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IN THIS ISSUE

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Cover

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Inside cover

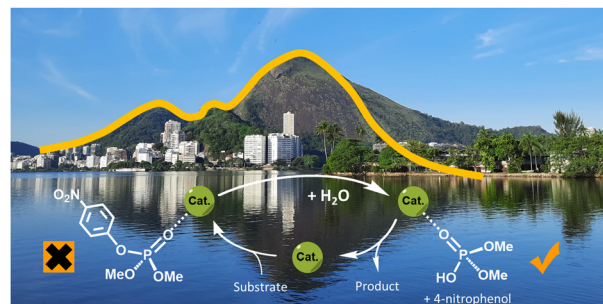
See Mário J. F. Calvete, Mariette M. Pereira *et al.*, pp. 480–483. Image reproduced by permission of Mariette M. Pereira from *Chem. Commun.*, 2025, 61, 480.

HIGHLIGHTS

391

Catalytic strategies for detoxifying phosphorus(v) biocides

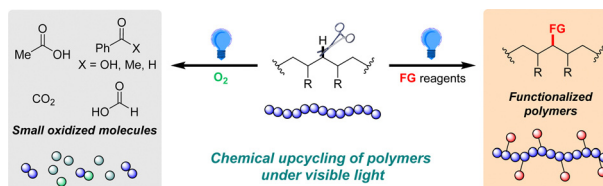
Larissa Maria S. de Carvalho, Nathália R. D. de Souza and Eduardo H. Wanderlind*



407

Photochemical upcycling of polymers via visible light-driven C–H bond activation

Wei Yi,* Jing Liu and Xiao-Qiang Hu*



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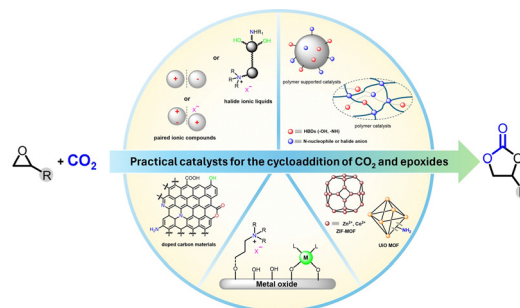
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FEATURE ARTICLES

419

CO₂ fixation: cycloaddition of CO₂ to epoxides using practical metal-free recyclable catalysts

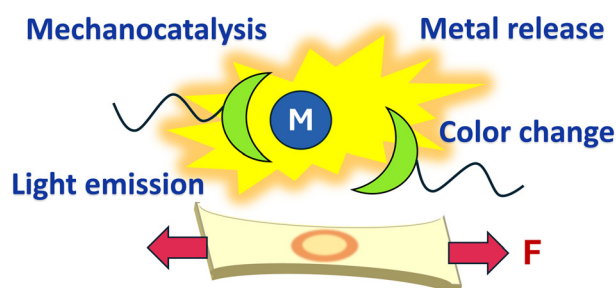
Wuttichai Natongchai, Daniel Crespy and Valerio D'Elia*



441

Functional coordination compounds for mechanoresponsive polymers

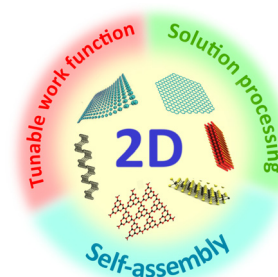
Tatiana Gridneva and Julia R. Khusnutdinova*



455

Atomically thin 2D materials for solution-processable emerging photovoltaics

Oleksandr Stroyuk,* Oleksandra Raievska, Jens Hauch and Christoph J. Brabec

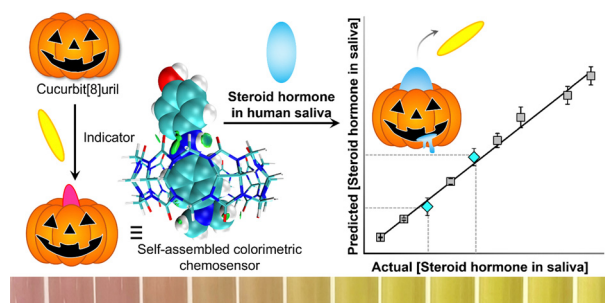


COMMUNICATIONS

476

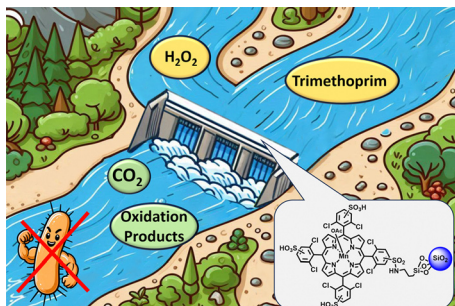
Colorimetric quantitative detection of steroid hormones using an indicator displacement assay-based chemosensor array

