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Chemical Communications

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IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(77) 11445-11596 (2023)



Cover

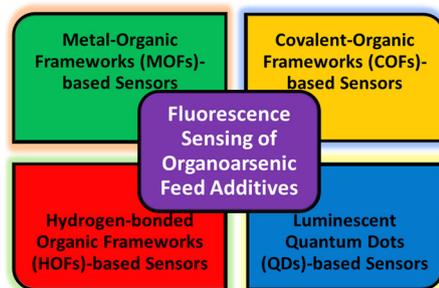
See Yi-Tsu Chan *et al.*,
pp. 11500-11503.
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Chem. Commun.,
2023, 59, 11500.

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*

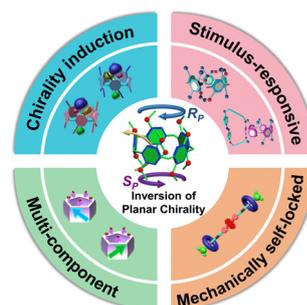


FEATURE ARTICLES

11469

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

Ting Zhao, Wanhua Wu* and Cheng Yang*



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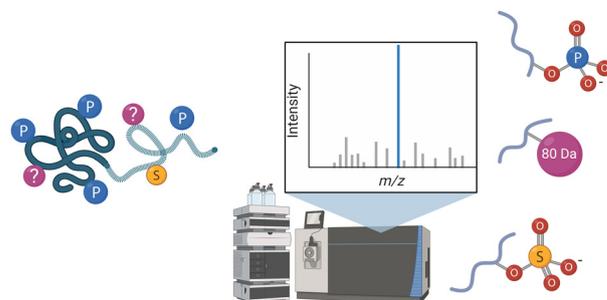


FEATURE ARTICLES

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*

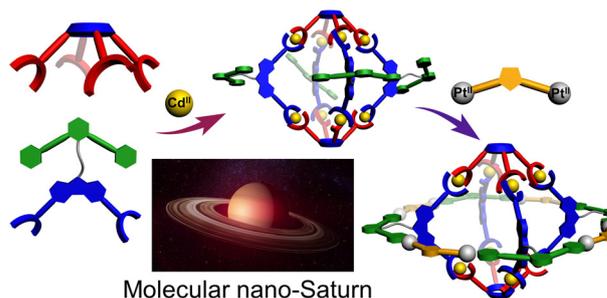


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11500

Sequential self-assembly of calix[4]resorcinarene-based heterobimetallic Cd₈Pt₈ nano-Saturn complexes

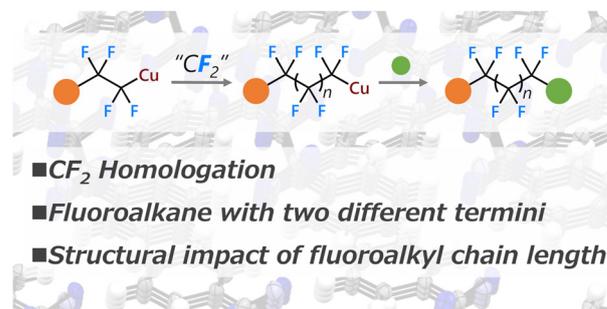
Lipeng He, Lijie Li, Shi-Cheng Wang and Yi-Tsu Chan*



11504

Difluoromethylene insertion into fluoroalkyl copper complexes

Yuyang Zhou, Ryohei Doi* and Sensuke Ogoshi*



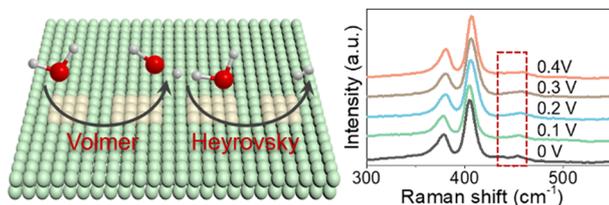
11508

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

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



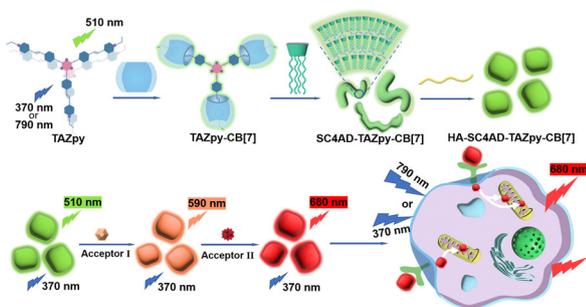
11512



Coupling MoS₂ nanosheets with CeO₂ 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*

