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Cover

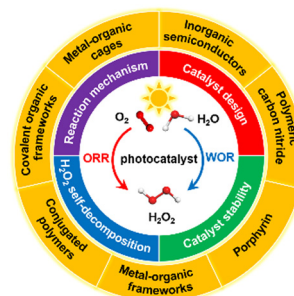
See Christopher B. Caputo *et al.*, pp. 5391-5394. Image reproduced by permission of Taylor Cosby and Christopher B. Caputo from *Chem. Commun.*, 2024, 60, 5391.

HIGHLIGHTS

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Recent developments in photocatalytic production of hydrogen peroxide

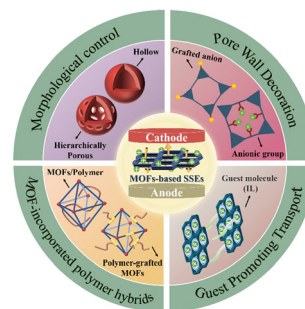
Xiao Fang, Xi Huang, Qiyu Hu, Bonan Li, Chunlian Hu, Baochun Ma* and Yong Ding*



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Recent progress and perspectives on metal-organic frameworks as solid-state electrolytes for lithium batteries

Xin Wang, Sheng Jin and Zhiliang Liu*



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Fundamental questions
Elemental answers

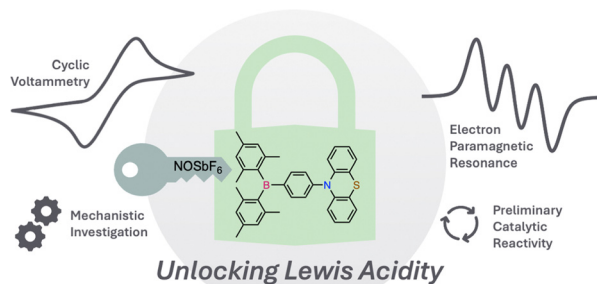


COMMUNICATIONS

5391

Unlocking Lewis acidity *via* the redox non-innocence of a phenothiazine-substituted borane

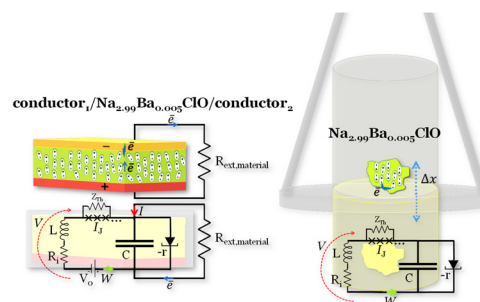
Taylor P. L. Cosby, Avik Bhattacharjee,
Samantha K. Henneberry, Jesse LeBlanc and
Christopher B. Caputo*



5395

Energy harnessing and storage from surface switching with a ferroelectric electrolyte

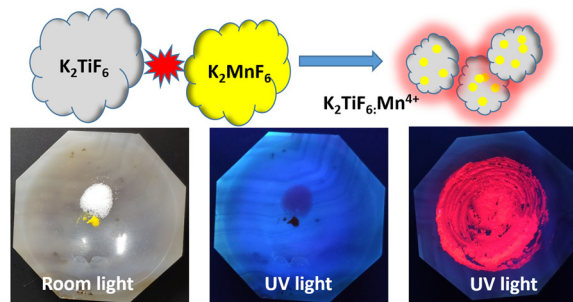
Maria Helena Braga



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Harnessing solid-state ion exchange for the environmentally benign synthesis of high-efficiency Mn⁴⁺-doped phosphors

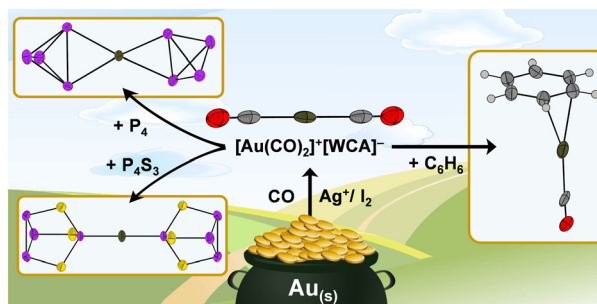
Changyuan Lu and Wenwu You*



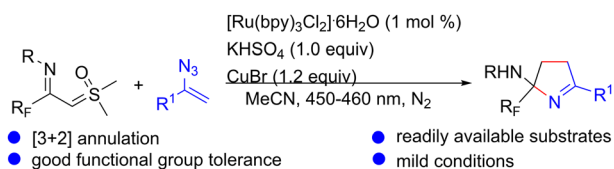
5403

Gold carbonyl cations and beyond: homoleptic gold(i) complexes with P₄ and P₄S₃ and the half-sandwich cation [Au(C₆H₆)(CO)]⁺

