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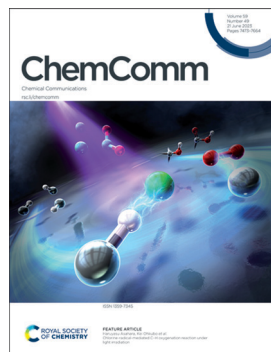
Chemical Communications

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ISSN 1359-7345 CODEN CHCOFS 59(49) 7473-7664 (2023)



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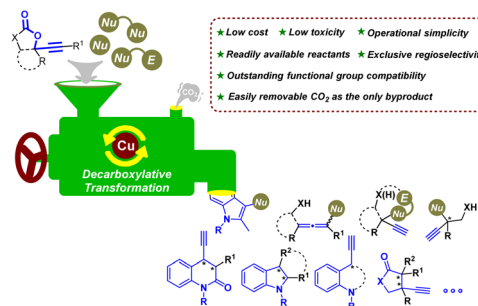
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HIGHLIGHT

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Recent advances in copper-catalyzed decarboxylative reactions of propargylic cyclic carbonates/carbamates

Yong You,* Yan-Ping Zhang, Zhen-Hua Wang, Jian-Qiang Zhao, Jun-Qing Yin and Wei-Cheng Yuan*

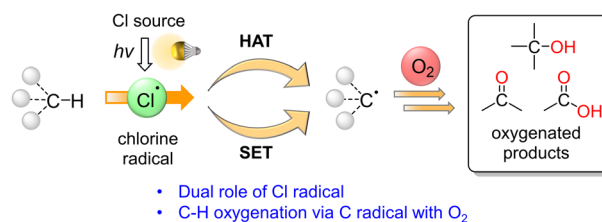


FEATURE ARTICLES

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Chlorine-radical-mediated C–H oxygenation reaction under light irradiation

Yuki Itabashi, Haruyasu Asahara* and Kei Ohkubo*



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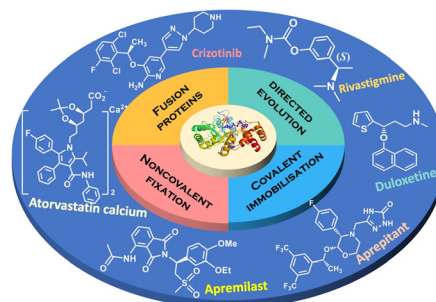


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Engineering ketoreductases for the enantioselective synthesis of chiral alcohols

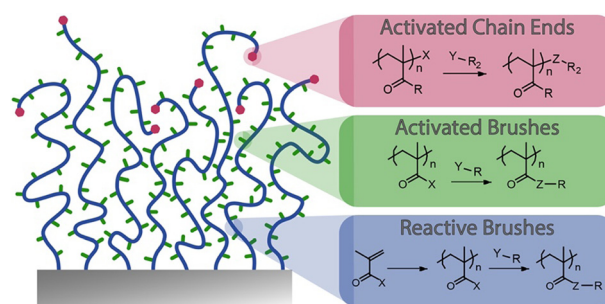
Li Qiao, Zhiyuan Luo, Haomin Chen, Pengfei Zhang, Anming Wang* and Roger A. Sheldon*



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A guide to functionalisation and bioconjugation strategies to surface-initiated polymer brushes

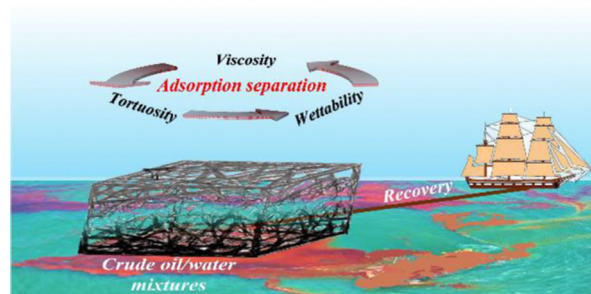
Carlos Eduardo Neri-Cruz, Franciane Mouradian Emidio Teixeira and Julien E. Gautrot*



