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FEATURE ARTICLES

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Insights into desalination battery concepts: current challenges and future perspectives

Cleis Santos* and Fabio La Mantia*

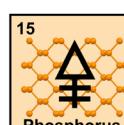
Insights into Desalination Battery Concepts Current Challenges and Future Perspectives



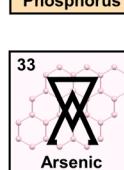
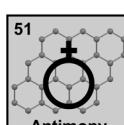
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Chemistry of two-dimensional pnictogens: emerging post-graphene materials for advanced applications

Matteo Andrea Lucherelli, Víctor Oestreicher, Marta Alcaraz and Gonzalo Abellán*



2D-PNICTOGENS from a chemical approach



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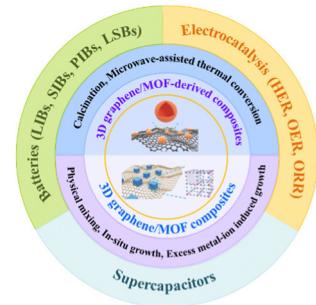


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Three-dimensional graphene/metal–organic framework composites for electrochemical energy storage and conversion

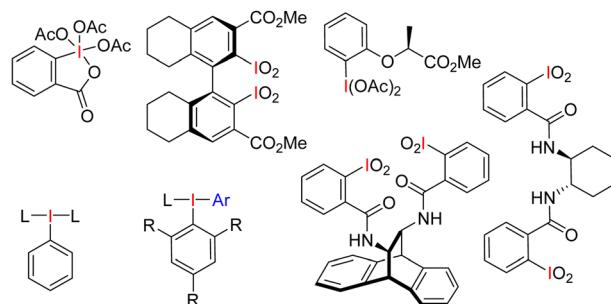
Yumei Ren and Yuxi Xu*



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Iodanes as multi-tools for the total synthesis of complex natural products

Camille Rocq, Maxime Denis and Sylvain Canesi*

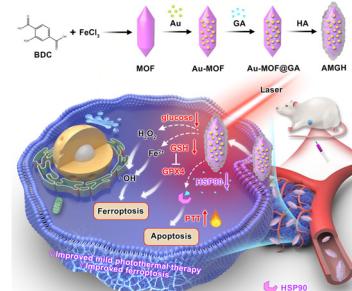


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A gold nanoparticle engineered metal–organic framework nanoreactor for combined ferroptosis and mild photothermal therapy

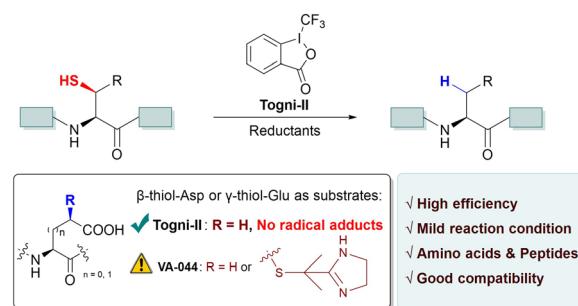
Ruyue Wei, Yanhua Li, Peng Gao, Xia Zhang, Xiaoyu Li, Kaixian Wang, Wei Pan, Na Li* and Bo Tang*



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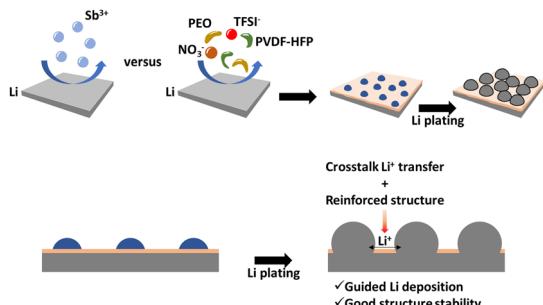
An efficient metal-free desulfurization strategy promoted by Togni-II reagent

Jun Zhang, Haiyun Liu, Shuang Teng, Zhiwen Liao, Lingkui Meng,* Qian Wan* and Suwei Dong*



