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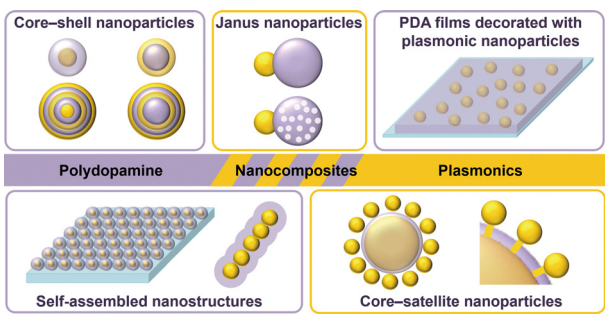
Inside cover
See Monika Kijewska, Grzegorz Wołczański *et al.*, pp. 3023–3026. Image reproduced by permission of Karolina Radziszewska from *Chem. Commun.*, 2024, **60**, 3023.

HIGHLIGHTS

2982

Polydopamine-based plasmonic nanocomposites: rational designs and applications

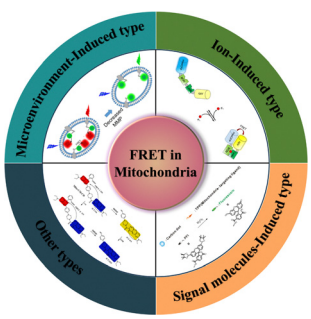
Shengyan Wang, Yiou Cui, Tarun Dalani, King Yin Sit, Xiaolu Zhuo* and Chun Kit Choi*



2994

Recent advances in FRET probes for mitochondrial imaging and sensing

Fei Peng,* Xiangnan Ai, Jing Sun, Linshuai Yang and Baoxiang Gao*



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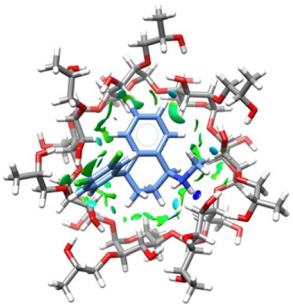
FEATURE ARTICLE

3008

Computational tools to study non-covalent interactions and confinement effects in chemical systems

Rubicelia Vargas,* Jorge Garza,* Ana Martínez and Ilich A. Ibarra

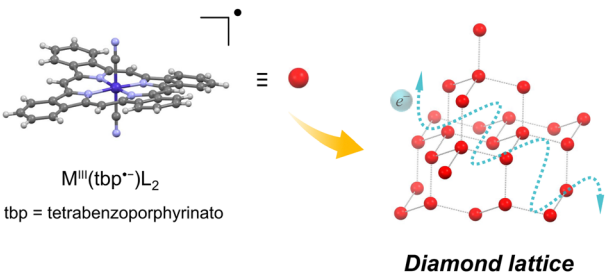


COMMUNICATIONS

3019

Diamond lattice in single-component molecular crystals comprising tetrabenzoporphyrin neutral radicals

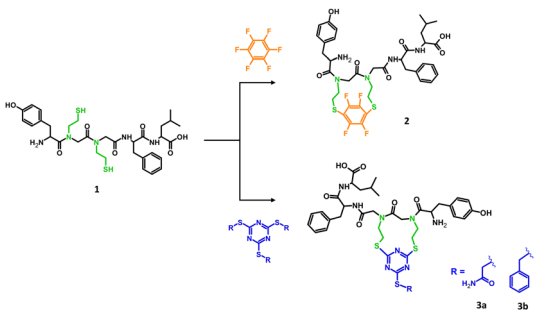
Kosuke Mine, Sachie Arae, Hiroshi Murakawa, Masahisa Tsuchiizu, Noriaki Hanasaki and Masaki Matsuda*



3023

Stapling of leu-enkephalin analogs with bifunctional reagents for prolonged analgesic activity