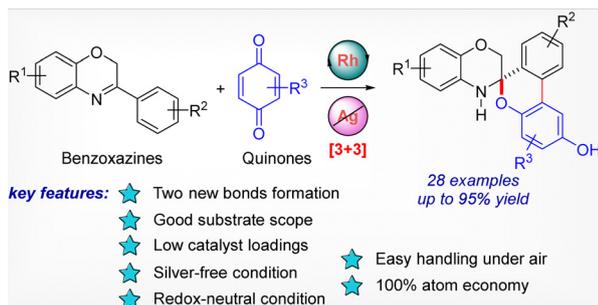
11516



Triazine pyridinium derivative supramolecular cascade assembly extended FRET for two-photon NIR targeted cell imaging

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

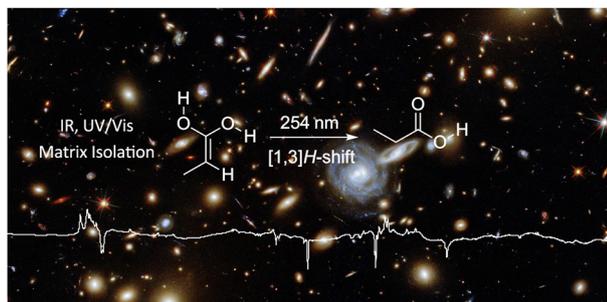
11520



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*

11524



The enol of propionic acid

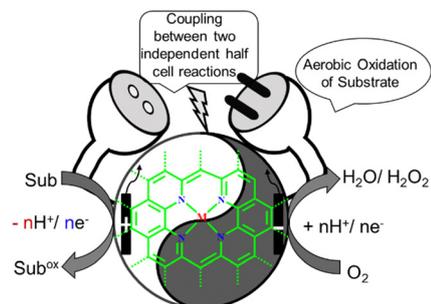
Akkad Danho, Artur Mardyukov and Peter R. Schreiner*



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

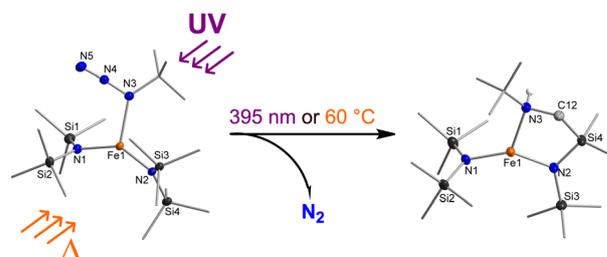
Snehanjali Behera, SK Tarik Aziz, Nisha Singla and Biswajit Mondal*



11532

A low-coordinate iron organoazide complex

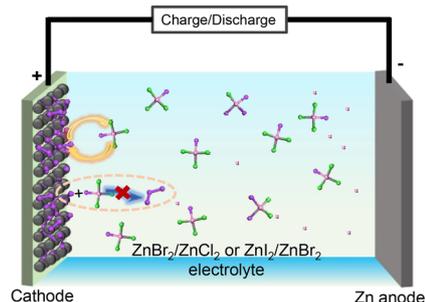
Andres Gonzalez, Serhiy Demeshko, Franc Meyer and C. Gunnar Werncke*



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

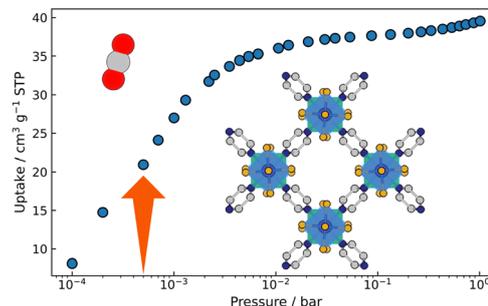
Wanlong Wu, Xiaoyu Yin, Sibao Wang, Quanwei Jiang, Hua-Yu Shi and Xiaoqi Sun*



