

IN THIS ISSUE

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Cover

See Song Liu, Kuo Liu *et al.*, pp. 7057–7060.
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CONFERENCE REPORT

6992

Highlights from Faraday Discussion: New horizons in nanoelectrochemistry, Nanjing, China

Huma Bhatti, Zhi-Cheng Yang and Yi-Lun Ying*

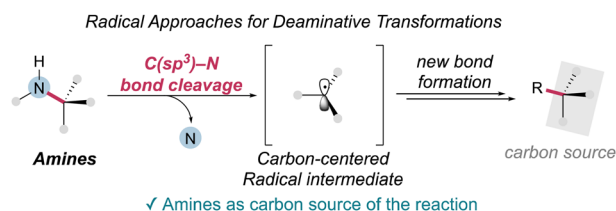


HIGHLIGHTS

6997

Radical approaches for C(sp³)–N bond cleavage in deaminative transformations

Je Uk Kim, Eun Song Lim, Ji Yeon Park, Donghoe Jung and Sumin Lee*



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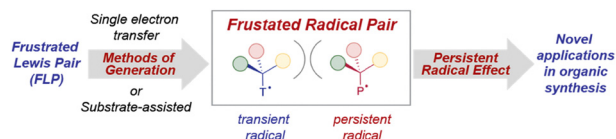


HIGHLIGHTS

7009

Exploring frustrated radical pairs through the persistent radical effect: methods of generation and recent applications

Darshika Singh and Robert E. Maleczka Jr*

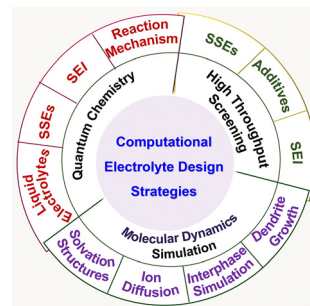


FEATURE ARTICLES

7019

Computational approaches to electrolyte design for advanced lithium-ion batteries

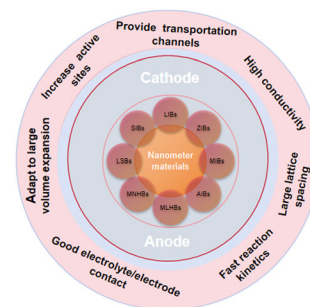
Shuang Wan,* Shunshun Zhao, Weiting Ma and Shimou Chen*



7035

High-performance rechargeable monovalent- and bivalent-ion batteries: from emerging nanomaterials to in-depth mechanisms

Ting Zhou, Yajun Zhu, Xiaofei Huang, Tianli Han and Jinyun Liu*

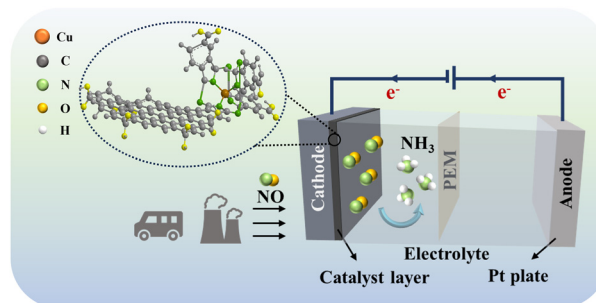


COMMUNICATIONS

7057

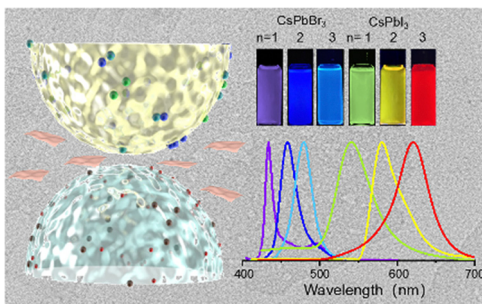
Highly selective and active NO reduction to synthesize NH_3 based on graphene-substituted phthalocyanine Cu electrocatalysts

Jiaxiao Bai, Song Liu* and Kuo Liu*



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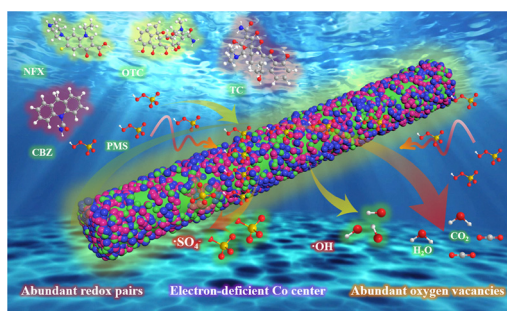
7061



Controlling the growth kinetics of CsPbX₃ nanocrystals through the spatial confinement effect

