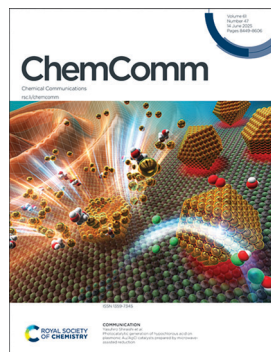


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ISSN 1359-7345 CODEN CHCOFS 61(47) 8449-8606 (2025)



Cover

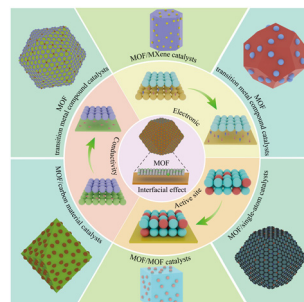
See Yasuhiro Shiraishi
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Chem. Commun.,
2025, 61, 8496.

HIGHLIGHT

8460

Interfacial effects on metal–organic frameworks for boosting electrocatalytic reactions

Jianguo Dong, Xuena Gao, Chunmei Ni, Huimin Yang,
Xiaoyan He,* Zhao Li* and Lin Tian*

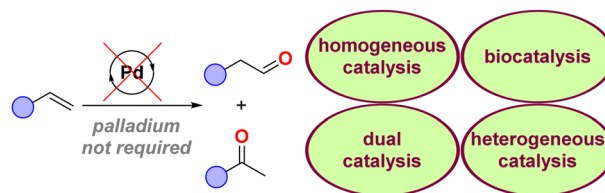


FEATURE ARTICLES

8471

Palladium-free Wacker-inspired oxidation: challenges and opportunities in catalysis

Inderpal Yadav and Rafael Gramage-Doria*



Markovnikov vs anti-Markovnikov products



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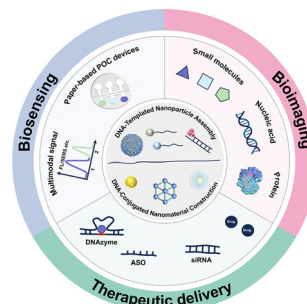


FEATURE ARTICLES

8482

DNA-programmed nanomaterials: advancing biosensing, bioimaging, and therapeutic applications

Hongyan Zhang, Hexv Niu, Zhe Hao, Huajie Pang, Run Yang, Xiyan Li,* Ruizhong Zhang* and Libing Zhang*

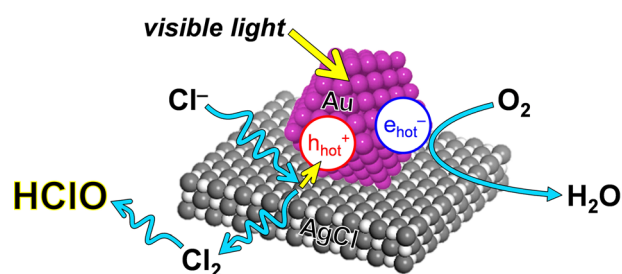


COMMUNICATIONS

8496

Photocatalytic generation of hypochlorous acid on plasmonic Au/AgCl catalysts prepared by microwave-assisted reduction

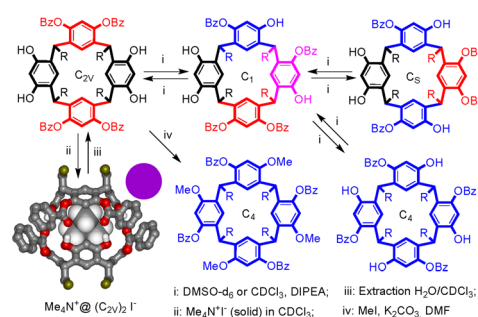
Yasuhiro Shiraishi,* Yoko Hiroaki, Satoshi Ichikawa, Shunsuke Tanaka and Takayuki Hirai



8500

Acyl migrations sensitive to supramolecular encapsulation

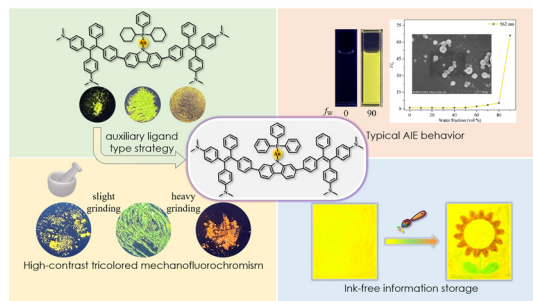
Oleksandra Lagerna, Alexander Shivanyuk,* Tetyana Kienko, Svitlana V. Shishkina, Oleg Lukin and Volodymyr Fetyukhin



