# ChemComm

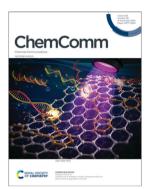
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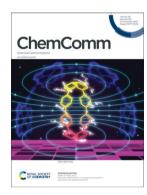
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#### Inside cover

See Martin D. Peeks et al., pp. 13438-13441. Image reproduced by permission of Alan Z. Chen from Chem. Commun., 2023, 59, 13438.

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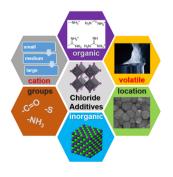


# HIGHLIGHT

13394

Advances in chloride additives for high-efficiency perovskite solar cells: multiple points of view

Xue Liu, Yanru Guo, Yu Cheng, Shirong Lu, Ru Li\* and Jiangzhao Chen\*



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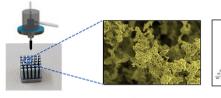


### FEATURE ARTICLES

#### 13406

### Surface functionalized 3D printed metal structures as next generation recyclable SERS substrates

Uzma Malik, Roxanne Hubesch, Paramita Kolev, Maciei Mazur, Sunil Mehla, Sai Kishore Butti, Milan Brandt, P. R. Selvakannan\* and Suresh Bhargava\*





Selective Laser Melting

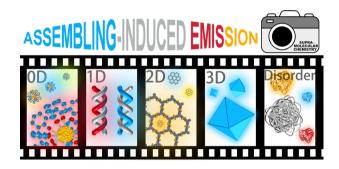
**Plasmonic** Metal/Semiconductor functional layer

Recyclable SERS substrate

#### 13421

### A supramolecular assembly strategy towards organic luminescent materials

Chenjia Yin, Zi-Ang Yan and Xiang Ma\*

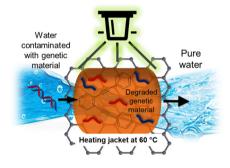


### **COMMUNICATIONS**

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## Synthesis of an enediyne carbon-allotrope surface for photo-thermal degradation of DNA

Santosh K. Misra, Mao Ye, Parikshit Moitra, Ketan Dighe, Abhinav Sharma, Enrique A. Daza, Aaron S. Schwartz-Duval, Fatemeh Ostadhossein and Dipanjan Pan\*



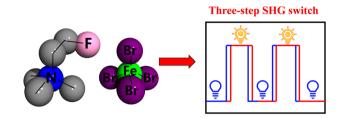
### 13438

# Electronic delocalization in charged macrocycles is associated with global aromaticity

David Bradley, Bethany K. Hillier and Martin D. Peeks\*



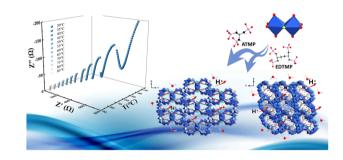
#### 13442



## An organic-inorganic hybrid material [Me<sub>3</sub>NCH<sub>2</sub>CH<sub>2</sub>F]FeBr<sub>4</sub> exhibits three-step SHG on/off

Haina Zhang, Lingyu Wang, Wenjing Guo, Hu Cai\* and Zhenhong Wei\*

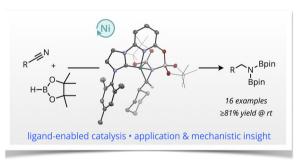
#### 13446



# The assembly of [Mo<sub>2</sub>O<sub>2</sub>S<sub>2</sub>]<sup>2+</sup> based on polydentate phosphonate templates and their proton conductivity

Bo Li, Yu-Xi Meng, Qian-Qian Liu, Xin-Yu Chen, Xin Liu and Hong-Ying Zang\*

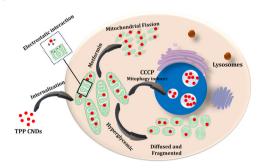
### 13450



# Secondary-sphere preorganization enables nickel-catalyzed nitrile hydroboration

Medina Afandiyeva, Xijue Wu, William W. Brennessel, Abhishek A. Kadam and C. Rose Kennedy\*

### 13454



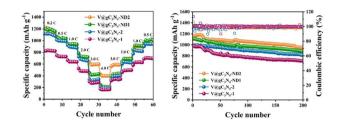
# Tracking the super resolved structure of mitochondria using red emissive carbon nanodots as a fluorescent biomarker

Richa Garg, Farhan Anjum, Abdul Salam, Kush Kaushik, Shagun Sharma, Udisha Sahrawat, Aditya Yadav and Chayan Kanti Nandi\*

#### 13458

### Vanadium-doped graphitic carbon nitride for high performance lithium-sulfur batteries

Yankang Wang, Yanbo Wang, Chunhong Huang, Qiang Zhang, Zhanghaoran Liu and Fengxiang Zhang\*



#### 13462

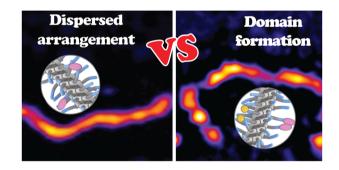
# Catalyst- and additive-free cascade radical addition/ cyclization of N-arylacrylamides with trifluoropyruvates

Yongbo Tan and Huawen Huang\*

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# Impact of subtle intermolecular interactions on the structure and dynamics of multicomponent supramolecular polymers