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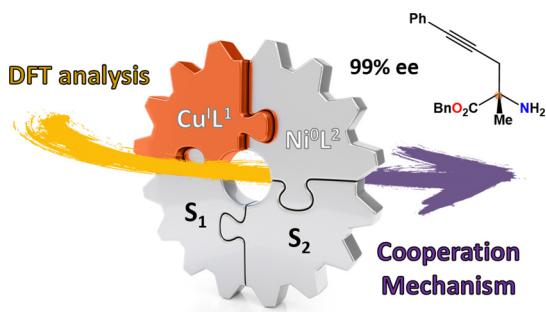
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Embedding alloying sites in a lithiated polymer matrix as a stable interphase of lithium electrodes

Tengpeng Xiong, Zhendong Li, Xiayin Yao* and Zhe Peng*

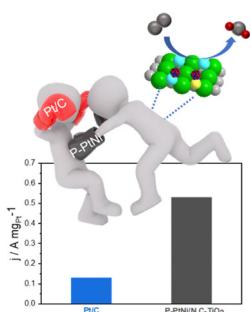
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Factors driving the Ni/Cu cooperative asymmetric propargylation of aldimine esters

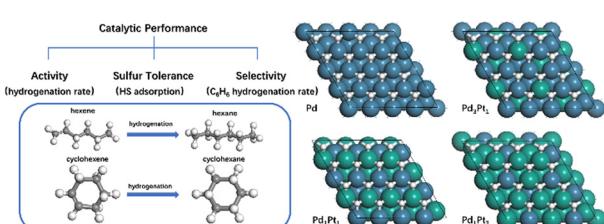
Giuseppe Sciortino and Feliu Maseras*

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A P-doped PtNi alloy supported on N,C-doped TiO₂ nanosheets as a stable electrocatalyst for the oxygen reduction reaction in an acidic electrolyte

Chen Lu, Chao Xu, Peng-Peng Guo, Kun-Zu Yang, Ying Xu, Hua-Min Chi, Ping-Jie Wei and Jin-Gang Liu*

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Identification of PdPt alloys for preferential C₆ olefin hydrogenation over aromatic hydrocarbons through density functional theory and microkinetic modeling

Haowen Ma, Jiayi Wang, Xuecheng Zhan,* Yuan Xie, Limin Sun, Xiaoli Hu, Haoxiang Xu and Daojian Cheng*

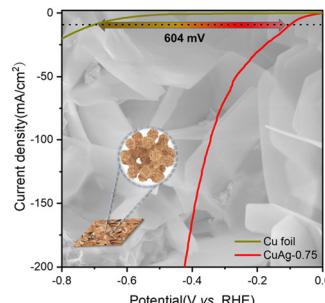


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Ag-doped Cu nanosheet arrays for efficient hydrogen evolution reaction

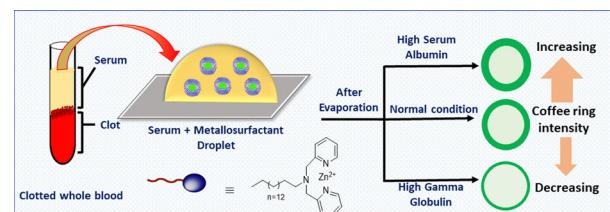
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Simultaneous quantification of serum albumin and gamma globulin using Zn(II)-metallosurfactant via a coffee ring pattern

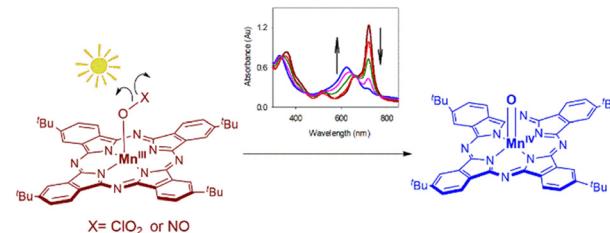
Aastha, Priyanka and Subhabrata Maiti*



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Photochemical generation and reactivity of a new phthalocyanine-manganese–oxo intermediate