Yui Sasaki, Yusuke Yamanashi, Kohei Ohshiro, Xiaojun Lyu and Tsuyoshi Minami*



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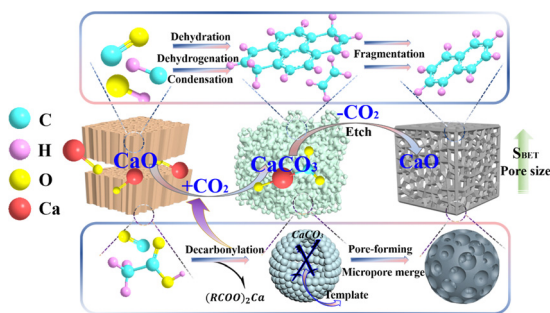
480



Advancing continuous flow techniques in effective trimethoprim oxidation: combatting bacterial resistance in wastewater

Diana L. Marques, Giusi Piccirillo, Fábio M. S. Rodrigues, Rafael T. Aroso, Lucas D. Dias, Gabriela J. da Silva, Mário J. F. Calvete* and Mariette M. Pereira*

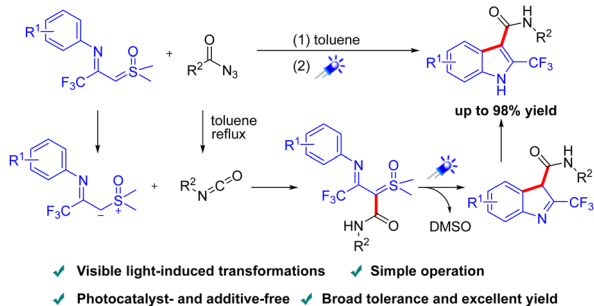
484



Activation of biochar by CO_2 produced from the same pyrolysis process and captured *in situ* by CaO

Mengjiao Fan, Yuewen Shao, Chao Li, Yuchen Jiang, Yunyu Guo, Shu Zhang, Kai Sun, Yi Wang and Xun Hu*

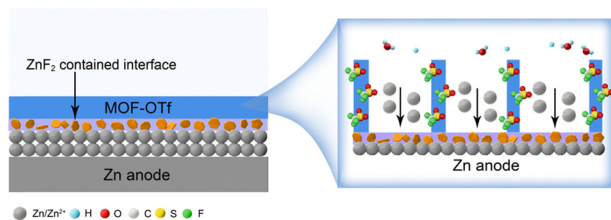
488



Visible light-induced cascade annulation of sulfoxonium ylides with azides for the synthesis of 2-trifluoromethyl indoles

Jia-Huan Cui, Qian-Yu Chen, Jun Zhang, Yan He,* Xingguang Li* and Pei-Nian Liu*

492



A triflate porous layer stabilizing Zn anodes for high-performance Zn-ion batteries

Ruijun Rao, Jingtao Chen, Mengxi Bai, Qiufen Li, Xiang Wang, Jiashuai Li, Dongze Li, Xiaoyan Lin, Siyuan Shao and Ziqi Wang*

