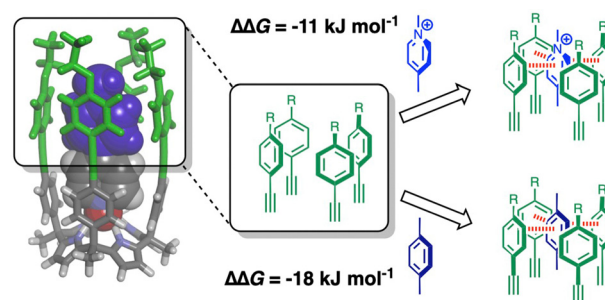
Hongxiang Chu, Ruofan Li, Di Zeng, Wenjing Wang, Bingkun Cui, Taikang Jia, Ling Zhang\* and Wenzhong Wang\*



14146

### Solvation rules: aromatic interactions outcompete cation- $\pi$ interactions in synthetic host-guest complexes in water

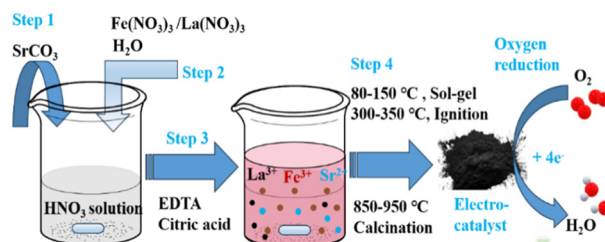
Gloria Tobajas-Curiel, Qingqing Sun, Jeremy K. M. Sanders, Pablo Ballester\* and Christopher A. Hunter\*



14149

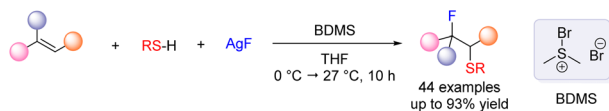
### A facile mixed complex synthesis method for perovskite oxides toward electrocatalytic oxygen reduction

Hui Lu,\* Danyang Wu, Yue Gu, Wenxin Sun, Xiaojian Yang, Wenxuan Li, Honglei Shuai and Xinsheng Zhao\*



## COMMUNICATIONS

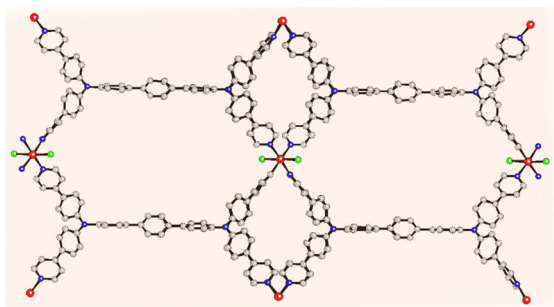
14153



### 1,2-Fluorosulfonylation of unactivated alkenes with thiols and a fluoride source promoted by bromodimethylsulfonium bromide

Zihui Yang, Jia Liu and Lan-Gui Xie\*

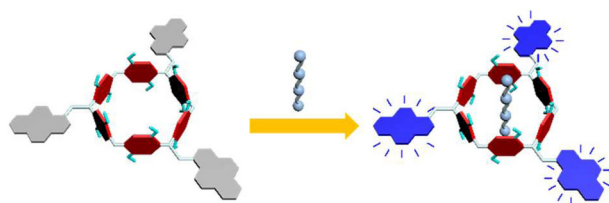
14157



### Exploring redox properties of a 3D Co-based framework with bis(triarylamine) terphenyl as a redox-active linker

Chin-May Ngue, Yong-Yun Zhang and Man-kit Leung\*

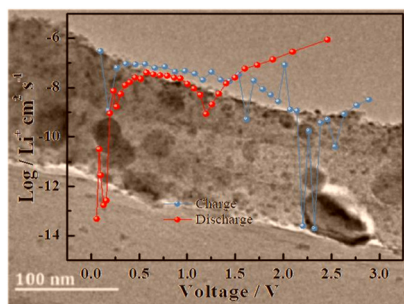
14161



### Water-soluble pillar[6]arene bearing pyrene on alternating methylene bridges for direct spermine sensing

Li Ling, Zizhen Zhao, Lijun Mao, Shuyi Wang and Da Ma\*

14165



### Promoted kinetics and capacity on the $\text{Li}_2\text{CuTi}_3\text{O}_8/\text{C}$ anode by constructing a one dimensional hybrid structure for superior performance lithium ion batteries

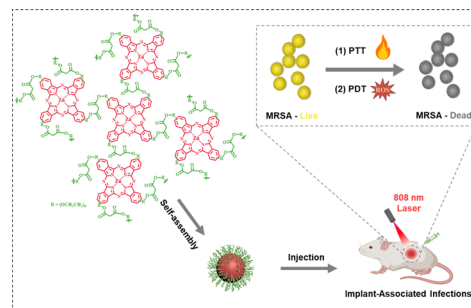
Yakun Tang, Jian Liu, Yue Zhang, Wenjie Ma, Lang Liu,\*  
Biao Zhang and Sen Dong

## COMMUNICATIONS

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### Hyperbranched polyphthalocyanine micelles with dual PTT/PDT functions for bacteria eradication under an NIR window

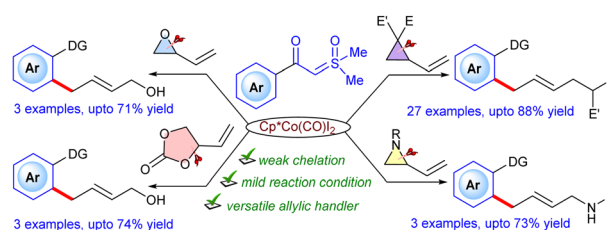
Ying Du, Guangyu Chu, Rui Yu, Rui Cui, Yuling Wang, Yiyong Mai, Ming Guan,\* Fugui Xu\* and Yongfeng Zhou\*



14173

### Expedient C–H allylation of sulfoxonium ylides: merging C–H and C–C/C–het bond activation

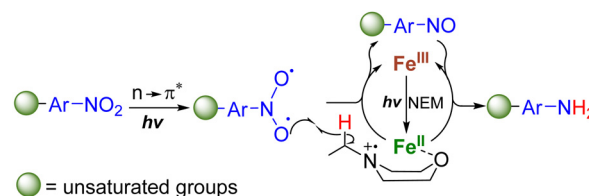
Sharajit Saha, Hemanga Bhattacharyya, Pallab Karjee, Bijoy Debnath, Kshitiz Verma and Tharmalingam Punniyamurthy\*



14177

### Visible-light-induced iron-catalyzed reduction of nitroarenes to anilines

Shilei Yang, Min He, Yi Wang, Ming Bao and Xiaoqiang Yu\*



● = unsaturated groups

- Abundant catalyst
- High chemoselective
- NEM act as H source as well as ligand
- Nitro triplet biradical HAT

14181

### Rapid construction of Co/CoO/CoCH nanowire core/shell arrays for highly efficient hydrogen evolution reaction

Sihan Liu, Runwei Song, Shuai Wang, Weiye Shi, Qin Zhou, Yan Zhang, Chunqing Huo,\* Shengjue Deng\* and Shiwei Lin\*

