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#### IN THIS ISSUE

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#### Cover

See Ambara R. Pradipta, Katsunori Tanaka et al., pp. 8054-8060. Image reproduced by permission of Katsunori Tanaka from Chem. Sci., 2023, 14, 8054.



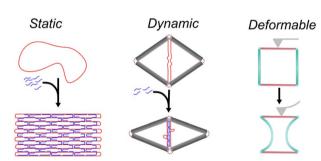
#### Inside cover

See Alakesh Bisai et al.. pp. 8047-8053. Image reproduced by permission of Rhituparna Nandi from Chem. Sci., 2023, **14**, 8047.

#### **REVIEW**

#### Mechanics of dynamic and deformable DNA nanostructures

Ruixin Li, Anirudh S. Madhvacharyula, Yancheng Du, Harshith K. Adepu and Jong Hyun Choi\*

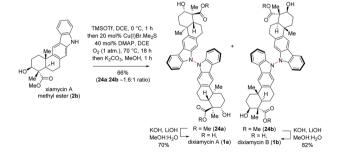


#### **EDGE ARTICLES**

#### 8047

### Total synthesis of atropisomeric indolosesquiterpenoids via N-N bond formation: dixiamycins A and B

Rhituparna Nandi, Sovan Niyogi, Sourav Kundu, Vipin R. Gavit, Mintu Munda, Ranjit Murmu and Alakesh Bisai\*



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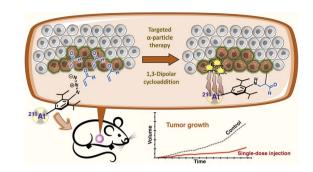
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#### 8054

### Therapeutic efficacy of <sup>211</sup>At-radiolabeled 2,6diisopropylphenyl azide in mouse models of human lung cancer

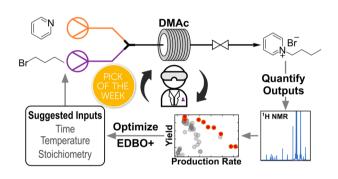
Yudai Ode, Ambara R. Pradipta,\* Peni Ahmadi, Akihiro Ishiwata, Akiko Nakamura, Yasuko Egawa, Yuriko Kusakari, Kyohei Muguruma, Yang Wang, Xiaojie Yin, Nozomi Sato, Hiromitsu Haba and Katsunori Tanaka\*



#### 8061

### Continuous flow synthesis of pyridinium salts accelerated by multi-objective Bayesian optimization with active learning

John H. Dunlap, Jeffrey G. Ethier, Amelia A. Putnam-Neeb, Sanjay Iyer, Shao-Xiong Lennon Luo, Haosheng Feng, Jose Antonio Garrido Torres, Abigail G. Doyle, Timothy M. Swager, Richard A. Vaia, Peter Mirau, Christopher A. Crouse and Luke A. Baldwin\*



#### 8070

#### 2,5-disubstituted bicyclo[2.1.1]hexanes as rigidified cyclopentane variants

Shashwati Paul, Daniel Adelfinsky, Christophe Salome, Thomas Fessard\* and M. Kevin Brown\*

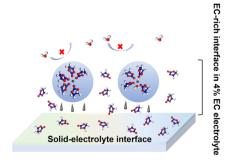


- New 2,5-Disubstituted Bicyclo[2.1.1]hexanes
- Rigidified 1,2-Disubstituted Cyclopentanes
- Synthesis by C-H functionalization and Cycloaddition

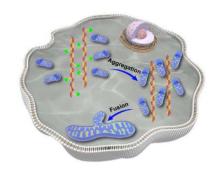
#### 8076

### Interface solvation regulation stabilizing the Zn metal anode in aqueous Zn batteries

Kuo Wang, Tong Qiu, Lu Lin, Fangming Liu, Jiaqi Zhu, Xiao-Xia Liu and Xiaoqi Sun\*



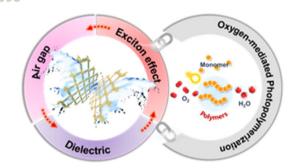
#### 8084



# Controllable mitochondrial aggregation and fusion by a programmable DNA binder

Longyi Zhu, Yiting Shen, Shengyuan Deng, Ying Wan,\* Jun Luo, Yan Su, Mingxu You, Chunhai Fan and Kewei Ren\*

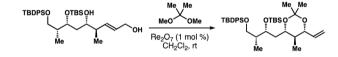
#### 8095



### Influence laws of air gap structure manipulation of covalent organic frameworks on dielectric properties and exciton effects for photopolymerization

Hongjie Yang, Zhen Lu, Xiangyu Yin, Shengjin Wu and Linxi Hou\*

#### 8103



# Stereoselective syntheses of 2-methyl-1,3-diol acetals *via* Re-catalyzed [1,3]-allylic alcohol transposition

Jiaming Liu and Ming Chen\*

#### 8109



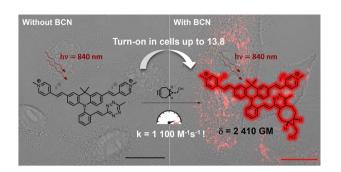
# Polymer up-cycling by mangana-electrocatalytic C(sp<sup>3</sup>)-H azidation without directing groups