Manuel Schmitt, Sarah Nestle, Valentin Radtke and
Ingo Krossing*



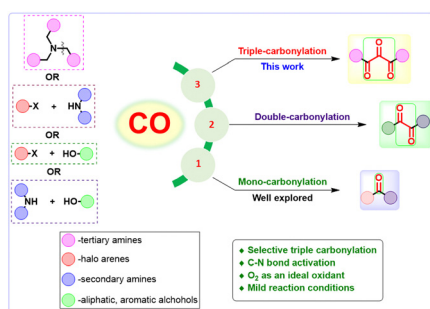
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Visible light-promoted [3+2] cyclization reaction of vinyl azides with perfluoroalkyl-substituted-imidoyl sulfoxonium ylides

Ming Yang, Yu-Xuan Meng, Haroon Mehfooz and Yu-Long Zhao*

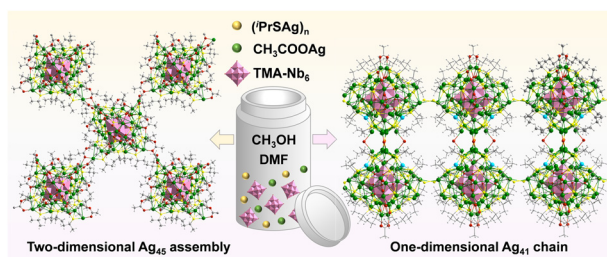
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Pd-catalysed synthesis of oxomalonamides through adjacent triple carbonylation of tertiary amines

Manjunath S. Lokolkar, Prafull A. Jagtap and Bhalchandra M. Bhanage*

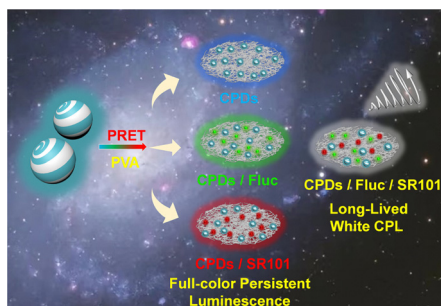
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Two structurally new Lindqvist hexaniobate-templated silver thiolate clusters

Zichen Zhao, Mengyun Zhao, Lan Deng,* Qing Li, Jing Zhang, Haifeng Su, Hongjin Lv* and Guo-Yu Yang

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Achieving long-lived white circularly polarized luminescence from carbonized polymer dots via phosphorescence resonance energy transfer

Feixiang Wang, Yijie Wang, Rui Guo, Yushuang Wu, Shengju Zhou,* Haibin Xiao* and Xiaofeng Sun*

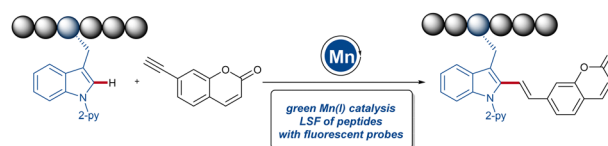


COMMUNICATIONS

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Fluorescent coumarin-alkynes for labeling of amino acids and peptides *via* manganese(i)-catalyzed C–H alkenylation

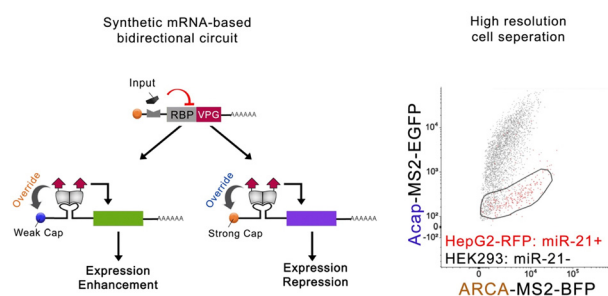
Adelina Kopp, Tsuyoshi Oyama and Lutz Ackermann*



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VPg-based bidirectional synthetic mRNA circuits enable orthogonal protein regulation for high-resolution cell separation

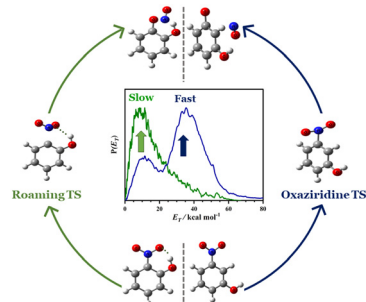
Zhenghua Liang, Yaxin Hu, Cheuk Yin Li, Wai Laam Yau, Kaixin Tan and Yi Kuang*



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Mechanistic variances in NO release: *ortho* vs. *meta* isomers of nitrophenol and nitroaniline

