## ChemComm

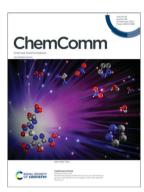
### Chemical Communications

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### IN THIS ISSUE

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



#### Cover

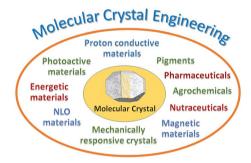
See Dheeraj Kumar et al., pp. 14110-14113. Image reproduced by permission of Dheeraj Kumar from Chem. Commun., 2023, 59, 14110.

### **HIGHLIGHT**

14052

Crystal engineering: from promise to delivery

Dario Braga

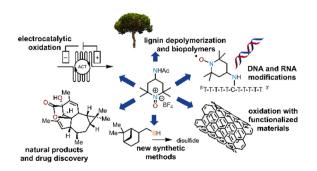


### **FEATURE ARTICLES**

### 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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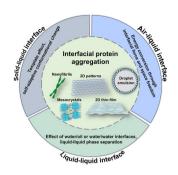


### FEATURE ARTICLES

#### 14093

### Interface-mediated protein aggregation

Fei Tao, Qian Han and Peng Yang\*

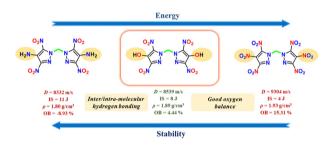


### COMMUNICATIONS

#### 14110

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

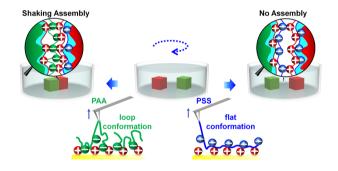
Prachi Bhatia, Krishna Pandey, Priyanka Das and Dheeraj Kumar\*



### 14114

Polyelectrolyte chain conformation matters in macroscopic supramolecular self-assembly

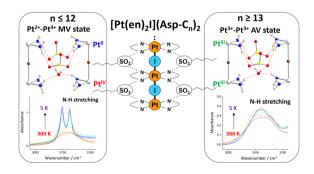
Qian Zhang, Cuiling lin, Chen Chen, Liqun Zhang, Feng Shi\* and Mengjiao Cheng\*



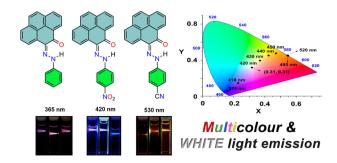
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Chemical pressure-induced PtIII-I Mott-Hubbard nanowire, [Pt(en)<sub>2</sub>I](Asp- $C_n$ )<sub>2</sub>· $H_2$ O (13  $\leq n$ ), detected via polarized infrared spectroscopy

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



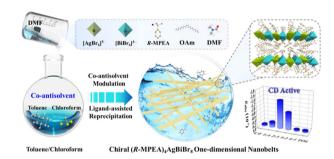
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Excitation wavelength-dependent multi-coloured and white-light emissive pyrene-based hydrazones: suppression of Kasha's rule

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

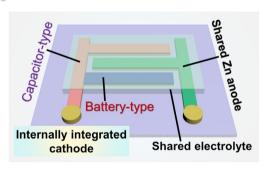
#### 14126



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\*

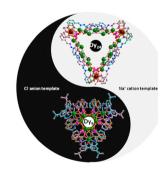
#### 14130



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

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

#### 14134



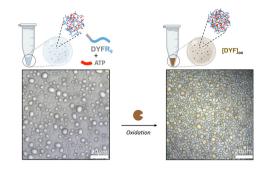
Double-stranded metallo-triangles: from anion-templated nonanuclear to cation-templated tetraicosanuclear dysprosium clusters

Yanan Liu, Xiao Sun, Peigiong 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

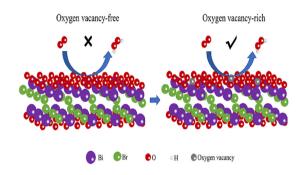
Kenny Barriales, Salma Kassem, Deborah Sementa, Alfredo Vidal Ceballos, Tong Wang, Shadman Khandaker, Rinat R. Abzalimov, Ankit Jain, Shana Elbaum-Garfinkle and Rein V. Ulijn\*



### 14142

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

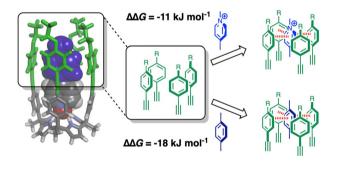
Hongxiang Chu, Ruofan Li, Di Zeng, Wenjing Wang, Bingkun Cui, Taikang Jia, Ling Zhang\* and Wenzhong Wang\*



### 14146

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

Gloria Tobajas-Curiel, Qingging 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\*



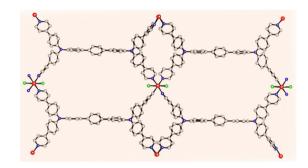
14153

#### BDMS THF 0 °C → 27 °C, 10 h 44 examples BDMS up to 93% yield

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

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

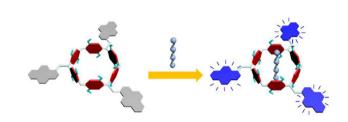




Exploring redox properties of a 3D Co-based framework with bis(triarylamine) terphenyl as a redox-active linker

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

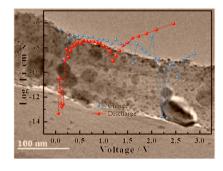




Water-soluble pillar[6]arene bearing pyrene on alternating methylene bridges for direct spermine sensing

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

14165



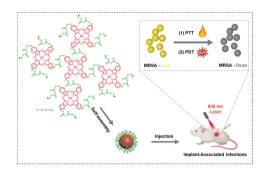
Promoted kinetics and capacity on the Li<sub>2</sub>CuTi<sub>3</sub>O<sub>8</sub>/ C anode by constructing a one dimensional hybrid structure for superior performance lithium ion batteries

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

#### 14169

### 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\*

$$-Ar-NO_2 \xrightarrow{n \to \pi^*} -Ar-N$$

$$-Ar-NO_2 \xrightarrow{hv} -Ar-NH_2$$

$$= unsaturated groups$$

- 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\*