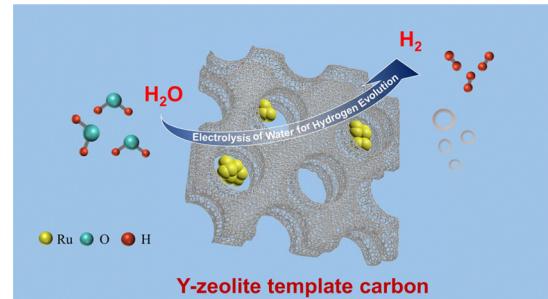
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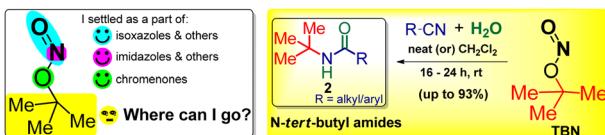
Zeolite-templated carbon-supported Ru-based catalysts for efficient alkaline hydrogen evolution reaction

Xin Wang, Xiaoli Yang,* Junwei Sun, Mingyu Guo, Zhihao Cao, Haoxi Ben, Wei Jiang, Shujun Ming and Lixue Zhang*



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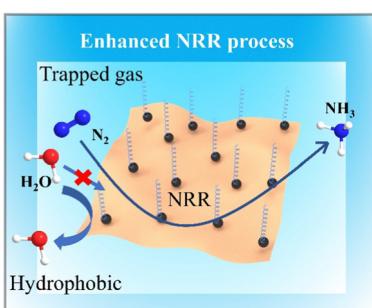
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Facile preparation of *N*-tert-butyl amides under heat-, metal- and acid-free conditions by using *tert*-butyl nitrite (TBN) as a practical carbon source

Palani Natarajan* and Onder Metin*

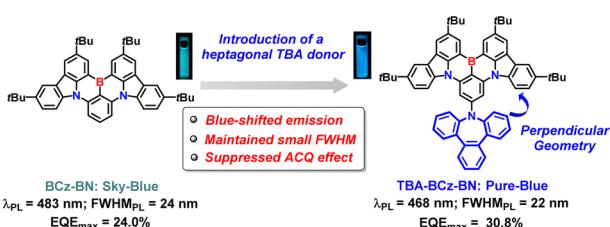
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Interfacial engineering of hydrophobic octadecanethiol/Pd metallene toward electrocatalytic nitrogen reduction

Hongjing Wang, Xu Mu, Qiqi Mao, Kai Deng, Hongjie Yu, You Xu, Xiaonian Li, Ziqiang Wang* and Liang Wang*

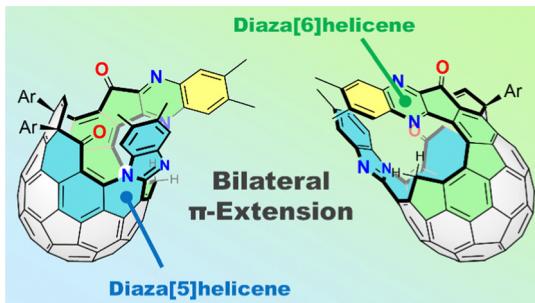
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“Medium-ring” strategy enables high-performance narrowband pure-blue multi-resonance emitters: boost provided by a unique perpendicular geometry

Xin Xiao, Bowen Lei, Di Wu* and Zhengyang Bin*

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Bilateral π -extension of an open-[60]fullerene in a helical manner

Yoshifumi Hashikawa, Shumpei Sadai and Yasujiro Murata*

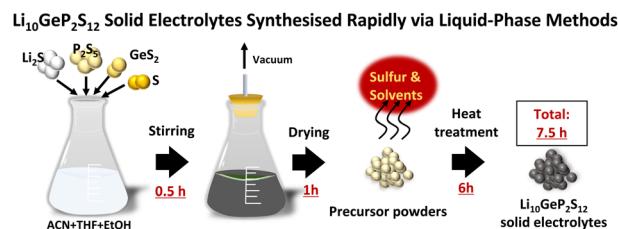


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Li₁₀GeP₂S₁₂ solid electrolytes synthesised via liquid-phase methods

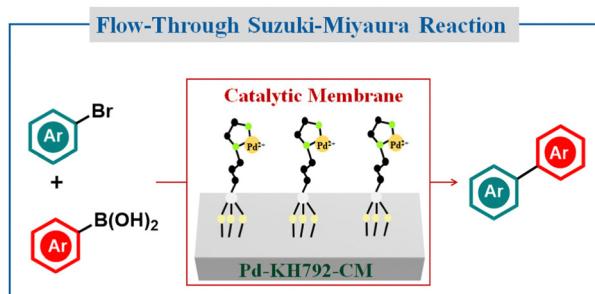
Kazuhiro Hikima,* Kaito Ogawa, Hirotada Gamo and Atsunori Matsuda*



