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#### HIGHLIGHT

#### 11456

Recent advances in fluorescence-based chemosensing of organoarsenic feed additives using luminescence MOFs, COFs, HOFs, and QDs

Rajdeep Mondal, Ananthu Shanmughan, A. Murugeswari\* and Sankarasekaran Shanmugaraju\*



#### FEATURE ARTICLES

#### 11469

Chiroptical regulation of macrocyclic arenes with flipping-induced inversion of planar chirality

Ting Zhao, Wanhua Wu\* and Cheng Yang\*



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#### FEATURE ARTICLES

#### 11484

Considerations for defining +80 Da mass shifts in mass spectrometry-based proteomics: phosphorylation and beyond

Leonard A. Daly, Christopher J. Clarke, Allen Po, Sally O. Oswald and Claire E. Eyers\*



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Sequential self-assembly of calix[4]resorcinarenebased heterobimetallic Cd<sub>8</sub>Pt<sub>8</sub> nano-Saturn complexes

Lipeng He, Lijie Li, Shi-Cheng Wang and Yi-Tsu Chan\*



#### 11504

## Difluoromethylene insertion into fluoroalkyl copper complexes

Yuyang Zhou, Ryohei Doi\* and Sensuke Ogoshi\*



#### 11508

## Methanol-water mixture evaporation-induced self-assembly of ZIF-8 particles

Jikun Yin, Haochen Ye, Xiaoli Xia, Lanhua Yi\* and Tie Wang\*



510 n

TAZpy

7370 nm

510 nm

#### 11512

11516



SC4AD-TAZpy-CBI71

HA-SC4AD-TAZpy-CB[7]

# Coupling $MoS_2$ nanosheets with $CeO_2$ for efficient electrocatalytic hydrogen evolution at large current densities

Rui-Qing Li,\* Changming Wang, Shuixiang Xie, Tianyu Hang, Xiaoyu Wan, Jinjue Zeng\* and Wei Zhang\*



Xuan Zhao, Xiaolu Zhou, Wen-Wen Xing and Yu Liu\*



370 nm

TAZpy-CB[7]

370 nm

#### Rhodium(III)-catalyzed intermolecular [3+3] annulation of benzoxazines with quinone compounds: access to spiro-heterocyclic scaffolds

Qing-Yi Wei, Ze Zhou, Meng-Lian Yao, Ji-Kai Liu, Bin Wu and Jin-Ming Yang\*

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#### The enol of propionic acid

Akkad Danho, Artur Mardyukov and Peter R. Schreiner\*

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#### 11528

# The synergy between electrochemical substrate oxidation and the oxygen reduction reaction to enable aerobic oxidation

Snehanjali Behera, SK Tarik Aziz, Nisha Singla and Biswajit Mondal\*



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#### A low-coordinate iron organoazide complex

Andres Gonzalez, Serhiy Demeshko, Franc Meyer and C. Gunnar Werncke\*



#### 11536

Zinc-dual-halide complexes suppressing polyhalide formation for rechargeable aqueous zinc-halogen batteries

Wanlong Wu, Xiaoyu Yin, Sibo Wang, Quanwei Jiang, Hua-Yu Shi and Xiaoqi Sun\*



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# Enhanced CO<sub>2</sub> sorption properties in a polarizable $[WO_2F_4]^{2-}$ -pillared physisorbent under direct air capture conditions

Daniel O'Nolan, Lindsey Chatterton, Timothy Bellamy, J. Todd Ennis and Mustapha Soukri\*





## Catalytic cascade synthesis of cyanohydrin esters via water/O<sub>2</sub>-induced cyanide transfer from $K_3Fe(CN)_6$

Anupam Kumar Singh, Shivani Singh Chauhan and Sukalyan Bhadra\*

α-Functionalization of ketones
H<sub>2</sub>O/O<sub>2</sub>-induced cyanide
32 Examples, up to 93% yield release from K<sub>3</sub>Fe(CN)<sub>6</sub>





OH

Ru/CePr

40 60 80 Time (min)

Ammonia synthesis rate

# Highly selective $\alpha$ -hydrogermylation of alkynes catalyzed by an *in situ* generated bulky NHC-cobalt complex

Małgorzata Bołt,\* Aleksandra Mermela and Patrycja Żak

# Boosting the ammonia synthesis activity of ceria-supported Ru catalysts achieved through trace Pr addition

Chunyan Li, Zecheng Zhang, Lingyun Zhou, Biyun Fang, Jun Ni, Jianxin Lin, Bingyu Lin\* and Lilong Jiang\*

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Ru/CePr



#### Intermolecular hydrogen bonding in calix[5]arene derived cavitands regulates the molecular recognition of fullerenes

Rubén Álvarez-Yebra, Alba Sors-Vendrell and Agustí Lledó\*

#### 11560

#### A cocktail therapeutic strategy based on clofarabine-containing aptamer-PROTAC for enhanced cancer therapy

Zhenzhen Chen, Mohan Chen, Ran Liu, Huanhuan Fan\* and Jingjing Zhang\*



#### 11564

#### Topological capture of mRNA for silencing gene expression

Fangjie Lyu, Takashi Tomita, Naoko Abe, Haruka Hiraoka, Fumitaka Hashiya, Yuko Nakashima, Shiryu Kajihara, Fumiaki Tomoike, Zhaoma Shu, Kazumitsu Onizuka, Yasuaki Kimura\* and Hiroshi Abe\*



#### 11568

A redox-neutral weak carbonyl chelation assisted C4-H allylation of indoles with vinylcyclopropanes

Shubhajit Basak, Tripti Paul and Tharmalingam Punniyamurthy\*



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Amazing enhancement of OER performances: creating a well-designed functional Ni and N-doped carbon layer as a support material for fabricating a NiFe-LDH electrocatalyst

Yu Wei, Zhenze Han, Taolue Liu, Xin Ding\* and Yan Gao\*







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3D XBOR

#### Reactivation of an air-passivated lithium metal anode through halogen regulation

Yiging Yao, Hui Gu, Jiahang Zou, Hanxu Yang, Qingan Zhang, Zhipeng Jiang\* and Yongtao Li\*

#### Two and three-dimensional halogen-bonded frameworks: self-assembly influenced by crystallization solvents

Chuan-Zhi Liu,\* Jing-Jing Wang, Bo Yang, Zhong-Yi Li, Meng Yan, Xin-Ming Liu, Zhi-Yuan Hu,\* Lan-Tao Liu and Zhan-Ting Li\*



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#### Copper ferrite nanoparticles catalyzed the challenging Diels-Alder reaction of aromatic chalcones with cyclopentadiene

Divya Tagra, Meha Bhargava and Jyoti Agarwal\*

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#### Selective edge etching of Pd metallene for enhanced formic acid electrooxidation

Ze Liu,\* Xiaohang Ge, Yanrui Wang, Mang Niu, Weiyong Yuan and Lian Ying Zhang\*

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#### CORRECTIONS

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#### Correction: Stannyl phosphaketene as a synthon for phosphorus analogues of $\beta$ -lactams

Yong-an Luo, Zhao Zhao, Ting Chen, Yanguo Li, Yufen Zhao, Douglas W. Stephan\* and Yile Wu\*

#### 11593

#### Correction: Cyclopentane FIT-PNAs: bright RNA sensors

Odelia Tepper,\* Hongchao Zheng, Daniel H. Appella\* and Eylon Yavin\*