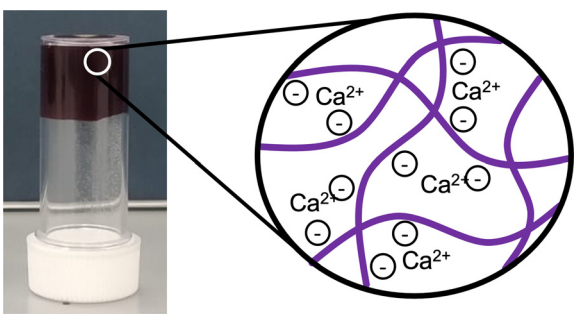
Monika Kijewska,* Grzegorz Wołczański,* Piotr Kosson, Robert Wieczorek, Marek Lisowski and Piotr Stefanowicz



3027

Tuning conductivity while maintaining mechanical properties in perylene bisimide hydrogels at physiological pH

Juan Antonio Mena Jimenez, Jacquelyn Egan, Rebecca I. Randle, Amina Omelbanine Rezig, Benjamin O. Orimolade, Rebecca E. Ginesi, Ralf Schweins, Mathis O. Riehle and Emily R. Draper*



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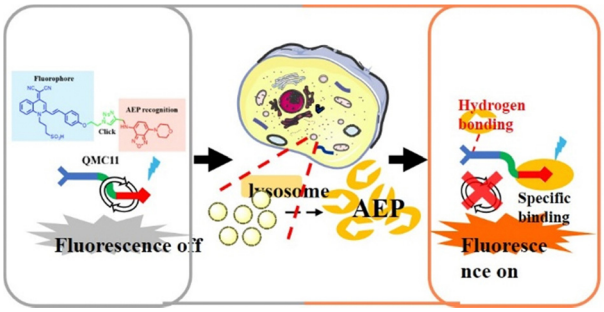
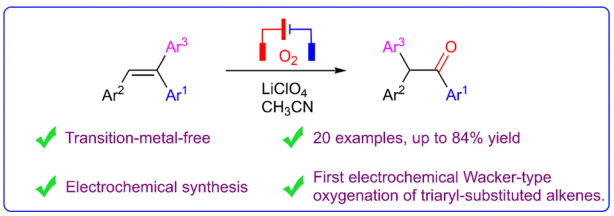
3031



A non-peptide-based fluorescent probe capable of sensitively visualizing asparagine endopeptidase

Kang Li, Yanxian Hou, Jinliang Han, Chengyuan Lv, Wenkai Liu, Jianjun Du, Wen Sun, Jiangli Fan* and Xiaojun Peng

3035



Electrochemical aerobic Wacker-type oxygenation of triaryl substituted alkenes to 1,2,2-triarylethanones

Zhou Zhang, Jin Li,* Zhiwei Cai, Songyao Kang, Jian Wang, Yue Cui, Siyuan Han, Lei Sheng, Qing Yin, Ang Dai, Weining Zhao* and Fangyuan Zhao*

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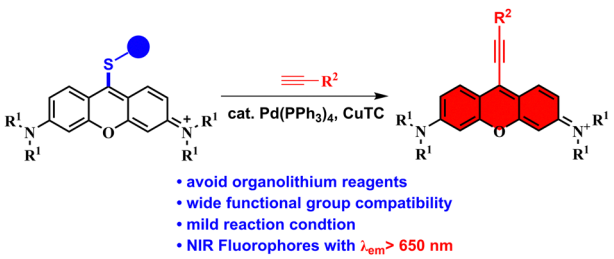
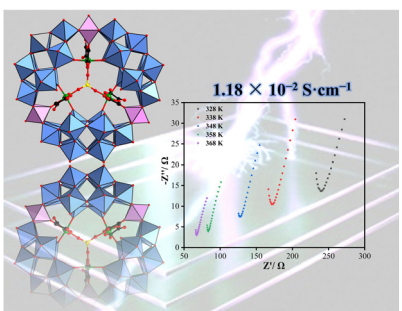


Desulfitative Sonogashira cross-coupling of thiopyronin for the synthesis of NIR arylacetylene-containing rhodamines

Guangshuai Zhou, Nathaniel Finney* and Yali Wang*

3043



A wheel-shaped Zr-substituted phosphotungstate $[\{Zr(C_2O_4)_2\}_3(PO_4)(P_6W_{39}O_{150})]^{39-}$ with tunable proton conduction properties