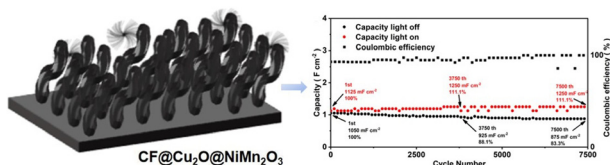
8504

High-contrast tricolored mechanofluorochromism of a novel gold(I)-based AIEgen achieved through the phosphino-type auxiliary ligand modulation strategy

Zhao Chen,* Yijie Zou, Xiaowen Deng, Xingru Liang, Kaixin He and Sheng Hua Liu*



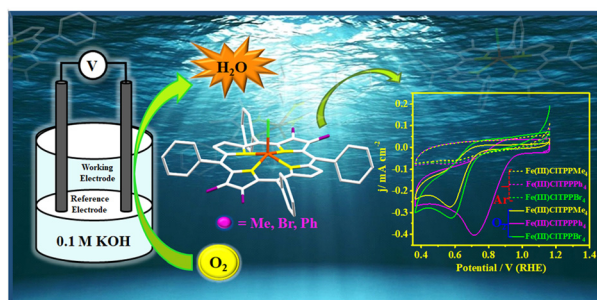
8508



In situ fabrication of a porous CF@Cu₂O@NiMn₂O₃ heterostructure as an integrated electrode for photo-supercapacitors

Chengzhuo Sun, Muhammad Arif, Annan Xie, Zhiyong Liu, Ting Zhu* and Xiaobo Feng*

8512

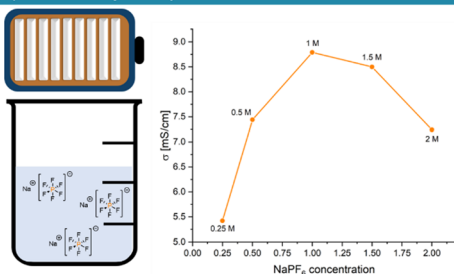


Unveiling the potential of tailored β -substituted iron-porphyrins for highly efficient oxygen reduction reactions (ORR)

Shivani Rathi, Ikrar Ahmad and Muniappan Sankar*

8516

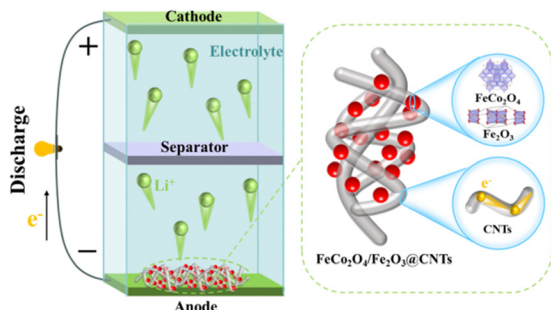
Properties of NaPF₆ Electrolyte Concentration and Effect on Sodium-Ion Cycling



Properties of NaPF₆ electrolytes and effect of electrolyte concentration on performance in sodium-ion batteries

Darren M. C. Ould, Stefan Oswald, Holly E. Smith, Christopher A. O'Keefe, Tengfei Song, Emma Kendrick, Dominic S. Wright and Clare P. Grey*

8520



Ultrafine FeCo₂O₄/Fe₂O₃ nanoparticles anchored on carbon nanotubes as high-performance anode materials for lithium-ion batteries

Taolin Zhao, Kunkun Gong, Peifeng Li, Yubo Yang, Shuxing Mei,* Shasha Wang,* Yong Zheng,* Shengxiu Ma and Chen Chen

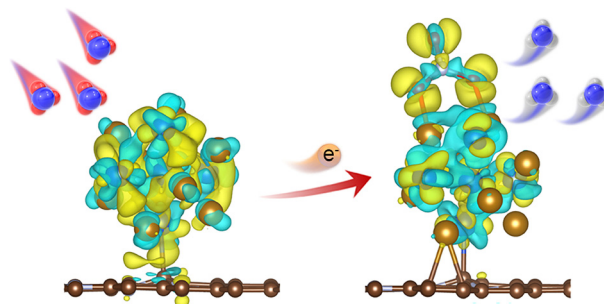


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A cluster-scale CuFe heteroatom ensemble with a multisite interface reinforces electronic interaction to boost ambient ammonia electrosynthesis