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Palladium-loaded ceramic membrane-catalyzed flow-through Suzuki–Miyaura reaction

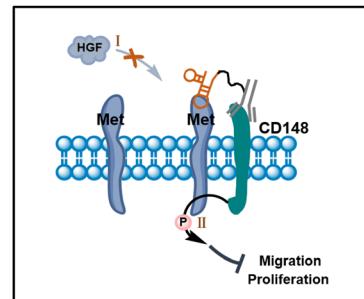
Shuangqiang Wang, Jinliang Chen, Fei Zhang, Yao Zhao, Xiaojin Wu* and Rizhi Chen*



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A phosphatase-recruiting bispecific antibody-aptamer chimera for enhanced suppression of tumor growth

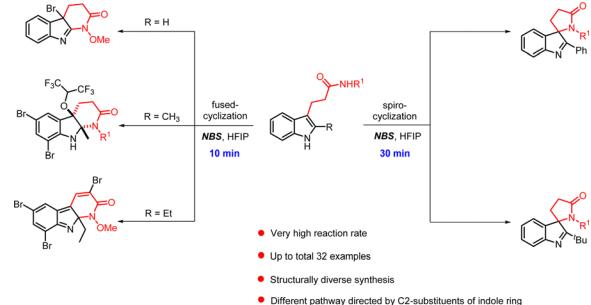
Wei Li, Weihua Lu and Zhen Liu*



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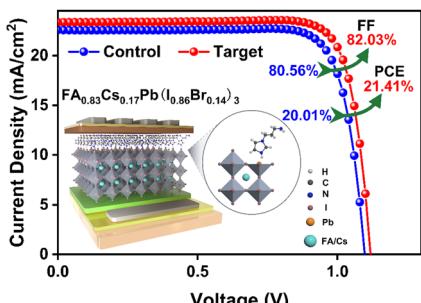
NBS-induced intramolecular annulation reactions for the divergent synthesis of fused- and spirocyclic indolines

Xian Luo, Meng-Meng Xu, Xiao-Ping Xu* and Shun-Jun Ji*



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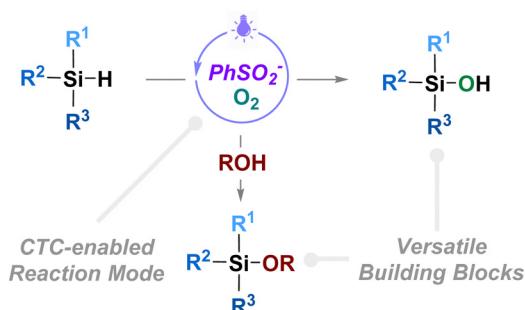
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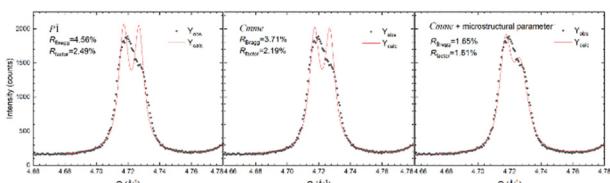


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COMMENT

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Surface termination passivation of imidazole-based diiodide enabling efficient inverted perovskite solar cells

Yu Wang, Jiaxing Song,* Jingchuan Ye, Yingzhi Jin, Xinxing Yin, Zhen Su, Lin Hu, Yan Wu, Chufeng Qiu, Hao Wang, Wensheng Yan* and Zaifang Li*

Light-mediated sulfonyl-iodination of ynamides and internal alkynes

Mohana Reddy Mutra, Jing Li and Jeh-Jeng Wang*

Visible-light-driven oxidation of organosilanes by a charge-transfer complex

Yi-Xuan Chen, Jun-Tao He, Mei-Chun Wu, Zhi-Lin Liu, Peng-Ju Xia, Kai Chen, Hao-Yue Xiang* and Hua Yang*

Comment on "Structural transition and superconductivity in hydrothermally synthesized FeX (X = S, Se)" by U. Pachmayr, N. Fehn and D. Johrendt, *Chem. Commun.*, 2016, 52, 194

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