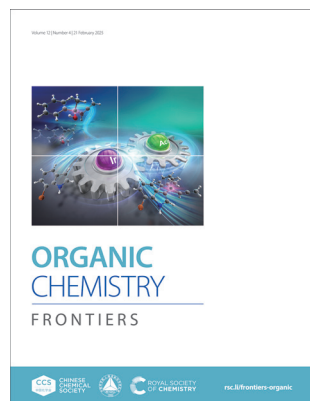


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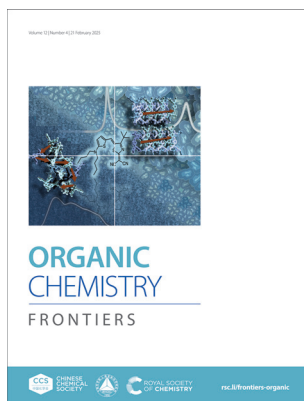
ISSN 2052-4129 CODEN OCFRA8 12(4) 1067-1376 (2025)



Cover

See Ryo Takeuchi *et al.*, pp. 1080–1085.

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Inside cover

See Klaus Meerholz *et al.*, pp. 1086–1098.

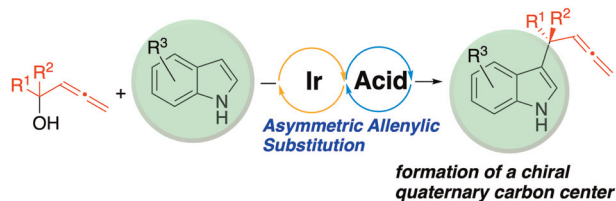
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RESEARCH ARTICLES

1080

Iridium-catalyzed asymmetric allenylc substitution of tertiary racemic allenylc alcohols with indoles

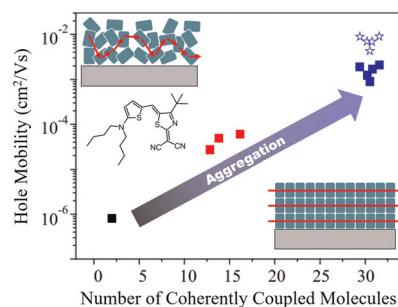
Takahiro Sawano, Manami Kobayashi, Momoko Ishikawa, Eri Ishikawa and Ryo Takeuchi*



1086

Influencing optical and charge transport properties by controlling the molecular interactions of merocyanine thin films

Lukas Böhner, Philipp Weitkamp, Thorsten Limböck, Nora Gildemeister, Daniele Fazzi, Manuela Schiek, Ruth Bruker, Dirk Hertel, Roland Schäfer, Klas Lindfors and Klaus Meerholz*



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Christopher Hüßler, Martin C. Dietl, Matthias Scherr,
Emma Butigan, Robin Heckershoff, Eric F. Lopes,
Justin Kahle, Petra Krämer, Frank Rominger,
Matthias Rudolph and A. Stephen K. Hashmi*

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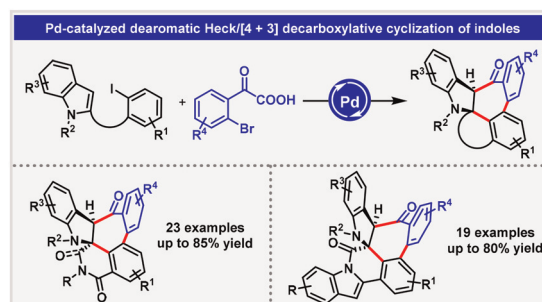
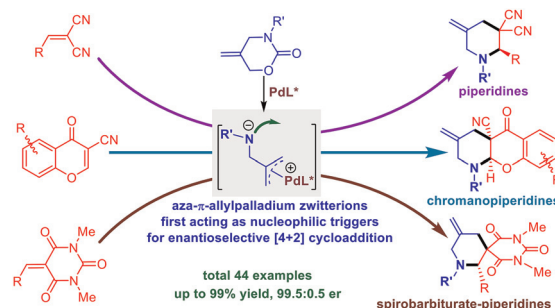
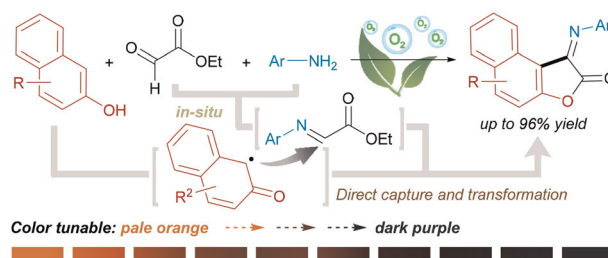
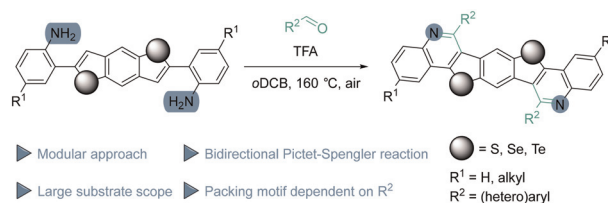
Jianyu Dong, Shaofeng Wu,* Long Liu, Dan Zhou,
Min Mo, Yadong Gao, Lebin Su, Shuang-Feng Yin and
Yongbo Zhou*