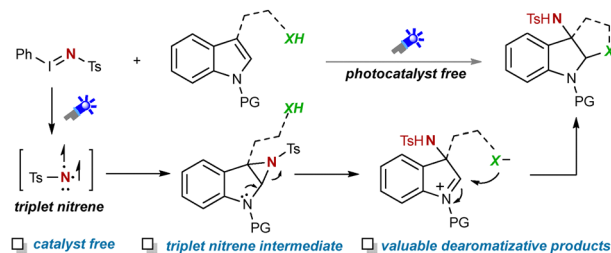
Fengchun Zhou, Sisi Liu,* Xiaolei Yuan, Weiye Shen, Wenjun Shi, Kaiwen Xiao, Yanqi Li, Chenglin Yan and Tao Qian*



8528

Dearomatizative aminoetherification and diamination of indoles enabled by photochemical nitrene transfer reactions

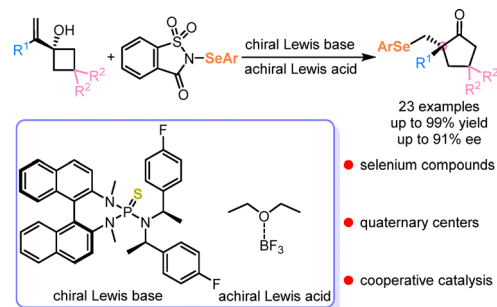
Li-Hua Zhang, Yang Xie and Jun Xuan*



8532

Organocatalytic asymmetric electrophilic tandem selenylation semipinacol rearrangement of 1-(1-arylvinyl)cyclobutanols

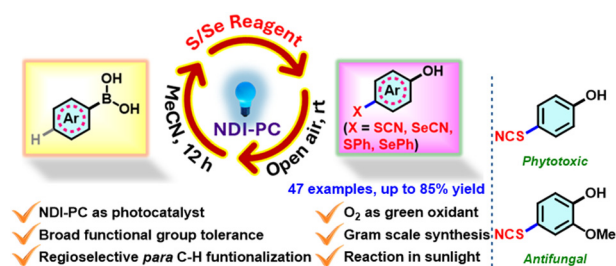
Ren-Fei Cao, Zheng-Wei Wei, Shu-Kun Li, Tong-Mei Ding, Hua Ke* and Zhi-Min Chen*



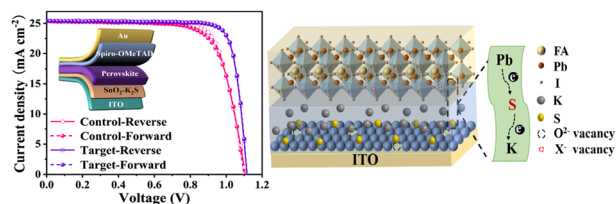
8536

Dual *ipso*-hydroxylation and *para*-C–H chalcogenation of arylboronic acids using an NDI photocatalyst in visible light

Anirban Datta and Nidhi Jain*



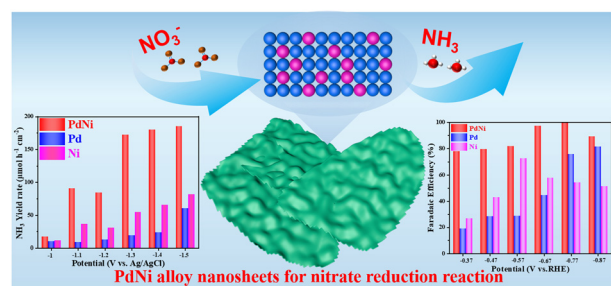
8540



Composite $\text{SnO}_2\text{--K}_2\text{S}$ ETL for energy level regulation and electron mobility enhancement in perovskite solar cells

Ruiyuan Hu,* Yongjun Li, Fan Zhang, Yuhui Ma, Taomiao Wang, Fei Wang, Yonggui Sun, Xing'ao Li, Hanlin Hu* and Yi Zhang*

8544



Pd-based bimetallic nanosheets for a highly efficient nitrate reduction reaction

Yuanwei Ma, Jigang Wang, Qiang Liu, Zhongfang Li and Likai Wang*

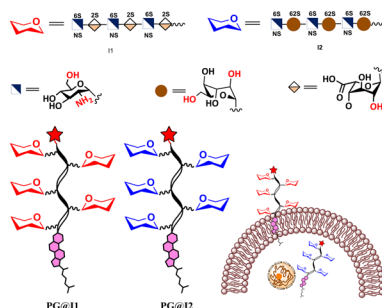
8548



Synergistic electronic and microstructural regulation for high-performance PdPt-based electrocatalysts in the hydrogen evolution reaction

