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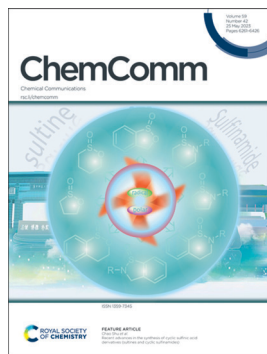
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ISSN 1359-7345 CODEN CHCOFS 59(42) 6261-6426 (2023)



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See Jan O. Jeppesen *et al.*, pp. 6335–6338.
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Inside cover

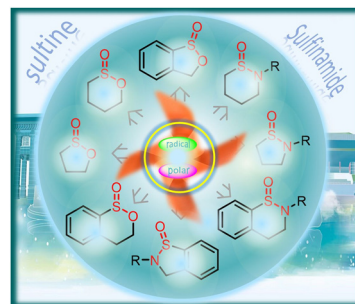
See Chao Shu *et al.*, pp. 6272–6285.
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FEATURE ARTICLES

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Recent advances in the synthesis of cyclic sulfinic acid derivatives (sultines and cyclic sulfinamides)

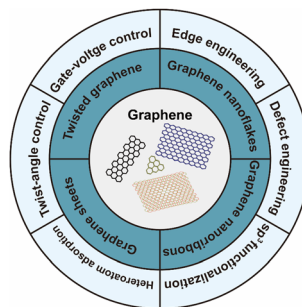
Yongxin Zhang, Helian Li, Xiaoxiao Yang, Pan Zhou and Chao Shu*



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Recent advances in magnetism of graphene from 0D to 2D

Ziying Li, Shuilin Li, Yongjie Xu* and Nuijiang Tang*



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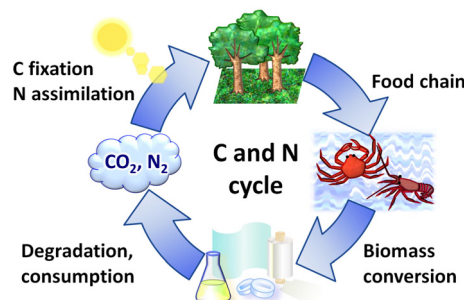


FEATURE ARTICLES

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Catalytic conversion of chitin as a nitrogen-containing biomass

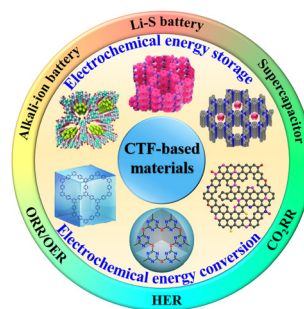
Hirokazu Kobayashi,* Takuya Sagawa and Atsushi Fukuoka



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Emerging covalent triazine framework-based nanomaterials for electrochemical energy storage and conversion

Yong Zheng,* Niaz Ali Khan, Xuepeng Ni, Kai A. I. Zhang,* Yi Shen, Niu Huang, Xin Ying Kong and Liqun Ye*

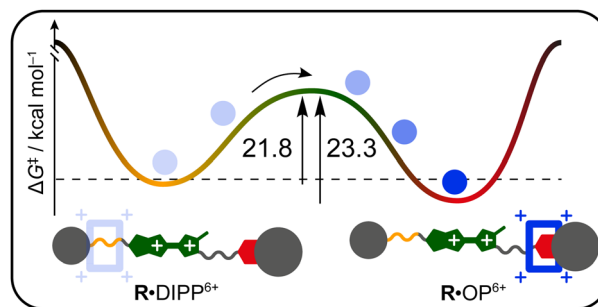


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Evaluating the energy landscape of an out-of-equilibrium bistable [2]rotaxane containing monopyrrolotetraphiafulvalene

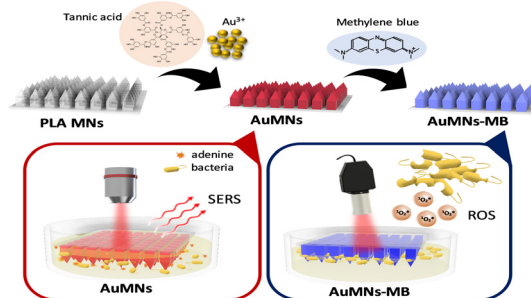
Mathias S. Neumann, Amanda F. Smith, Sofie K. Jensen, Rikke Frederiksen, Mathias L. Skavenborg and Jan O. Jeppesen*