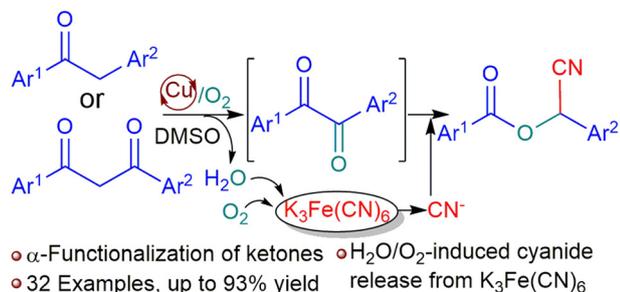
11540

Enhanced CO₂ sorption properties in a polarizable [WO₂F₄]²⁻-pillared physisorbent under direct air capture conditions

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



11544

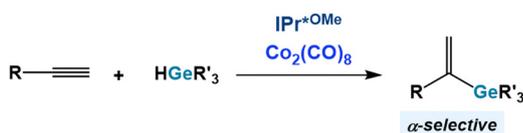


Catalytic cascade synthesis of cyanohydrin esters via water/ O_2 -induced cyanide transfer from $\text{K}_3\text{Fe}(\text{CN})_6$

Anupam Kumar Singh, Shivani Singh Chauhan and Sukalyan Bhadra*

11548

BULKY NHC-COBALT CATALYST

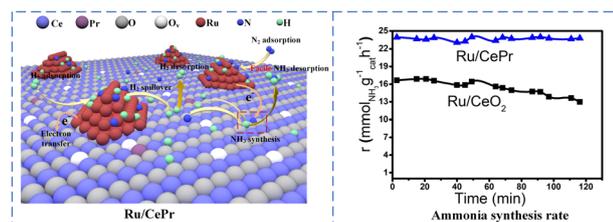


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- High alpha-selectivity
- Broad substrate scope
- No harmful by-products
- 24 new products (yield up to 97%)

Highly selective α -hydrogermylation of alkynes catalyzed by an *in situ* generated bulky NHC-cobalt complex

Małgorzata Bott,* Aleksandra Mermela and Patrycja Żak

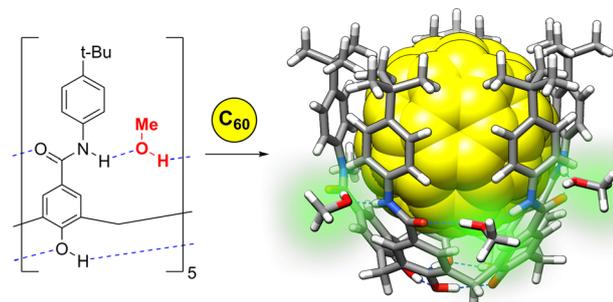
11552



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*

11556



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

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

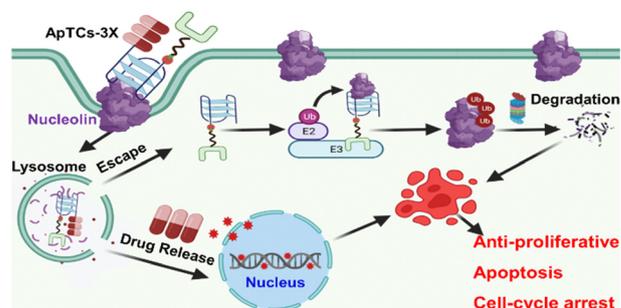


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A cocktail therapeutic strategy based on clofarabine-containing aptamer-PROTAC for enhanced cancer therapy

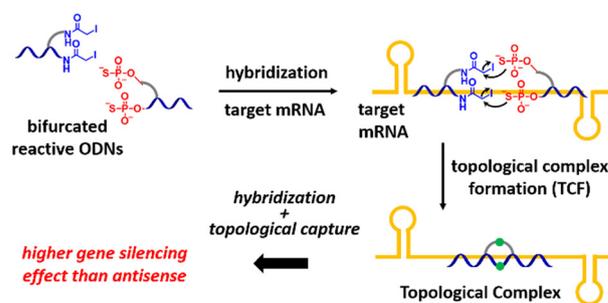
Zhenzhen Chen, Mohan Chen, Ran Liu, Huanhuan Fan* and Jingjing Zhang*