Zhiheng Chen, Lu Zhang, Yicheng Jiang, Zhiyi Su, Jun Jin,* Hang Lei* and Xuelin Yang*

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Comparative analysis of sulfated L-idose and L-iduronic acid in neoproteoglycan cell surface engineering

Rakesh Raigawali, Saurabh Anand, Ankita Chandra, Virendrasinh Mahida, Preeti Ravindra Bhoge, Jancy Nixon Abraham and Raghavendra Kikkeri*

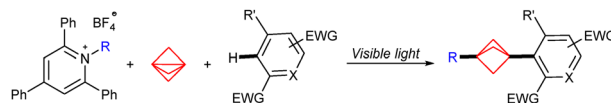


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Site-selective alkylation of electron-deficient aromatic cycles: visible-light photoredox-catalyzed radical di-functionalization of [1.1.1]propellane

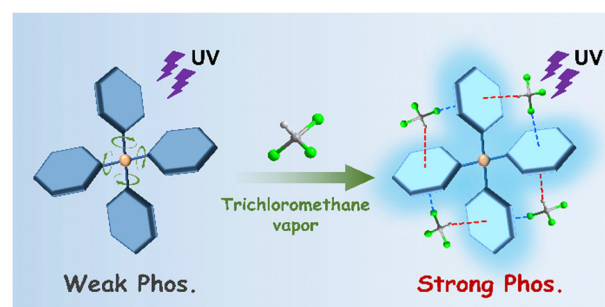
Chengjun Chen, Xiaoyu Shen, Shengkun Guo, Ruizhe Yan, Huaguang Yu, Ying Han, Qiu Sun and Shaoqun Zhu*



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Awakening of high-energy phosphorescence by enhanced weak interactions for ratiometric detection of trichloromethane vapor

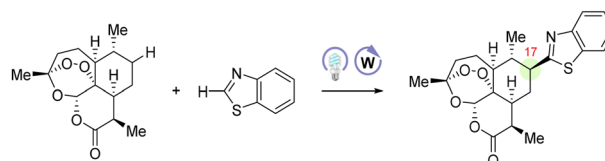
Bo-Lun Zhang, Wen-Tao Song, Jian-Jun Zhang,* Jun Chen, Lei Miao, Wen-Jing Shi, Rui-Hong Wang, Mengmeng Cai, Jun Ni and Zongbin Zhao*



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Modifications of terpenoids via inert aliphatic C–H bond heteroarylation with heteroarenes

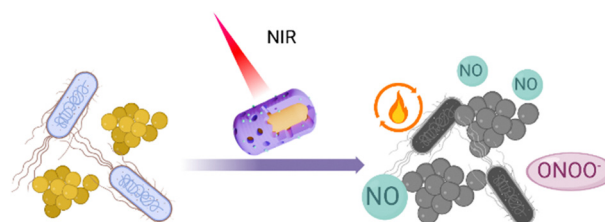
Shuxin Yang, Huirong Li, Jiaxing Lv, Lu Wang, Yongye Lu, Guangshun Sun, Xiangyin Wang, Qikun Yin, Yi Bi* and Xianhe Fang*



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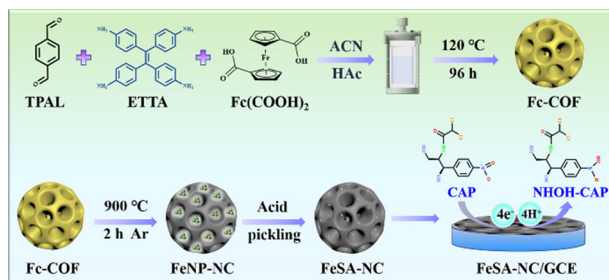
S-Nitrosylated Au@COF nanohybrids for synergistic light-nitric oxide killing of bacteria

Xiaobei Shi, Yu Zou,* Yunbo Li and Jiang Jiang*



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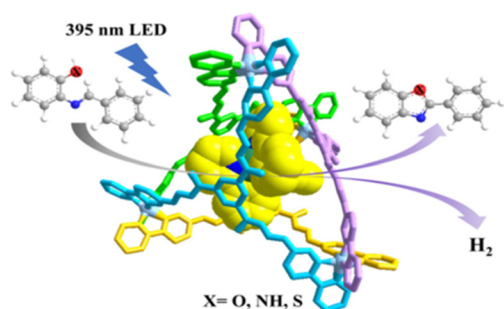
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Ferrocene-functionalized COF-derived Fe single-atom dispersed N-doped porous carbon for enhanced electrochemical sensing of chloramphenicol