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Advances in special wettable materials for adsorption separation of high-viscosity crude oil/water mixtures

Bin Xiang, Qiuqiu Liu, Wenhao Yan, Yibin Wei, Peng Mu and Jian Li*

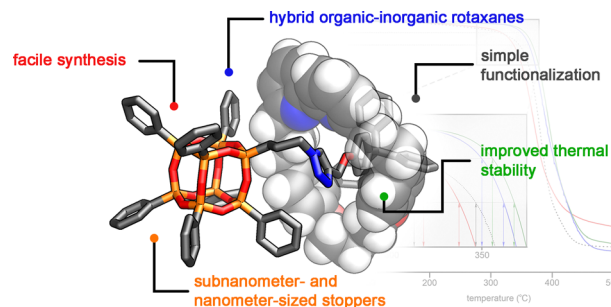


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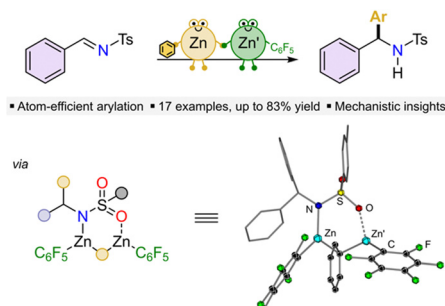
POSSaxanes: active-template synthesis of organic–inorganic rotaxanes incorporating cubic silsesquioxane stoppers

Rafał A. Grzelczak, Anna Władyczyn, Agata Białońska, Łukasz John* and Bartosz Szyszko*



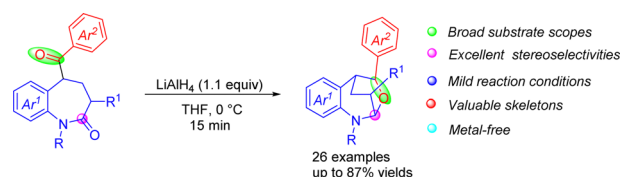
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Atom-efficient arylation of *N*-tosylimines mediated by cooperative $\text{ZnAr}_2/\text{Zn}(\text{C}_6\text{F}_5)_2$ combinations

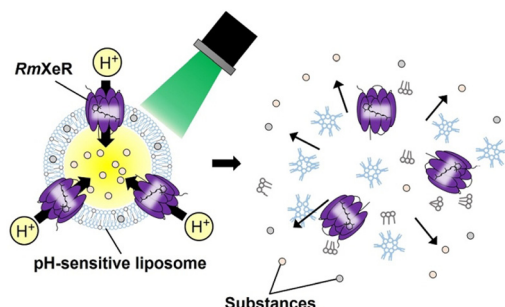
Andryj M. Borys, Tim Kunzmann, Jose M. Gil-Negrete and Eva Hevia*

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Highly regioselective and stereoselective cascade reductive cyclization of δ -ketoamide: practical access to oxa-bridged benzazepines

Hao Ye, Xi-Wei Zhu, Yi-Yun Pan, Jie Sun, Fei Sun and Xin-Xing Wu*

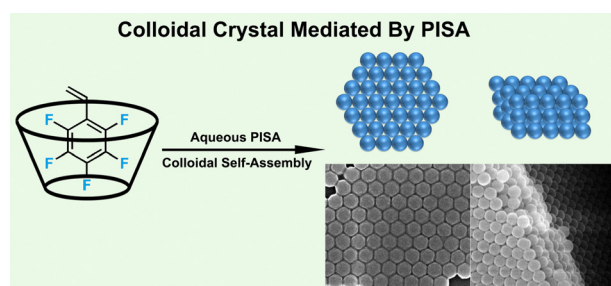
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Development of light-induced disruptive liposomes (LiDL) as a photoswitchable carrier for intracellular substance delivery

Taichi Tsuneishi, Keiichi Kojima, Fumika Kubota, Hideyoshi Harashima, Yuma Yamada and Yuki Sudo*