Dongsheng Yang, Lihua Liu, Yunfan Zhang, Miao Zhang, Pengtao Ma,* Jingping Wang and Jingyang Niu*

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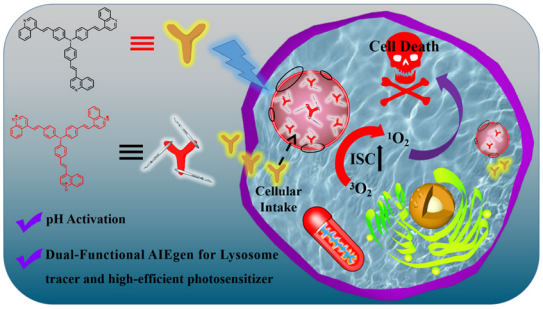
COMMUNICATIONS

3047

A novel pH-activated AIEgen probe for dynamic lysosome tracking and high-efficiency photodynamic therapy

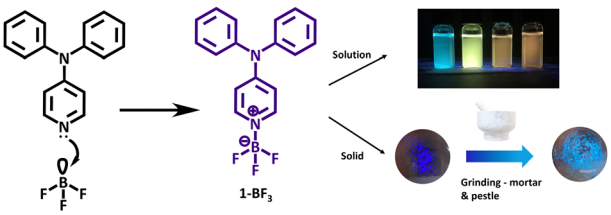
Yingcai Hu, Sheng-Yan Yin, Ting Deng* and Jishan Li*



3051

A multi-chromic boron trifluoride–pyridyl Lewis adduct

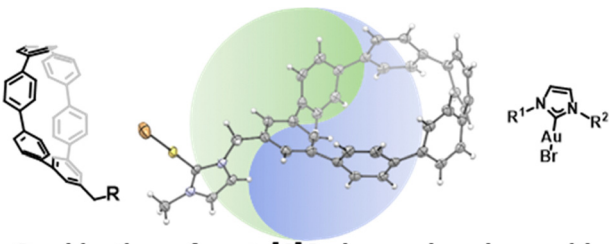
Peter W. McDonald and Chris Ritchie*



3055

Synthesis and investigation of a *meta*[6]cycloparaphenylene gold(I) *N*-heterocyclic carbene complex

Felix Bernt, Christopher M. Leonhardt, Dominic Schatz and Hermann A. Wegner*

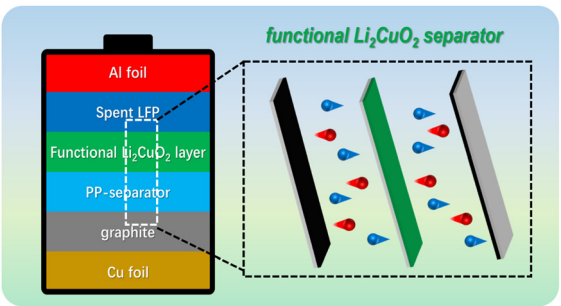


Combination of *meta*[6]Cycloparaphenylene with a *N*-Heterocyclic Carbene Gold(I)-Complex

3059

Designing functional Li_2CuO_2-coated separators from Cu foil towards spent $LiFePO_4$ cathode regeneration

Zihao Zeng, Hai Lei, Jiexiang Li, Zhengqiao Yuan, Bing Wang, Wenqing Zhao, Yue Yang and Peng Ge*



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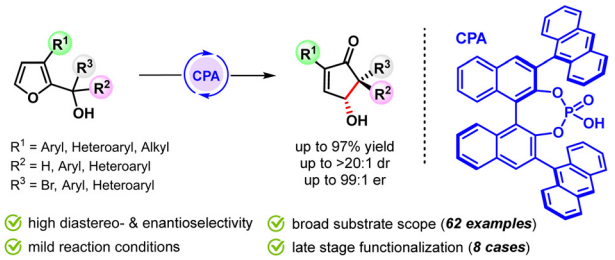
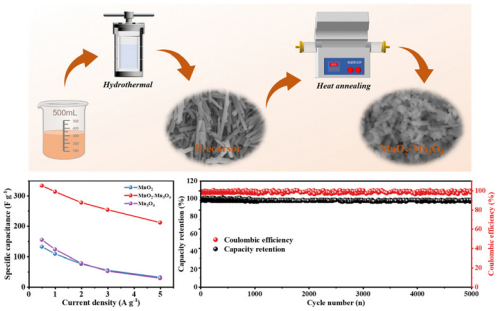
3063