Shanshan Li, Jing Yang, Min Cui, Na Li, Haiyan Zhao* and Cong Zhang*

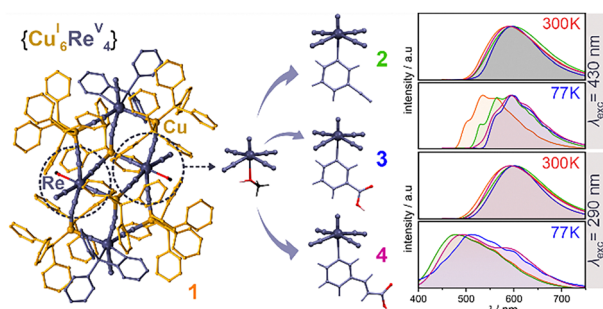
8576



An Ir(ppy)₃ encapsulated metal–organic tetrahedral cage for photocatalytic dehydrogenation cross-couplings

Yang Hao, Yang Yang,* Fengyu Yang, Youpeng Shi, Xu Jing* and Chunying Duan

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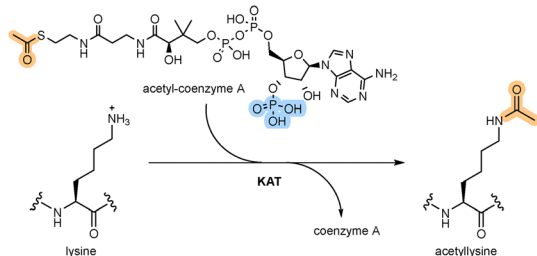


Decanuclear {Cu₆Re₄} clusters utilizing cyanido and nitrido molecular bridges as efficient ligand-modulated luminophores

Michal Liberka, Piotr Gas and Szymon Chorazy*

8584

Is the 3'-phosphate group necessary for productive KAT catalysis?



Importance of the 3'-phosphate group of acetyl-coenzyme A for efficient histone lysine acetyltransferase catalysis

Nurgül Bilgin, Laust Moesgaard, Giordano Proietti, Jacob Kongsted and Jasmin Mecinović*

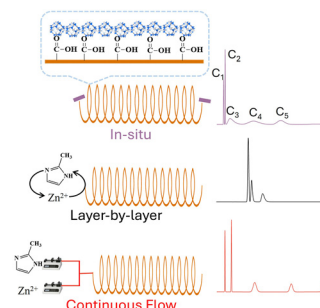


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Continuous flow fabrication of metal organic framework capillary gas chromatographic column

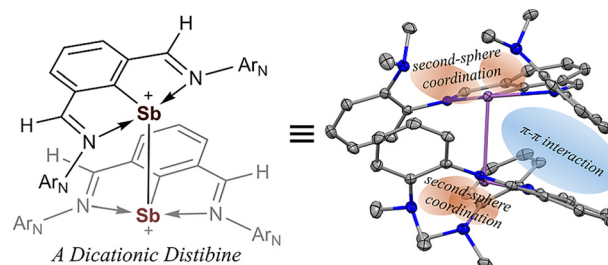
Yinghong Zhao, Jia Jia,* Ailin Ning, Wenlanqi Du and Jin Luo



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A dicationic distibine stabilized by intramolecular $\pi-\pi$ interaction and second-sphere coordination

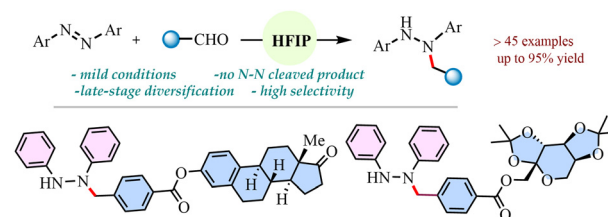
Lingjie Zhang, Minghao Huang and Jiliang Zhou*



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Reductive alkylation of azoarenes to *N*-alkylated hydrazines enabled by hexafluoroisopropanol

Siddhartha Kumar Senapati and Animesh Das*



8600

Three antimony-based organic–inorganic hybrid perovskites (1,4-3.2.2- H_2dabcn) SbX_5 ($\text{X} = \text{Cl}, \text{Br}, \text{I}$) show progressively decreasing phase transition temperatures and bandgaps

Ying Wei, Jie Zhou, Lin Zhou* and Zhenhong Wei*