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Colloidal crystals of monodisperse fluoro-nanoparticles by aqueous polymerization-induced self-assembly

Nankai An, Xi Chen,* Mingxin Zheng and Jinying Yuan*

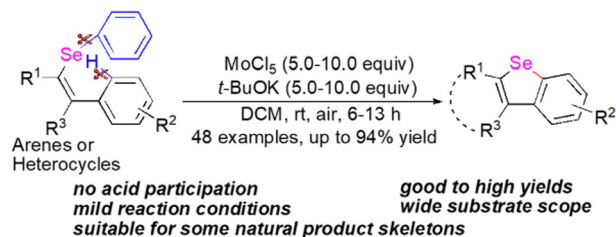


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Molybdenum(v)-mediated switching of the C(sp²)–Se bond of phenylselenenyl-functionalized arenes or heterocycles under mild conditions

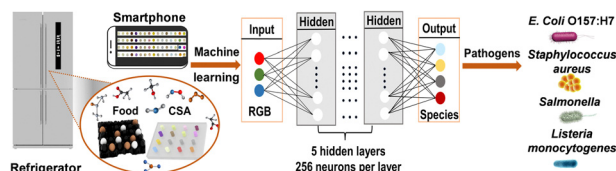
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A machine learning-based colorimetric sensor array for high-precision pathogen identification in household refrigerators

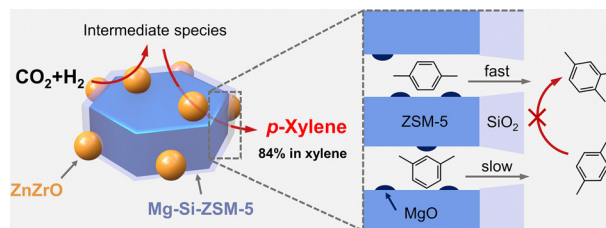
Yu Zhang, Gong-Xiang Qi, Yong-Liang Yu, Meng-Xian Liu* and Shuai Chen*



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Highly selective conversion of CO₂ to *para*-xylene over tandem catalysts

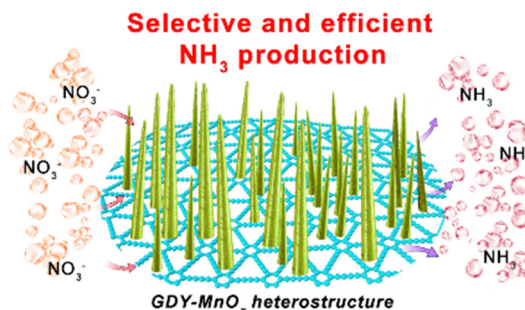
Yuanzhi Qu, Zelong Li, Hanwen Hu, Siyu Chen, Jijie Wang* and Can Li*



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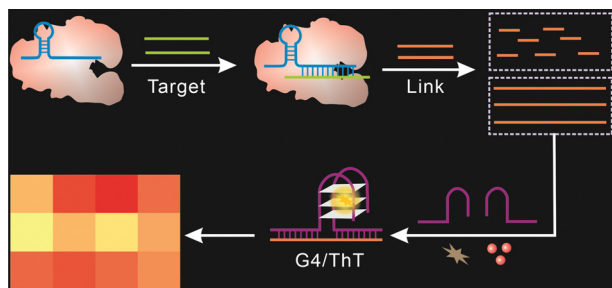
In situ growth of a GDY–MnO_x heterointerface for selective and efficient ammonia production

Xiaoyu Luan, Lu Qi, Zhiqiang Zheng, Shuya Zhao, Yaqi Gao, Yurui Xue* and Yuliang Li*