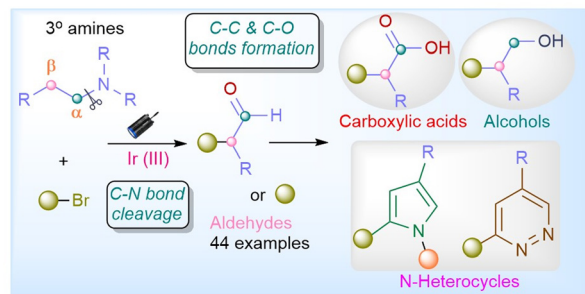
Pralhad Roy Chowdhury, Monali Kawade and G. Naresh Patwari*



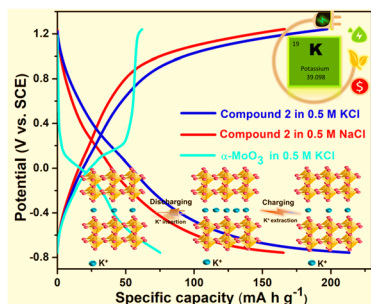
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Iridium(III)-catalyzed photoredox cross-coupling of alkyl bromides with trialkyl amines: access to α -alkylated aldehydes

Gaurav Shukla, Malkeet Singh, Saurabh Singh and Maya Shankar Singh*



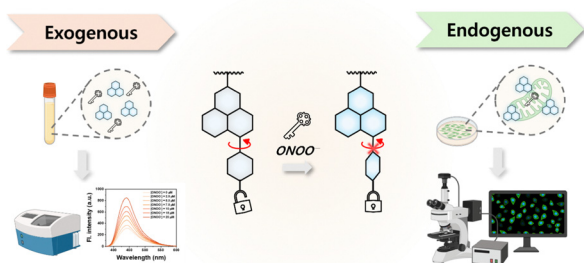
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Intercalating a potassium–aqua complex cation into an α - MoO_3 layer without reducing molybdenum: a potential storage system

Debu Jana, Shalini Sanjay Mishra and Samar K. Das*

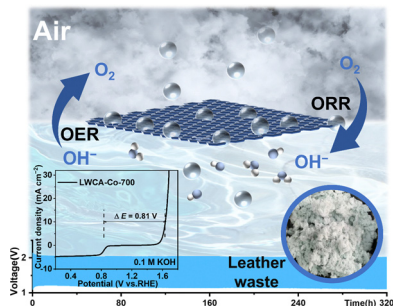
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An AIE-based fluorescent probe to detect peroxynitrite levels in human serum and its cellular imaging

Jaewon Kim, Jiyoung Yoo, Byungkook Kim, Kyung-Woo Lee, Sunghyun Kim, Sukwon Hong* and Jong Seung Kim*

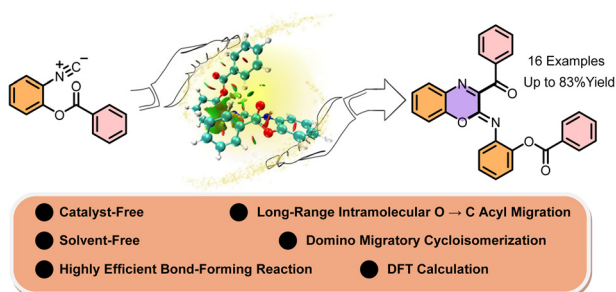
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Prussian blue analogue derived from leather waste as a bifunctional catalyst in zinc–air batteries

Meng-yu Liu, Shi-yi Shen, Jia-hua Guo, Ze-yu Zhu, Bao-li Zha, Jiansheng Wu,* Wen-Bo Pei,* Xiao-Ming Ren and Fengwei Huo

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Metal- and solvent-free domino reaction of 2-isocyanophenol esters to benzoxazines: long-range 1,5-acyl migration on 1,4-diazabutatriene

Alireza Akbari, Hormoz Khosravi, Felix Bauer, Frank Rominger, Bernhard Breit* and Saeed Balalaie*

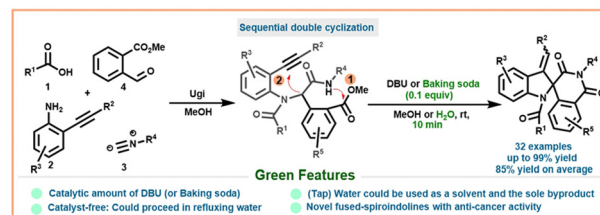


COMMUNICATIONS

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Green synthesis for diverse bioactive benzo-fused spiroindolines through DBU-catalysed post-Ugi double cyclization

Shuang Zhao, Mengxiao Chen, Wenlu Zhou, Dan Ni, Zhenghua Li, Shenyong Nie* and Yi He*



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Layered $\text{BaV}_6\text{O}_{16} \cdot 3\text{H}_2\text{O}@\text{GO}$ as a high performance cathode material for calcium ion batteries

Lixiao Xiang, Wenhua Yang, Yuanhao Wang, Xiang Sun, Jie Xu, Derang Cao, Qiang Li, Hongsen Li and Xia Wang*