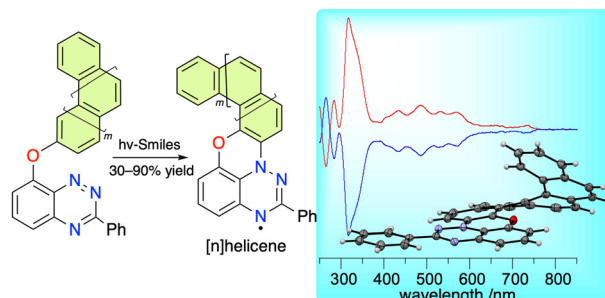


COMMUNICATIONS

496

 π -Curved Blatter radicals: Blatter helicenes

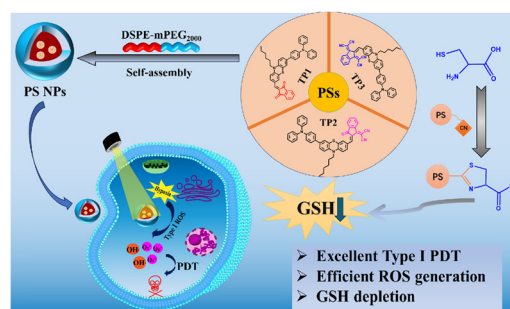
Hemant K. Singh, Agnieszka Bodzioch,
Anna Pietrzak and Piotr Kaszyński*



500

Molecular acceptor engineering to precisely design a NIR type I photosensitizer for efficient PDT-based synergistic therapy

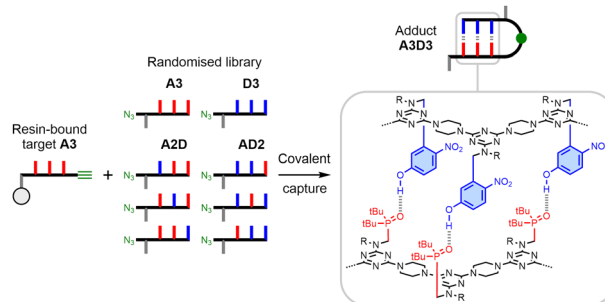
Ziqi Zou, Yili Xie, Jiaxing Wan, Qing Wan, Jianwen Tian,*
Xiaoyong Zhang* and Yen Wei*



504

Sequence-selective pulldown of recognition-encoded melamine oligomers using covalent capture on a solid support

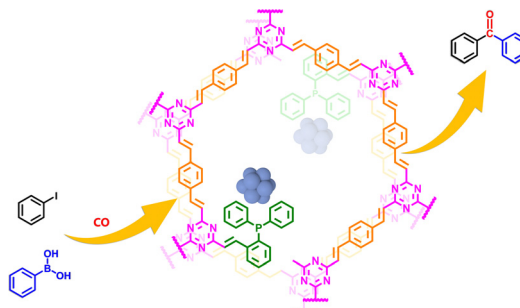
Luis Escobar, Daniel Sun, Mohit Dhiman and
Christopher A. Hunter*



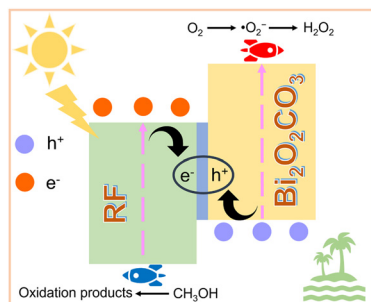
508

Robust phosphine-based covalent-organic framework palladium catalysts for the highly efficient carbonylation coupling reaction

Benling Yu, Liuqing He, Shiyuan Wei, Jiawei Li,*
You Wang, Juan Zhong, Jianhan Huang* and
You-Nian Liu



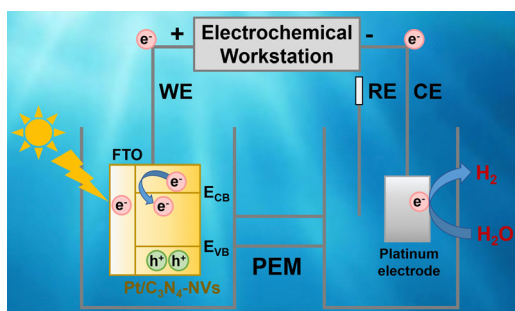
512



Organic–inorganic complex S-scheme photocatalyst resorcinol–formaldehyde resins/Bi₂O₂CO₃ with enhanced photocatalytic H₂O₂ production

Meichao Gao,* Jianting Wang, Huichao Cui, Mingyang Meng, Yuanyuan Feng,* Yunyun Gong and Changlong Sun*