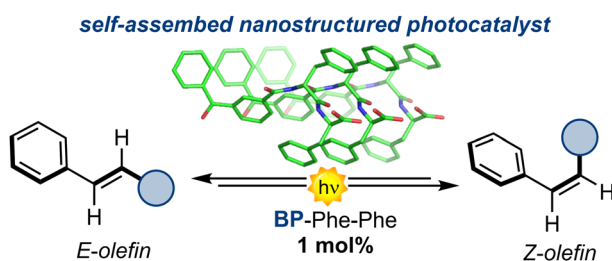
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**Split G-quadruplex-programmed label-free CRISPR-Cas12a sensing system**

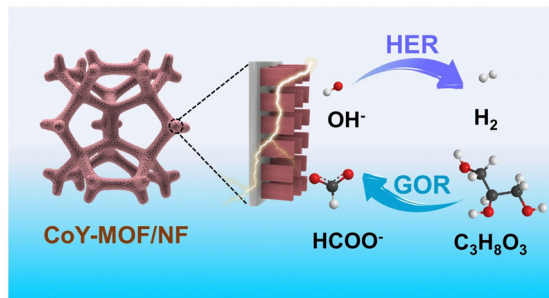
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**Self-assembly of benzophenone-diphenylalanine conjugate into a nanostructured photocatalyst**

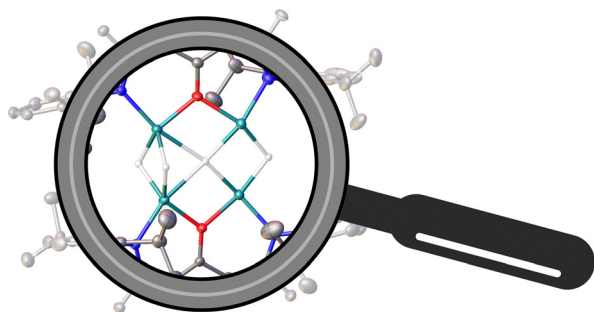
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**Yttrium-doped cobalt-based metal-organic frameworks for selective electrooxidation of glycerol coupled with hydrogen production**

You Xu, Qingsong Zhou, Tiantian Liu, Tianlun Ren, Hongjie Yu, Kai Deng, Ziqiang Wang, Liang Wang* and Hongjing Wang*

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**A tetranuclear magnesium hydride cluster with a four-coordinate hydride in near square-planar geometry**

Fabian Seifert, Helmar Görls, Stephan Kupfer* and Robert Kretschmer*

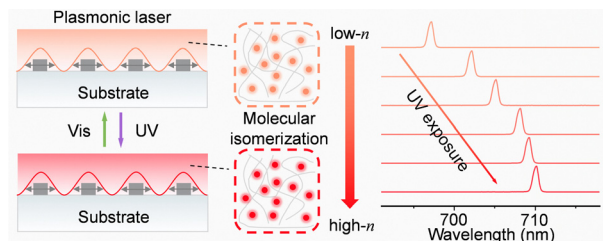


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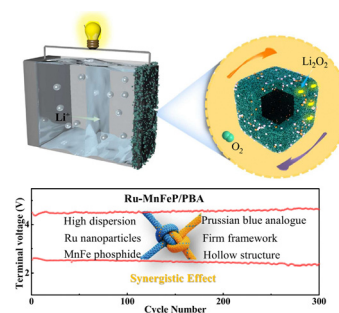
Shuang Wen, Wu Zhou, Zhiyuan Tian, Yongli Yan* and Yong Sheng Zhao*



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MnFe phosphides doped in hollow Prussian blue analogues with Ru modification as an efficient cathode for Li-O₂ batteries

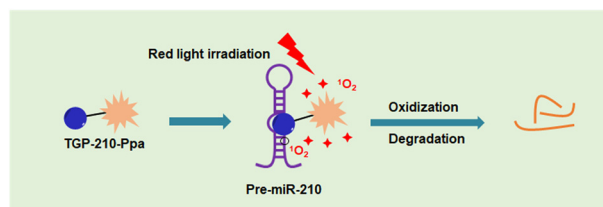
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Bifunctional chimera for ligand-directed photo-degradation of oncogenic microRNA