Wanying Zhang, Zhiqing Wang, Fen Li, Zixin Gu, Keqiang Chen* and Guogang Li*

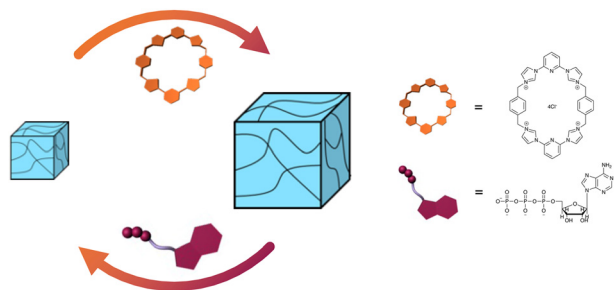
7065



Constructing electron-deficient Co centers in the lattice of oxygen-vacancy-rich CuO for improved PMS activation and contaminant degradation

Hongyang Zhu, Zhenxiao Wang, Liying Cao, Yanyun Wang, Yangping Zhang, Danhong Shang,* Linzhi Zhai, Tongyi Yang and Fu Yang*

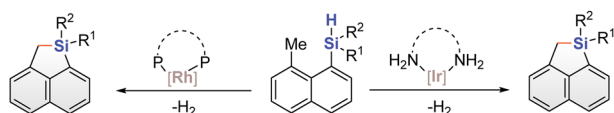
7069



Macrocycle-ATP mediated contraction and expansion of a hydrogel actuator

Mehroz Ahmed, Baturalp Baser and Jonathan L. Sessler*

7073



Facile synthesis of 1-silaacenaphthenes by transition metal-catalyzed intramolecular C(sp³)-H silylation

Delong Mu,* Xinrui Zhu and Jian Chen*

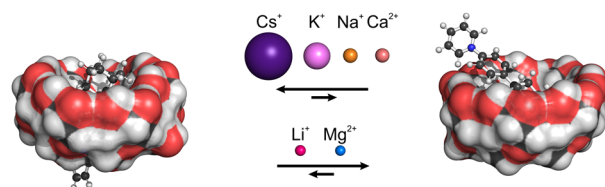


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7077

Metal cations switch geometry of β -cyclodextrin complexes

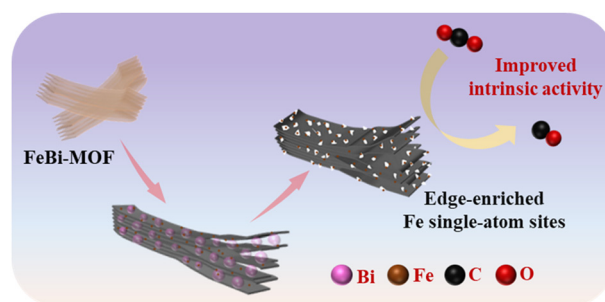
Václav Kolařík, Aneta Hromádková, Adam Knirsch, Zdeňka Prucková, Petr Janovský, Michal Rouchal, Jas S. Ward, Kari Rissanen and Robert Vícha*



7081

Edge-hosted Fe single-atomic sites fabricated by a Bi-assisted pyrolysis strategy for electroreduction of CO_2

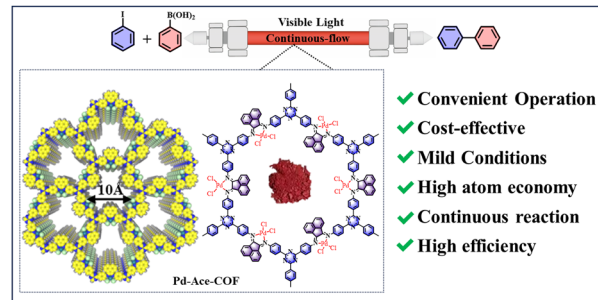
Miaoling Liu, Chenghong Hu, Kui Shen, Liyu Chen* and Yingwei Li*



7085

Continuous photocatalytic C–C coupling achieved using palladium anchored to a covalent organic framework

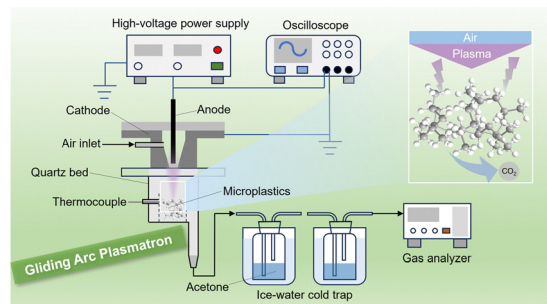
Chao Ma, Zhe Wu, Yi-Tong Hou, Shao-Xuan Xiong, Li-Hua Ma,* Zhi-Ming Zhang, Tong-Bu Lu and Song Guo*