11564

Topological capture of mRNA for silencing gene expression

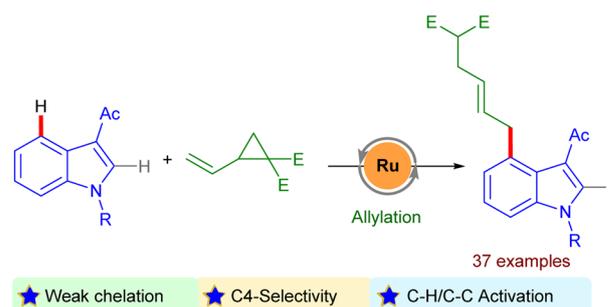
Fangjie Lyu, Takashi Tomita, Naoko Abe, Haruka Hiraoka, Fumitaka Hashiya, Yuko Nakashima, Shiryu Kajihara, Fumiaki Tomoike, Zhaoma Shu, Kazumitsu Onizuka, Yasuaki Kimura* and Hiroshi Abe*



11568

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

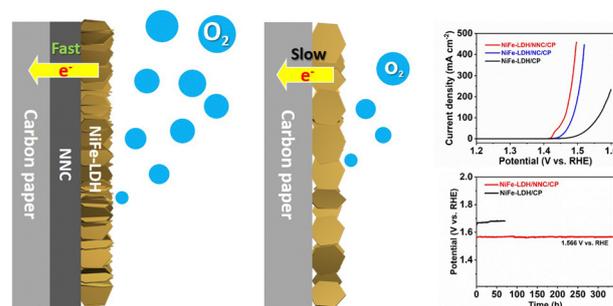
Shubhajit Basak, Tripti Paul and Tharmalingam Punniyamurthy*



11572

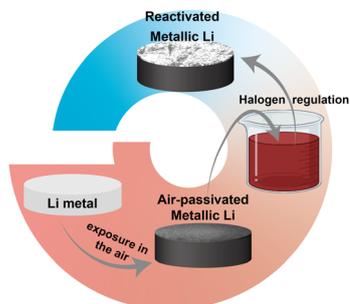
Amazing enhancement of OER performances: creating a well-designed functional Ni and N-doped carbon layer as a support material for fabricating a NiFe-LDH electrocatalyst

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



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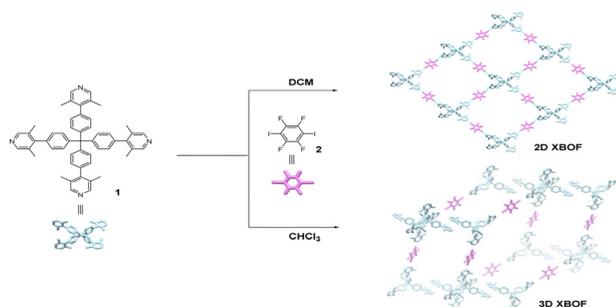
11576



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

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

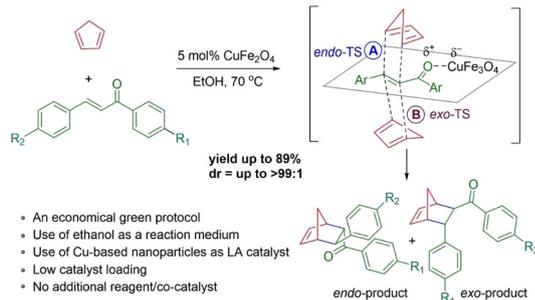
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Two and three-dimensional halogen-bonded frameworks: self-assembly influenced by crystallization solvents

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*

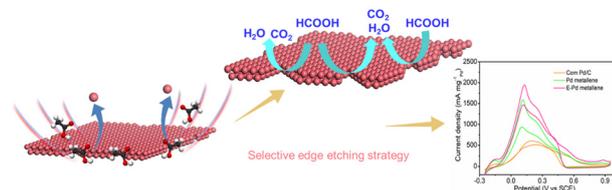
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Copper ferrite nanoparticles catalyzed the challenging Diels–Alder reaction of aromatic chalcones with cyclopentadiene

Divya Tagra, Meha Bhargava and Jyoti Agarwal*

11588



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*



CORRECTIONS

11592

Correction: Stannyl phosphaketene as a synthon for phosphorus analogues of β -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*