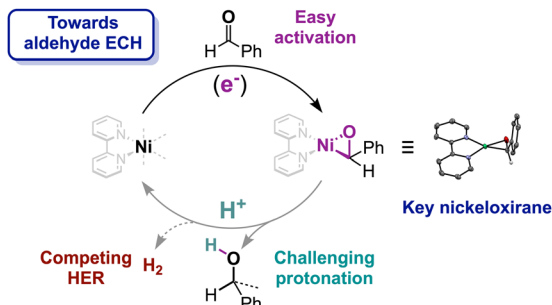
516



Rapid Joule heating synthesis of Pt/C₃N₄-NVs for photoelectrocatalytic water splitting to produce H₂

Zehui Zhao and Xiangchao Meng*

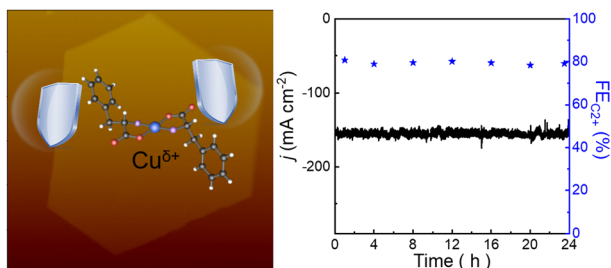
520



Electrochemical aldehyde hydrogenation: probing the inner-sphere strategy with nickel-bipyridine complexes

Gabriel Durin, Mijung Lee, Martina A. Pogany, Christian Kahl, Thomas Weyhermüller, Walter Leitner and Nicolas Kaeffer*

524



Two-dimensional Cu-phenylalanine nanoflakes for efficient and robust CO₂ electroreduction to C₂₊ products

Wenda Zhou, Mingyue Chen, Xingfang Luo, Cailei Yuan,* Shoujie Liu, Wen Lei and Shouguo Wang*

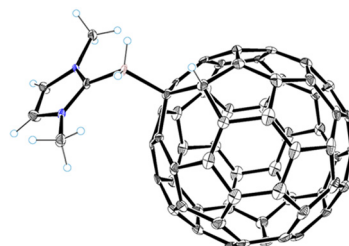


COMMUNICATIONS

528

NHC-BH₂-C₆₀H: synthesis, characterization and electrochemical properties of the N-heterocyclic-carbene-stabilized fullerene–borane complex

Sheng-Hu Yuan, Shu-Chao Ma, Jian Wu, Xiu-Ying Zheng, Jun Xuan* and Fei Li*



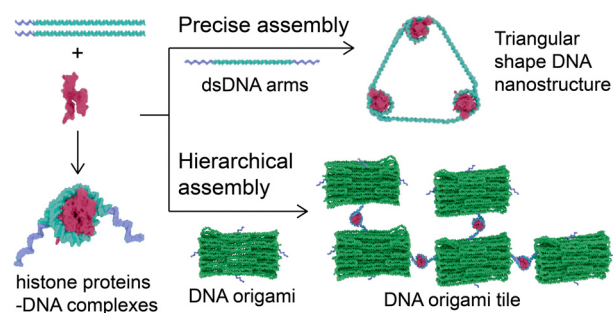
NHC-BH₂-C₆₀H

a stable fullereborane complex with high LUMO energy level

532

A versatile approach for geometry-based self-assembly of DNA–protein hybrid nanostructures using histone–DNA interactions

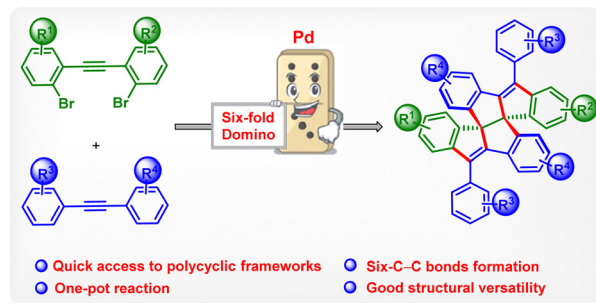
Hajar Al-Zarah, Maged F. Serag, Faisal Alkhalidi and Satoshi Habuchi*



536

A rapid pathway to molecular complexity: a palladium-catalyzed six-fold domino process to access polycyclic frameworks