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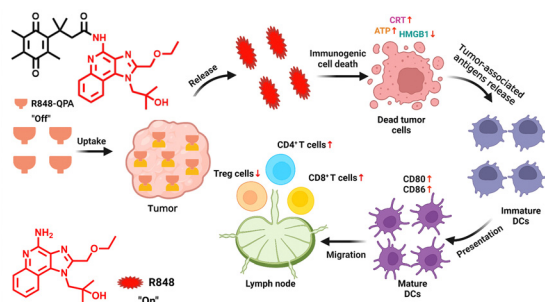
Polyphenol-assisted assembly of Au-deposited polylactic acid microneedles for SERS sensing and antibacterial photodynamic therapy

Zi-Chun Chia, Yi-Lun Chen, Cheng-Hsun Chuang, Chou-Hsun Hsieh, Ya-Jyun Chen, Kuan-Hsu Chen, Tzu-Chi Huang, Mei-Chin Chen* and Chih-Chia Huang*



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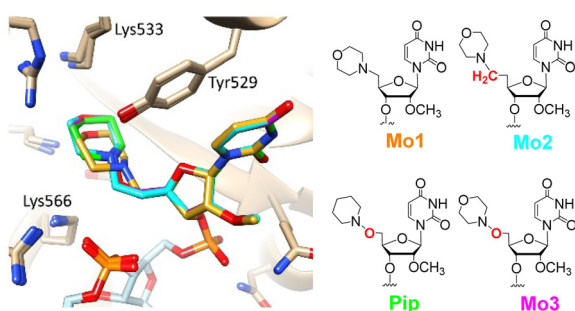
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NAD(P)H: quinone oxidoreductase 1 activatable toll-like receptor 7/8 agonist designed for precise immunotherapy

Guo Li, Yongxiao Xu, Xiaojie Kong, Liuwei Gu, Yuling Qin* and Li Wu*

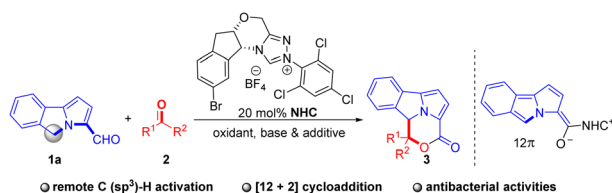
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Rational optimization of siRNA to ensure strand bias in the interaction with the RNA-induced silencing complex

Dhrubajyoti Datta, Christopher S. Theile, Kelly Wassarman, June Qin, Tim Racie, Karyn Schmidt, Yongfeng Jiang, Rachel Sigel, Maja M. Janas, Martin Egli and Muthiah Manoharan*

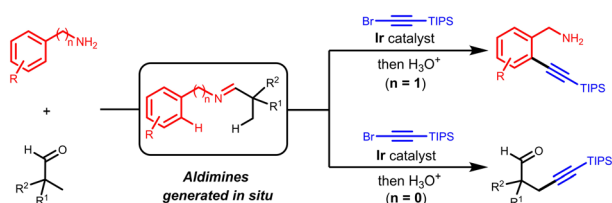
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NHC-catalyzed [12+2] reaction of polycyclic arylaldehydes for access to indole derivatives

Hong Ji, Juan Zou, Chengli Mou, Yonggui Liu, Shi-Chao Ren* and Yonggui Robin Chi*

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Catalytic C–H alkynylation of benzylamines and aldehydes with aldimine-directing groups generated *in situ*

Jiao Zhou, Tenggang Jiao, Qiang Fu, Jun Wang, Ji Lu, Lin Yang, Jun Wei, Siping Wei, Xuefeng Cong* and Na Hao*

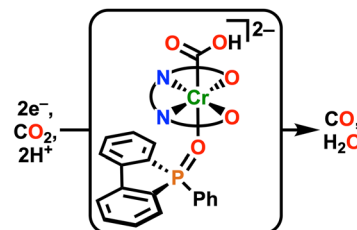


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Co-electrocatalytic CO₂ reduction mediated by a dibenzophosphole oxide and a chromium complex