7089

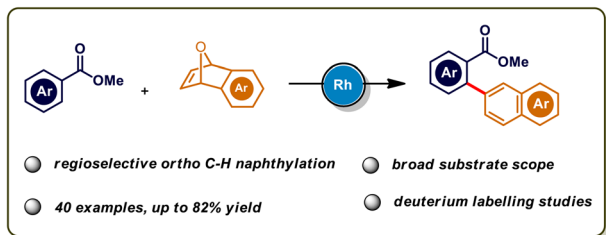
Rapid degradation of microplastics by catalyst-free gliding arc plasmatron

Chuanqi Shi, Yanhui Long, Yunqing Zhou, Shi Feng, Zhenzhen Wu, Hualiang Li, Kaiyi Wang, Zijiang Zhao, Qunxing Huang, Xiaodong Li and Hao Zhang*



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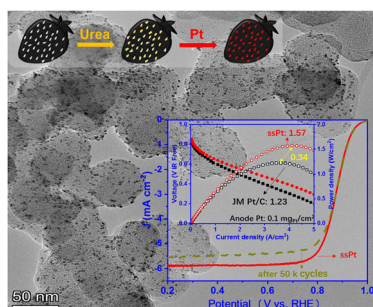
7093



Rhodium(III)-catalyzed directed C–H naphthylation of aryl esters with 7-oxabenzonorbornadienes

Narasingan Aravindan and Masilamani Jeganmohan*

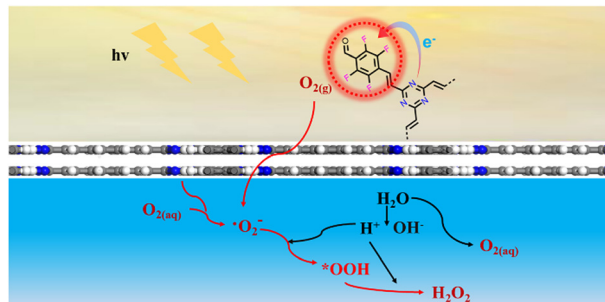
7097



Facile chemical synthesis of a high-performance Pt/C catalyst displaying a specialized morphology

Jie Yang, Rurong Liu, Chenyang Shen, Xiaoxia Hou, Chenjia Liang, Ruiyao Zhao, Chao Yue, Yingxuan Zhao, Qing Liu, Ningze Gao, Liwen Wang, Tao Wang, Wenhua Hou* and Weiping Ding*

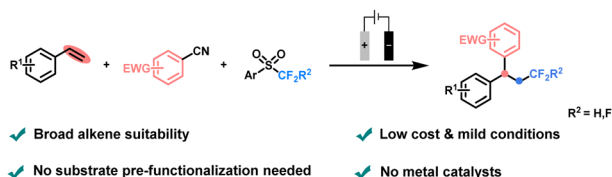
7101



End-capping fluorination of vinylene-linked covalent organic frameworks for photocatalytic hydrogen peroxide production

Anqi Chen, Yi Jian, Qiujian Xie, Wen Li, Chunyue Pan, Guipeng Yu, Shuai Gu* and Juntao Tang*

7105



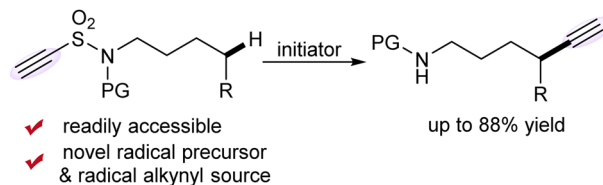
A dual-radical process for tri/di-fluoromethylarylation of alkenes enabled by indirect electroreduction

Zhening Jin, Yuan Shi, Zhangchi Zheng, Yuxin Ding, Weike Su, Changjun Zhang* and YuanYuan Xie*

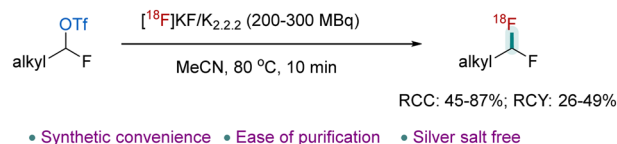


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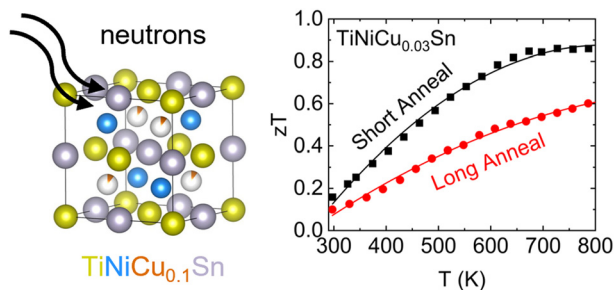
7109