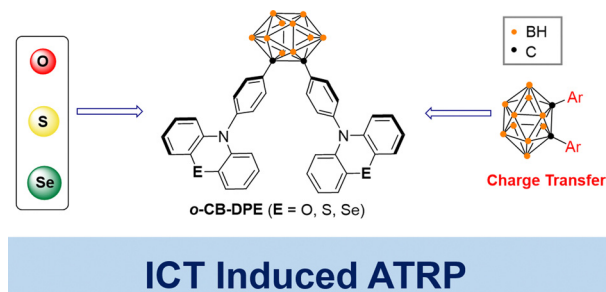
Chen Li, Jin Wang, Yan Wang, Yi Feng, Jinbo Li* and Yan Zhang*



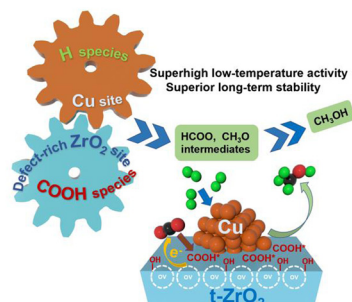
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Carborane based chalcogen-fused phenazines for visible light induced ATRP

Xiaodong Yang,* Haishuang Li, Dong Shao and Gang He*



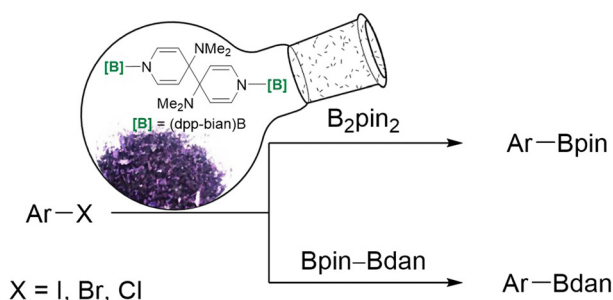
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Oxygen vacancy promoted carbon dioxide activation over Cu/ZrO₂ for CO₂-to-methanol conversion

Haohao Chang, Feifan Gao, Alin Luo, Yongmei Liu,*
Yifeng Zhu, Heyong He and Yong Cao*

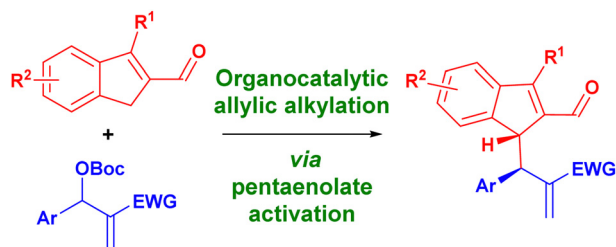
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A bottleable super-electron-donor for catalytic borylation of aryl halides

Wenbo Ming, Yashi Xu, Libo Xiang and Qing Ye*

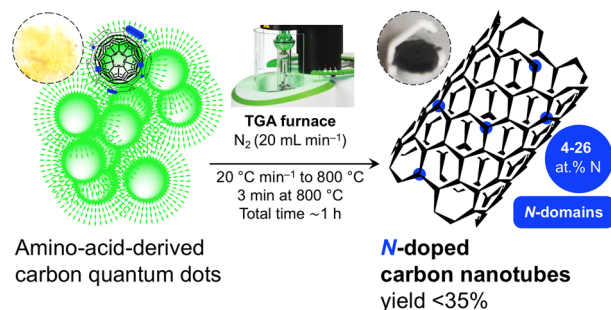
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Pentaenolate activation in the organocatalytic allylic alkylation of indene-2-carbaldehydes

Adam Cieśliński, Sebastian Frankowski and
Łukasz Albrecht*

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From dots to tubes – the reversed scenario of bottom-up external-catalyst-free synthesis of N-doped carbon nanotubes

Anna Kolanowska,* Dariusz Łukowiec, Maciej Krzywiecki,
Joanna Bok-Badura and Sławomir Boncel*