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Han-Yang Zhong, Hong-Wei Xiao, Ji-Hong Liu,
Zhen-Zhen Ge, Jian-Qiang Zhao, Ming-Qiang Zhou*
and Wei-Cheng Yuan*

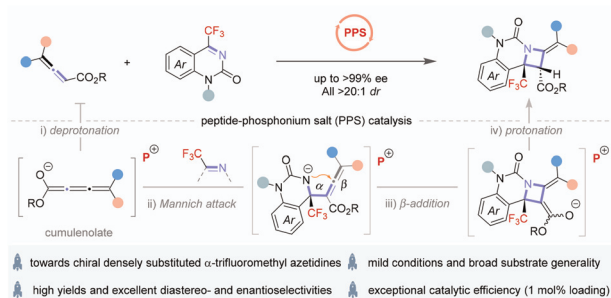
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Liwei Zhou,* Pengyang Jing, Wenbo Deng, Shuyi Guo,
Yun Liang* and Yuan Yang*



RESEARCH ARTICLES

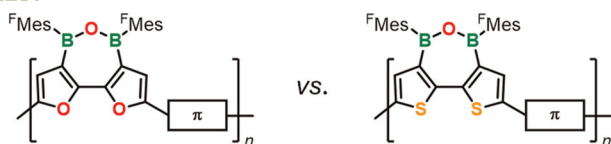
1129



Organocatalytic enantioselective [2 + 2] cycloadditions towards chiral fused α -trifluoromethyl azetidines

Song Zhang, Xingjie Luo, Siqiang Fang, Jia-Hong Wu, Jianke Pan, Zhipeng Xu* and Tianli Wang*

1137



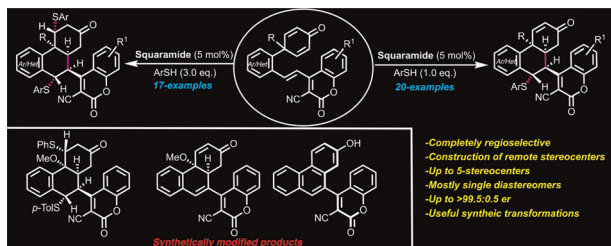
π -Conjugated Organoboron Copolymers

- ✓ facile Stille cross-coupling
- ✓ air- and moisture stable
- ✓ n- and p-type semiconductors

Bifuran- and bithiophene-fused 4,6-dihydro-1,2,7-oxadiborepins as building blocks for conjugated copolymers

Jonas Bachmann, Andreas Drichel, Jonas Klopf, Abhishek Koner, Adam Slabon* and Holger Helten*

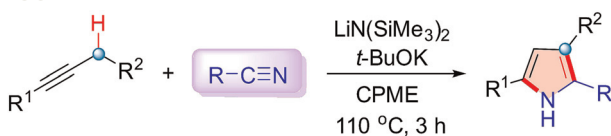
1144



Stereocontrolled desymmetrization of 2,5-cyclohexadienones via organocatalytic domino sulfa-1,6-/1,4-addition or sulfa-1,6-/1,4-/sulfa-1,4-addition reactions

Vanisha Sodhi, Deepak Sharma, Manisha Sharma and Pankaj Chauhan*

1150



- ✓ Transition metal-free
- ✓ Readily available reagents
- ✓ Broad substrate scope : 35 examples
- ✓ C(sp³)-H functionalization
- ✓ Atom economic

Synthesis of 2,3,5-trisubstituted 1H-pyrroles via formal [3 + 2] cycloaddition of 1-arylpropynes and nitriles and their antiproliferative activities

Dandan He,* Ling Li, Xiong Wen, Luxiang Yin, Jue Li, Sha Wu, Huili Li, Fei Jiang* and Xiangchun Shen*