Remote radical alkynylation of unactivated C(sp³)–H bonds of ethynesulfonamidesPan Zhou, Mengru Guo, Jiawei Li, Xu Li, Danyang Xie,*
Bo Qin* and Yong Xia*

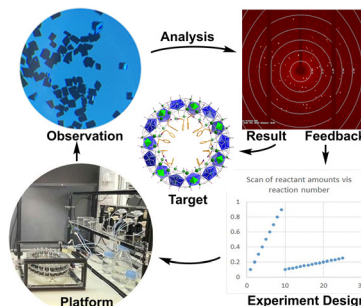
7113

[¹⁸F]Radiolabeling fluorination of monofluoroalkyl triflates for the synthesis of [¹⁸F]difluoromethylated alkanesYuan-Zhan Han, Peng-Fei Song, Hai-Yang Zhao,
Junbin Han* and Xingang Zhang*

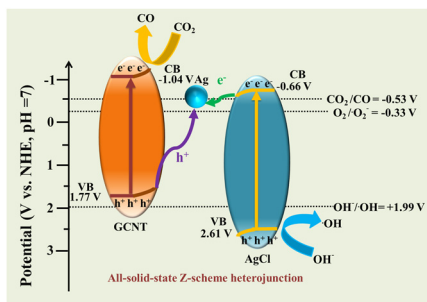
7117

Influence of Cu on the sustainable synthesis and thermoelectric properties of the half-Heusler TiNiSnBlair F. Kennedy, Aaron B. Naden, Clemens Ritter and
Jan-Willem G. Bos*

7121

Robotic exploration of amino-acid functionalised molybdenum blue polyoxometalate nanoclustersHaiyang Guo, Donglin He, De-Liang Long* and
Leroy Cronin*

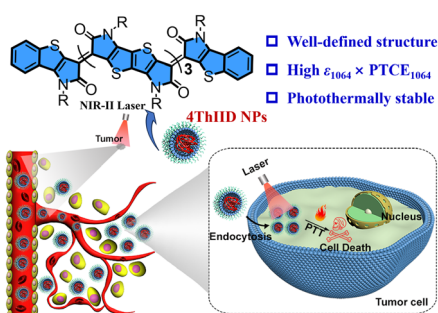
7125



Enhanced interface electric field in an all-solid-state Z-scheme Ag/AgCl/GCNT heterojunction for facilitating photocatalytic CO₂ reduction performance

Jintao Dong, Yi Zhang, Lu Liu, Xuemin Zhang, Lina Li, Gaopeng Liu, Huaming Li, Pengcheng Yan* and Jiexiang Xia*

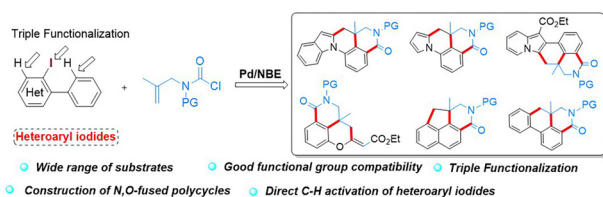
7129



A conjugated molecule based on tetra-fused thienoisindigo ribbon for NIR-II photothermal cancer therapy

Jiayi Chen, Junjie Wu, Hongrui Chen, Yangwei Zhu, Yiyang Zong, Yaoyuan Gao, Xiaohua Zheng* and Yu Jiang*

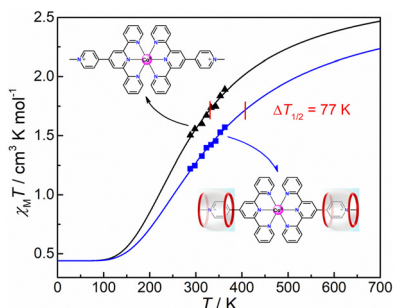
7133



Palladium/norbornene cooperative catalysis triple functionalization: carbamoylation/double-annulation of (hetero)aryl iodides

Yi-Xin Chai, Yu-Fan Yang, Feng-Yu Zhang, Ji-Yan Zhao, Ya-Ting Wang, Yanmei Chen, Yuan-Yuan Sun,* Jin-Heng Li* and Yan-Ping Zhu*

7137



Spin-state modulation by host-guest chemistry with cucurbiturils

Ke Lu, Yu-Xiao Chen, Jie-Sheng Hu, Zhi-Kun Liu, Xin-Li Shi, Meng Yu,* Alyona A. Starikova* and Jun Tao*



7141

Synthesis and structural characterization of Sb(III) and Bi(III) complexes with an N₂O₂-type tetradentate dipyrin ligand

Tomohiro Agou,* Shunsuke Kuroiwa, Ryo Moriyama, Takuma Kuroda, Kazuya Kubo, Hiroki Fukumoto,* Masato Morita, Ryo Inoue* and Tatsuya Nabeshima*