Connor A. Koellner, Amelia G. Reid and Charles W. Machan*

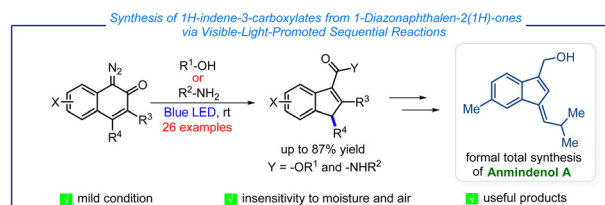


axial coordination of dibenzylphosphole oxide radical anion to a Cr complex co-catalytically enhances CO₂ to CO conversion

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Synthesis of a versatile 1*H*-indene-3-carboxylate scaffold enabled by visible-light promoted Wolff rearrangement of 1-diazonaphthalen-2(1*H*)-ones

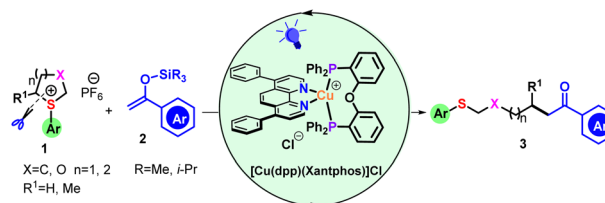
Xin Yue, Ying Zhou, Yan Zhang, Tengfei Meng, Yupei Zhao* and Wengang Guo*



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Visible light/copper catalysis enabled alkylation of silyl enol ethers with arylsulfonium salts

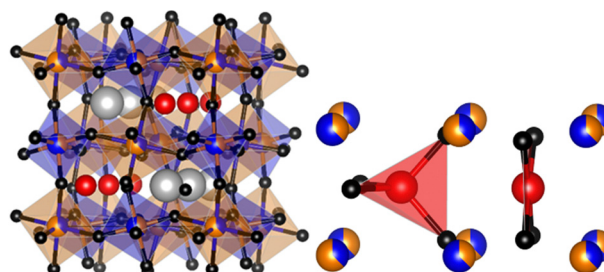
Wenwen Cui, Guoju Guo, Yifei Wang, Xiuyan Song, Jian Lv and Daoshan Yang*



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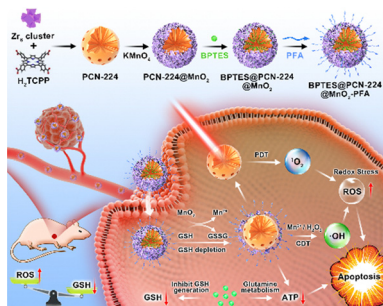
CaFeFeNbO₆ – an iron-based double double perovskite

K. Ji, J. R. Bedward, Q. Li, P. Manuel, C. Ritter and J. Paul Attfield*



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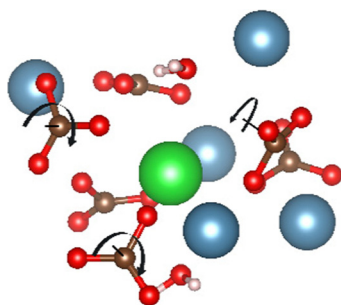
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Tumor-targeted nanoflowers regulate glutamine metabolism and amplify oxidative stress for synergistic therapy

Mengzhen Wang, Kaixian Wang, Xiaohan Liu, Mingwan Shi, Huiwen Zhang, Xia Zhang, Ruyue Wei, Na Li, Wei Pan* and Bo Tang*

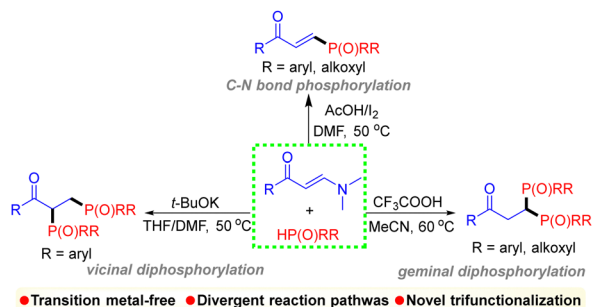
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Local density changes and carbonate rotation enable Ba incorporation in amorphous calcium carbonate