Isaac Maksso, Ramesh C. Samanta, Yifei Zhan, Kai Zhang, Svenja Warratz and Lutz Ackermann\*

#### 8119

### Ultrabright two-photon excitable red-emissive fluorogenic probes for fast and wash-free bioorthogonal labelling in live cells

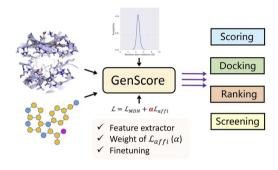
Marie Auvray,\* Delphine Naud-Martin, Gaëlle Fontaine, Frédéric Bolze, Gilles Clavier and Florence Mahuteau-Betzer\*



#### 8129

### A generalized protein-ligand scoring framework with balanced scoring, docking, ranking and screening powers

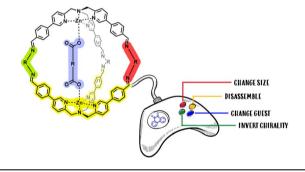
Chao Shen, Xujun Zhang, Chang-Yu Hsieh, Yafeng Deng, Dong Wang, Lei Xu, Jian Wu, Dan Li, Yu Kang,\* Tingjun Hou\* and Peichen Pan\*



#### 8147

### Programmed guest confinement via hierarchical cage to cage transformations

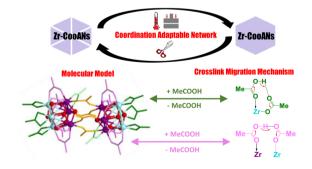
Federico Begato, Giulia Licini and Cristiano Zonta\*



### 8152

### Acetate exchange mechanism on a Zr<sub>12</sub> oxo hydroxo cluster: relevance for reshaping Zr-carboxylate coordination adaptable networks

Meenu Murali, Christian Bijani, Jean-Claude Daran, Eric Manoury and Rinaldo Poli\*



#### 8164

$$R = CH_2CH_3 \ (Et), \ CH_2CH_2CH_3(Pr), \ CH_2C_6H_5 \ (Bn), \ CH_2-4-OMe-C_6H_5(^{OMe}Bn), \ C_6H_5 \ (Ph)$$

$$Complexes \ supported \ by \ a \ PBP \ pincer \ ligand$$

$$R = CH_2CH_3 \ (Et), \ CH_2CH_3(Pr), \ CH_2C_6H_5 \ (Bn), \ CH_2-4-OMe-C_6H_5(^{OMe}Bn), \ C_6H_5 \ (Ph)$$

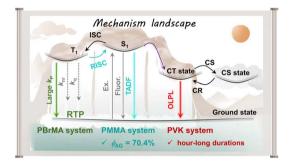
$$Comparison \ of \ rates \ of \ CO_2 \ insertion \ into \ different \ alkyl \ groups$$

CO<sub>2</sub> insertion rates: Et > Me > <sup>n</sup>Pr > Bn ~ <sup>OMe</sup>Bn

# Comparative study of CO<sub>2</sub> insertion into pincer supported palladium alkyl and aryl complexes

Anthony P. Deziel, Sahil Gahlawat, Nilay Hazari,\* Kathrin H. Hopmann\* and Brandon Q. Mercado

#### 8180



# Mechanism landscape in pyrylium induced organic afterglow systems

Guangming Wang, Xuefeng Chen, Xun Li, Ying Zeng and Kaka Zhang\*

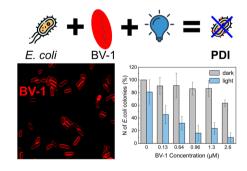
#### 8187



# HAA by the first {Mn(III)OH} complex with all O-donor ligands

Shawn M. Moore, Chen Sun, Jennifer L. Steele, Ellen M. Laaker, Arnold L. Rheingold and Linda H. Doerrer\*

#### 8196



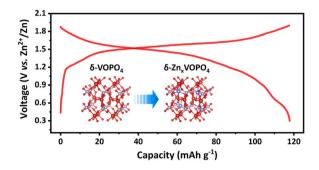
# A membrane intercalating metal-free conjugated organic photosensitizer for bacterial photodynamic inactivation

Arianna Magni, Sara Mattiello, Luca Beverina, Giuseppe Mattioli, Matteo Moschetta, Anita Zucchi, Giuseppe Maria Paternò\* and Guglielmo Lanzani\*

#### 8206

# $\delta\text{-VOPO}_4$ as a high-voltage cathode material for aqueous zinc-ion batteries

Dong Zhao, Xiangjun Pu,\* Shenglong Tang, Mingyue Ding,\* Yubin Zeng, Yuliang Cao and Zhongxue Chen\*



#### 8214

# Zn-induced electron-rich Sn catalysts enable highly efficient CO<sub>2</sub> electroreduction to formate

Xingxing Tan, Shunhan Jia, Xinning Song, Xiaodong Ma, Jiaqi Feng, Libing Zhang, Limin Wu, Juan Du, Aibing Chen, Qinggong Zhu, Xiaofu Sun\* and Buxing Han\*