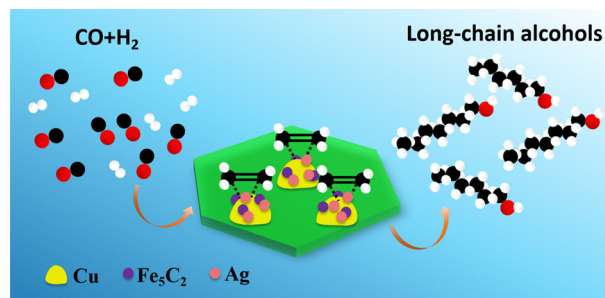
Komal Goel and Gedu Satyanarayana*



540

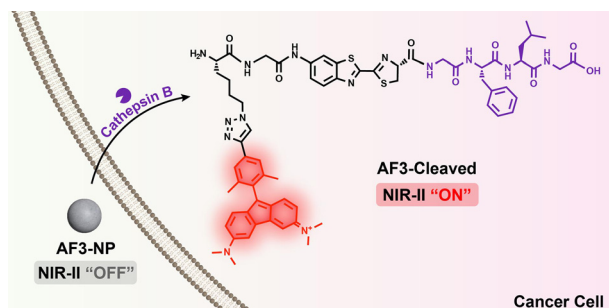
Promotion effect of Ag on syngas transformation to long-chain alcohols over CuFe catalysts

Zhiwei Qin, Yinwen Li,* Meng Wang, Yanrui Su, Wa Gao,* Ding Ma and Lin Yang



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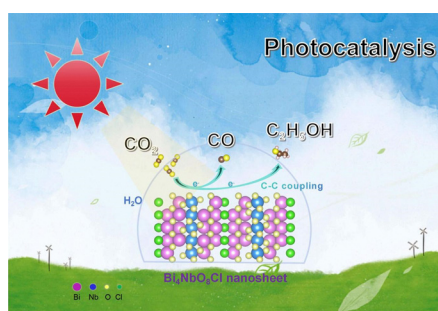
544



"Turn-on" NIR-II fluorescence of a dually quenched probe for sensitive imaging of cathepsin B *in vivo*

Yu Deng, Kui Yan, Lingling Xu, Xiaoyang Liu, Furong Zhao, Shangfeng Wang, Fan Zhang, Gaolin Liang* and Rui Wang*

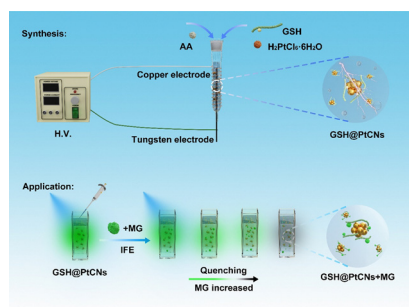
548



Crystal-facet modulated pathway of CO₂ photoreduction on Bi₄NbO₈Cl nanosheets boosting production of value-added solar fuels

Peiting Hao, Haoqiang Chi, Zhengdao Li,* Xinxin Lu,* Yong Yang, Yongcai Zhang, Zhigang Zou and Yong Zhou*

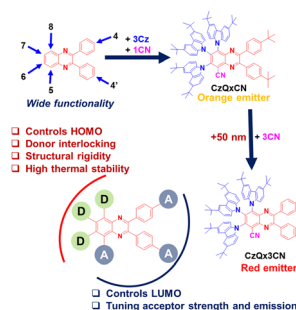
552



Dielectric barrier discharge-mediated one-pot rapid synthesis of platinum nanoclusters for fluorescent sensing of malachite green

Bingxin Ma, Bodong Wang, Yuqi Li, Lianshuang Jiang, Xiandeng Hou and Kailai Xu*

556



Leveraging quinoxaline functionalization for the design of efficient orange/red thermally activated delayed fluorescence emitters

Shantaram Kothavale, Rajendra Kumar Konidena, Hyunjung Lee and Jun Yeob Lee*

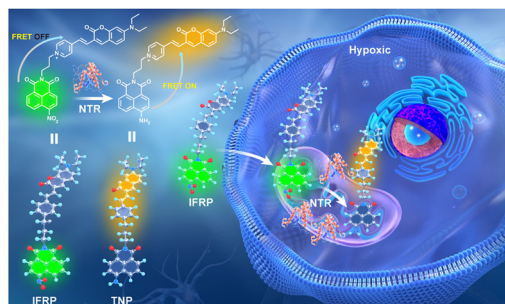


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560

A ratiometric two-photon fluorescent probe for the quantification of nitroreductase in hypoxic neurons