Sebastien N. Kerisit,* Micah P. Prange and Sebastian T. Mergelsberg

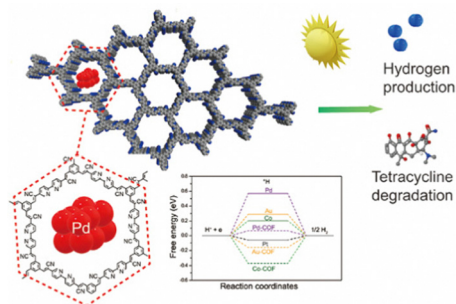
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Tunable vicinal, geminal diphosphorylation and C–N bond phosphorylation of enaminones toward divergent phosphorylated ketone derivatives

Dingsheng Cao, Chaoli Wang, Jie-Ping Wan, Chengping Wen* and Yunyun Liu*

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Pd nanoparticle-decorated covalent organic frameworks for enhanced photocatalytic tetracycline hydrochloride degradation and hydrogen evolution

Fenghua Xu, Bo Liang, Luqing Liu, Xiaodong Hu and Baicheng Weng*

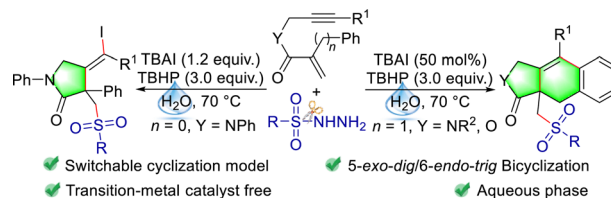


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Radical bicyclization of 1,6-enynes with sulfonyl hydrazides by the use of TBAI/TBHP in the aqueous phase

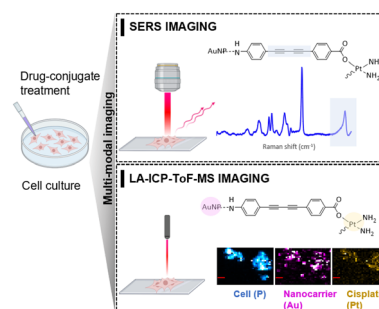
Fa-Liang Liu, Lan Mei, Ling-Tao Wang, Yu Zhou, Keqi Tang,* Ting Li,* Rongnan Yi and Wen-Ting Wei*



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Synthesis, characterisation and multi-modal intracellular mapping of cisplatin nano-conjugates

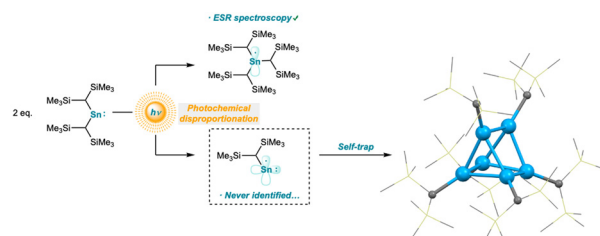
Aristea Anna Leventi, Henry J. Braddick, Kharmen Billimoria, Gregory Q. Wallace, Heidi Goenaga-Infante, Nicholas C.O. Tomkinson,* Karen Faulds* and Duncan Graham*



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Disproportionation of $\text{Sn(II)}\{\text{CH}(\text{SiMe}_3)_2\}_2$ to $\text{Sn(III)}\{\text{CH}(\text{SiMe}_3)_2\}_3$ and $\text{Sn(I)}\{\text{CH}(\text{SiMe}_3)_2\}_2$: characterization of the Sn(I) product

Kristian L. Mears, Bronson Ruiz, Gia-Ann Nguyen, Wenxing Zou, James C. Fetting and Philip P. Power*