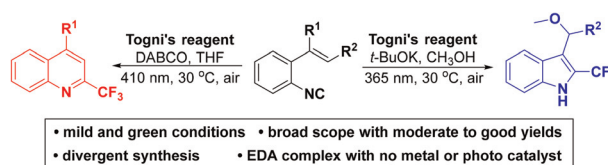


RESEARCH ARTICLES

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Photoredox trifluoromethylation of isocyanides to access 2-trifluoromethylated quinolines and indoles

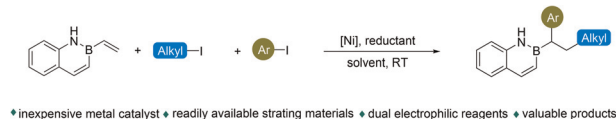
Jin Wang,* Yaohui Liu, Jinhai Xu, Peiyuan Li, Xiaoxi Xu, Shuo Zhang, Jie Yang and Xianxiu Xu*



1162

Nickel-catalyzed reductive difunctionalization of BN-heterocyclic olefins

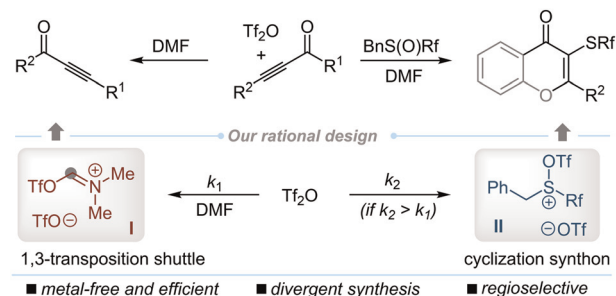
Chaokun Li, Kui Yu, Kai Yang* and Qiuling Song*



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Tf₂O-induced selective 1,3-transposition/cyclization of ynones in DMF

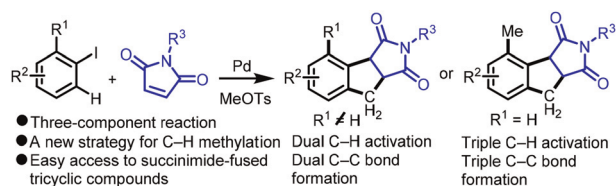
Hui-Lin Lan, Wenting Liu, Wen Liu, Jiajian Peng, Ying Bai* and Xinxin Shao*



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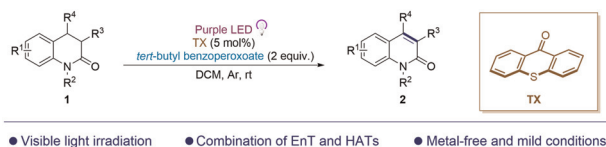
Palladium-catalyzed three-component annulation reaction involving multiple C–H activation

Shuai Yang, Xiang Zuo and Yanghui Zhang*



RESEARCH ARTICLES

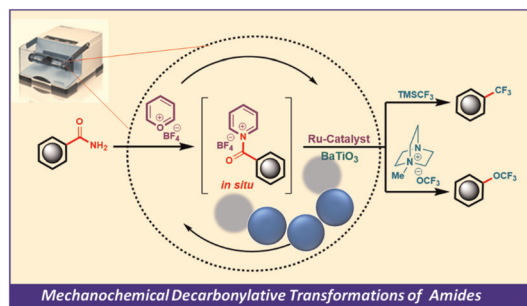
1183



Visible-light-induced dehydrogenation of dihydroquinolinones via the combination of energy transfer and hydrogen atom transfers

Jin Feng, Hanguang Tang, Hao Guo* and Aishun Ding*

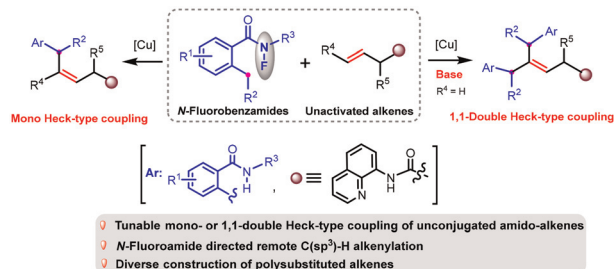
1189



Mechanochemical decarbonylative transformation of the amide group into OCF₃ and CF₃ functionalities under ruthenium catalysis

Satenik Mkrtchyan,* Vishal B. Purohit, Oleksandr Shalimov, Michał Jakubczyk, Vaibhav D. Prajapati, Ronak V. Prajapati, Jiří Zapletal, Yevhen Karpun, Vitaliy Yepishev, Gabriela Addová, Juraj Filo, Elena Kupcová, Barbora Benická, Jarmila Kmeťová and Viktor O. Iaroshenko*