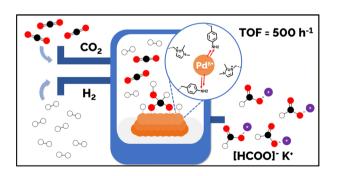
Job N. S. Hanssen and Shikha Dhiman\*



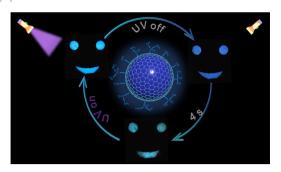
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# Amine-modified polyionic liquid supports enhance the efficacy of PdNPs for the catalytic hydrogenation of CO<sub>2</sub> to formate

Reece Paterson, Luke E. Fahy, Elisabetta Arca,\* Casey Dixon, Corinne Y. Wills, Han Yan, Anthony Griffiths, Sean M. Collins, Kejun Wu, Richard A. Bourne, Thomas W. Chamberlain,\* Julian G. Knight and Simon Doherty\*



#### 13474



# High-efficiency NP-carbon dots above 60% with both delayed fluorescence and room-temperature phosphorescence

Bin Xu, Qun Hao, Xin Tang and Menglu Chen\*

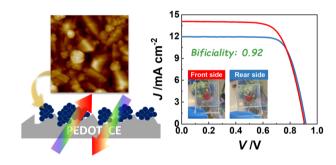
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### High-entropy oxides as photocatalysts for organic conversion

Mingjin Li, Shuxing Mei, Yong Zheng,\* Long Wang\* and Ligun Ye\*

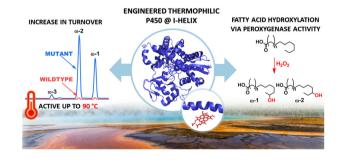
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# Transparent PEDOT counter electrodes for bifacial dye-sensitized solar cells using a cobalt complex mediator

Yiming Li, Jing Wang, Hao Wang, Zhichao Di, Mingyan Liu, Xueping Zong, Chunsheng Li, Yan Sun, Mao Liang and Zhe Sun\*

#### 13486



# Efficient biocatalytic C-H bond oxidation: an engineered heme-thiolate peroxygenase from a thermostable cytochrome P450

Alecia R. Gee, Isobella S. J. Stone, Tegan P. Stockdale, Tara L. Pukala, James J. De Voss and Stephen G. Bell\*

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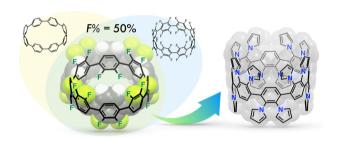
### Supramolecular intermediates in thermo-mechanochemical direct amidations

Tomislav Stolar.\* Jasna Alić, Gregor Talaiić, Nikola Cindro, Mirta Rubčić, Krešimir Molčanov, Krunoslav Užarević\* and José G. Hernández\*

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Half-substituted fluorocycloparaphenylenes with high symmetry: synthesis, properties and derivatization to densely substituted carbon nanorings

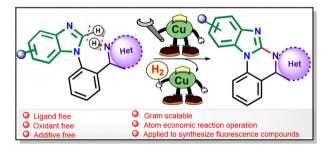
Hiroki Shudo, Motonobu Kuwayama, Yasutomo Segawa, Akiko Yagi and Kenichiro Itami\*



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Synthesis of benzimidazole fused poly-heterocycles via oxidant free Cu-catalyzed dehydrogenative C-N coupling and photophysical studies

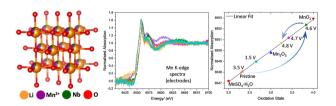
Sakshi Singh and Shantanu Pal\*



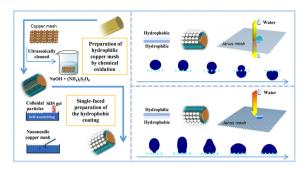
#### 13502

Synthesis of Li<sub>1.20</sub>Mn<sub>0.43</sub><sup>2+</sup>Nb<sub>0.39</sub>O<sub>2</sub> disordered rocksalt under reducing conditions for Li-ion batteries

Wilgner Lima da Silva, Ashok S. Menon, Martin R. Lees, Reza J. Kashtiban, Marc Walker, Louis F. J. Piper, Emma Kendrick\* and Richard I. Walton\*



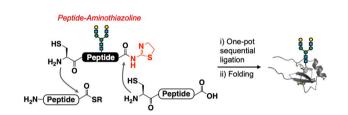
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# Preparation of a Janus copper mesh via nanoparticle interface self-assembly for unidirectional water transportation

Chaolang Chen, Linfeng Zhu, Ruisong Jiang\* and Xuan Li\*

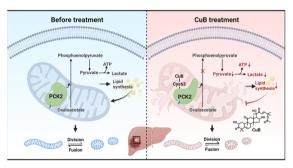
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# Convergent synthesis of proteins using peptide-aminothiazoline

Ryo Okamoto,\* Hiroyuki Shibata, Takahiro Yatsuzuka, Takuya Hanao, Yuta Maki, Kazuya Kabayama, Ayane Miura, Koichi Fukase and Yasuhiro Kajihara\*

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# Allosteric regulation of the lid domain of PCK2 as a novel strategy for modulating mitochondrial dvnamics

Yang Liu, Ling Li, Zhuo Yang, Li-xi Liao, Xiao-jun Yao, Peng-fei Tu and Ke-wu Zeng\*

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# Pd(II)-Catalyzed atroposelective C-H olefination: synthesis of enantioenriched N-aryl peptoid atropisomers

Tian-Yu Jiang, Yi-Ting Ke, Yong-Jie Wu, Qi-Jun Yao\* and Bing-Feng Shi\*