Organocatalytic enantioselective oxa-Piancatelli rearrangement

Rahul Sarkar, Alexander Korell and Christoph Schneider*

3067



Construction of MnO_2–Mn_3O_4 heterostructures to facilitate high-performance aqueous magnesium ion energy storage

Xueli Chen, Lu Han,* Guangzhen Zhao, Litao Zhao, Guoliang Gao, Lianghao Yu, Yanjiang Li, Xiuyang Shan, Junfeng Li, Xinjuan Liu and Guang Zhu*

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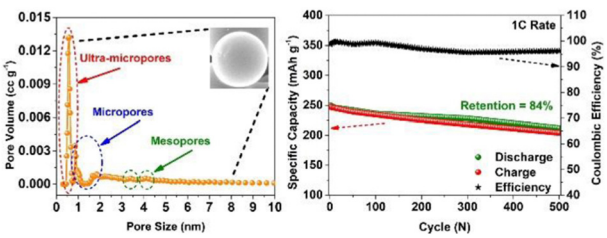

Hierarchically porous closed-pore hard carbon as a plateau-dominated high-performance anode for sodium-ion batteries

Nagmani, S. Manna and S. Puravankara*

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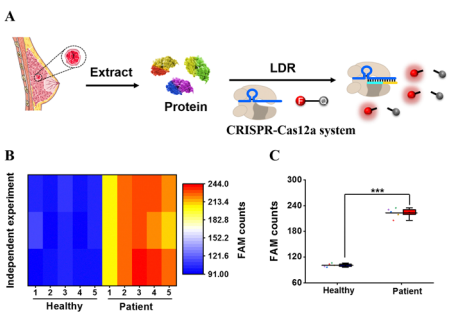

Ligase detection reaction amplification-activated CRISPR-Cas12a for single-molecule counting of FEN1 in breast cancer tissues

Zi-yue Wang, Shuang-qian Teng, Ning-ning Zhao, Yun Han, Dong-ling Li and Chun-yang Zhang*

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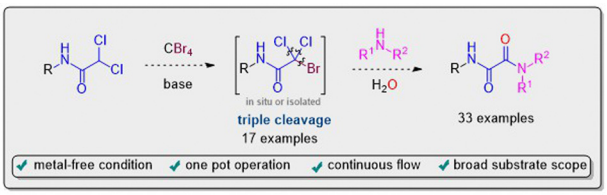
COMMUNICATIONS

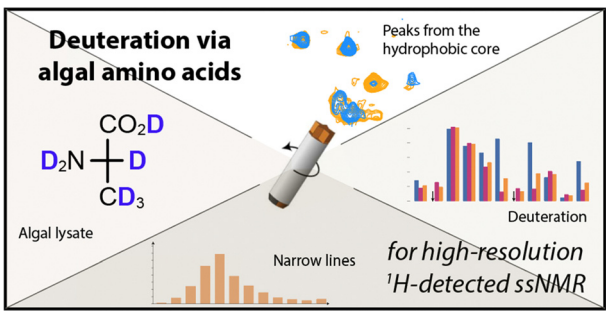
3079

Base-promoted triple cleavage of CCl_2Br: a direct one-pot synthesis of unsymmetrical oxalamide derivatives

Alageswaran Jayaram, Vijay Thavasianandam Seenivasan, Karthick Govindan, Yu-Ming Liu, Nian-Qi Chen, Ting-Wei Yeh, Gokulakannan Venkatachalam, Chien-Hung Li, Tsz-Fai Leung and Wei-Yu Lin*



3083

Protein deuteration *via* algal amino acids to circumvent proton back-exchange for ^{1}H-detected solid-state NMR

Hanna Aucharova, Alexander Klein, Sara Medina Gomez, Benedikt Söldner, Suresh K. Vasa and Rasmus Linser*