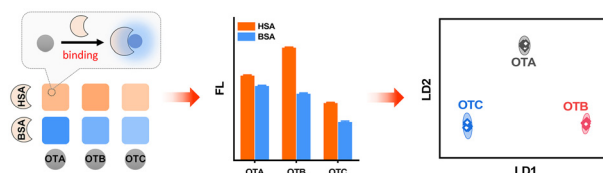
Zhiqian Tang, Hong Huang,* Yuanyuan Yao, Shumei Gao, Bingyong Lin, Qianshou Zong, Wanpeng Hu,* Jianguo Xu, Yangang Wang and Longhua Guo*



564

An albumin fluorescent sensor array discriminates ochratoxins

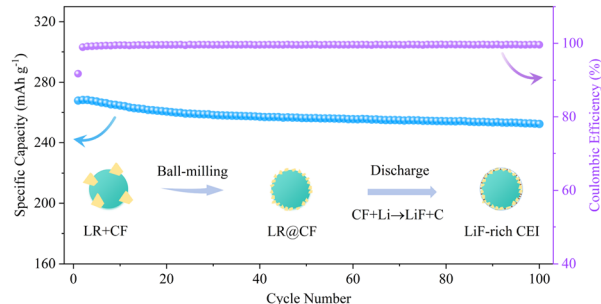
Zhongyong Xu, Yilin Zhan, Shiwei Zhang, Zhiqing Xun, Lei Wang, Xiaoqiang Chen, Bin Liu* and Xiaojun Peng



568

Constructing LiF-rich cathode electrolyte interphase to enhance the cyclic stability of lithium-rich manganese-based oxide cathode

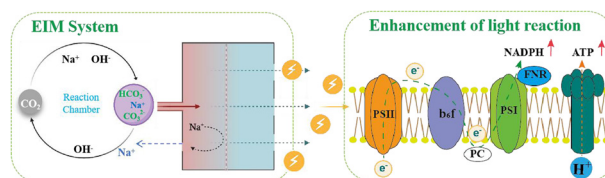
Yang Yang, Yajun Zhao, Junjie Song, Xiqian Yu* and Hong Li*



572

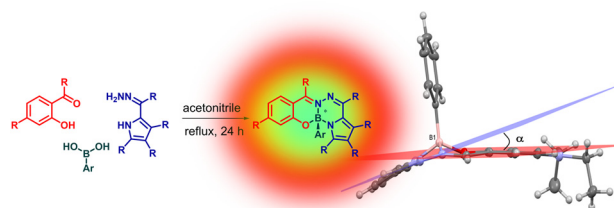
The electrochemical ion membrane system (EIMs) enhanced light reactions of photosynthesis with intermittent electrical stimulation

Bicheng Deng, Yuyong Hou, Sihan Lu, Suihao Yan, Zhile Guo, Zhiyong Liu, Xinqi Wang, Changhong Jia, Weijie Wang,* Longjiang Yu* and Lei Zhao*



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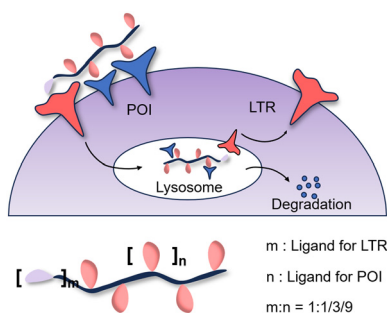
576



Multicomponent synthesis of stereogenic-at-boron fluorophores (BOSPYR) from boronic acids, salicylaldehydes, and 2-formylpyrrole hydrazones

Ezgi Bayer Kömüşdoğan, Sania Batool, Ertan Şahin, Erol Yıldırım, Murat Işık* and Cihangir Tanyeli*

580



Controllable multivalent LYTACs enhance targeted protein degradation

Yuheng Lv, Yicun Li, Qin Fu and Peng Shi*

CORRECTION

584

Correction: Photochemical upcycling of polymers *via* visible light-driven C–H bond activation

Yi Wei,* Jing Liu and Xiao-Qiang Hu*