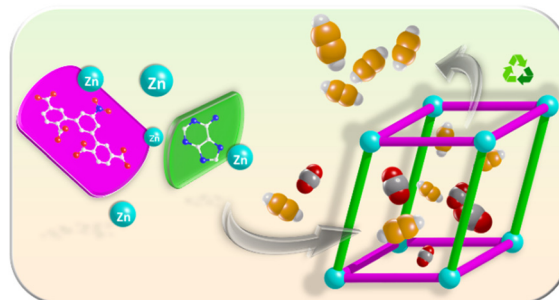


Synthesis of a new Sn_6 Cluster with a trigonal prismatic geometry
Evidence for the formation of an elusive Sn(I) disproportionation product

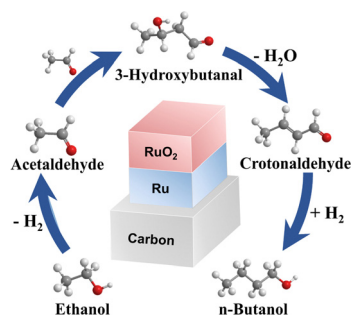
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Efficient C_2H_2 -selective separation in a microporous Zn(II) -based metal-organic framework via the dual-ligand strategy

Fan Yang, Juan-Juan Xue, Guang-Ping Lei, Wen-Yan Zhang, Guo-Ping Yang* and Yao-Yu Wang*



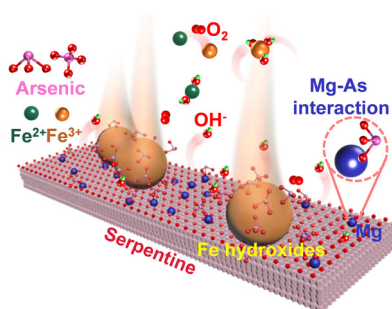
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Homologous RuO₂-Ru heterostructures for tandem catalytic upgrading of ethanol

Pei Jing, Haiyang Zhao, Wenxiang Zhang and Gang Liu*

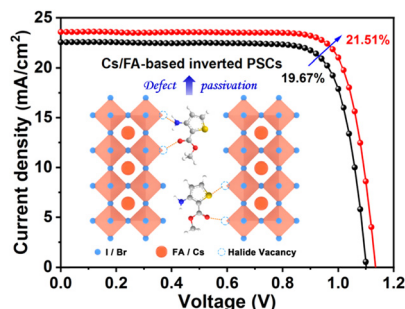
6410



Efficient arsenic coagulation by serpentine-mediated iron hydroxides

Lei Ouyang, Fangfang Song, Caiyue Yu, Lijin Huang and Qin Shuai*

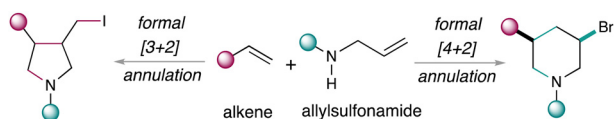
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Defect passivation via a multifunctional organic additive toward efficient and stable inverted perovskite solar cells

Chufeng Qiu, Jiaying Song,* Yan Wu, Xinxing Yin, Lin Hu, Zhen Su, Yingzhi Jin, Wentao Wang,* Hao Wang and Zaifang Li*

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Tunable [3+2] and [4+2] annulations for pyrrolidine and piperidine synthesis

Jeewani P. Ariyaratna, Prabagar Baskaran, Akanksha Chhikara, Navdeep Kaur, Alex M. Nguyen, Shashini M. Premathilaka, Michelle M. Huynh, Jonathon T. Truong and Wei Li*



CORRECTIONS

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Correction: One-step mild preparation of tough and thermo-reversible poly(vinyl alcohol) hydrogels induced by small molecules

Chuang Dong, Jiahua Zhou, Dongjian Shi, Yufang Song, Xi Yu, Weifu Dong, Mingqing Chen* and Daisaku Kaneko*

6423

Correction: Palladium(II)-catalyzed vinylic geminal double C–H activation and alkyne annulation reaction: synthesis of pentafulvenes

Jyotshna Phukon and Sanjib Gogoi*

6424

Correction: Copper coordination-based conjugated polymer nanoparticles for synergistic photodynamic and chemodynamic therapy

Qiang Cheng, Yuyan Li, Wei Huang, Ke Li, Minhuan Lan, Benhua Wang,* Jianxiu Wang* and Xiangzhi Song