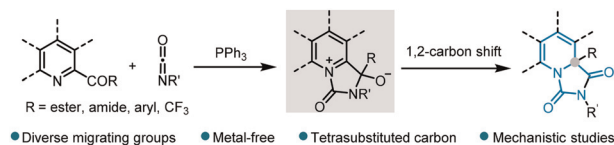
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Tunable mono- or 1,1-double Heck-type coupling reaction of unconjugated amido-alkenes with remote benzylic C(sp³)-H of N-fluorobenzamides

Tianyu Lu, Weixing Chang, Lingyan Liu* and Jing Li*

1206



Cyclizative dearomative rearrangement of pyridines with isocyanates

Xing-Zi Li, Fang-Zhou Li, Zi-Qi Wang and Hua Wu*

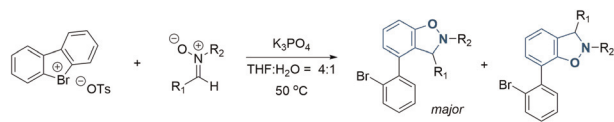


RESEARCH ARTICLES

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[3 + 2] cycloaddition between cyclic diaryl λ^3 -bromanes and nitrones towards the formation of dihydrobenzisoxazoles and an evaluation of regioisomeric bioactivity

Jing-Yi Fan, Ming-Chuan Wang, Jian-Feng Zhou, Tong-Qi Gan, Wan-Xuan Zhang,* Lin Wei* and Bin-Jie Li*

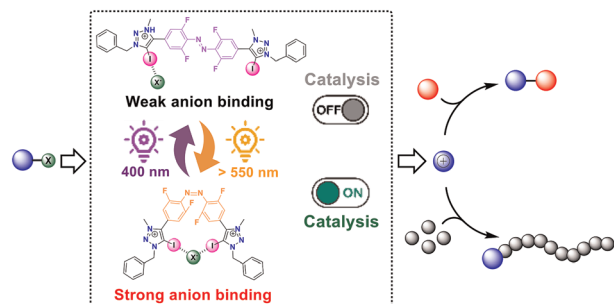


- [3+2] Cycloaddition
- Cyclic diaryl λ^3 -bromanes with nitrones
- Various dihydrobenzisoxazoles formed
- Preliminary bioactivity evaluation

1217

A reversibly photoresponsive halogen bonding receptor as a photoswitchable catalyst for an anion abstraction reaction and cationic polymerization

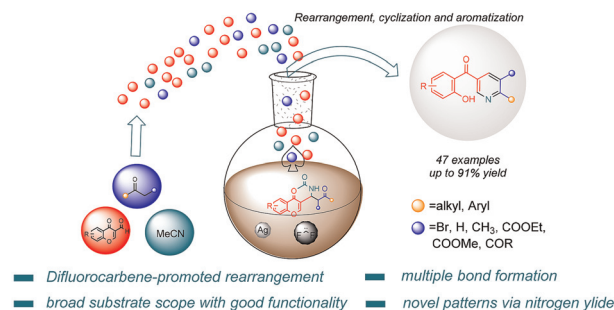
Qi Jin, Yu Hai, Li-Juan Liu,* Tian-Guang Zhan and Kang-Da Zhang*



1227

Ag-catalyzed and difluorocarbene-promoted amide-ylide rearrangement: synthesis of 3-salicyloylpyridines

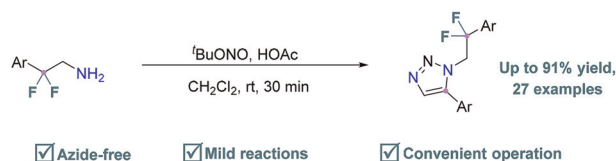
Xu Yuan, Tong Zhou, Qiaoqiao Wang, Yu Chen, Xiaohong Cheng and Yi Jin*



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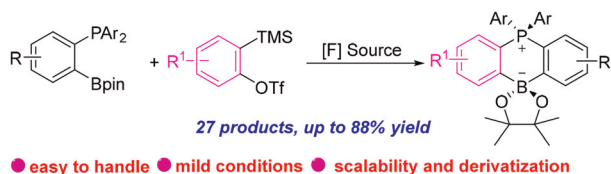
Acetic acid-catalyzed synthesis of 1,5-disubstituted 1,2,3-triazoles under azide-free conditions

Jiuling Li,* Xinyu Jia, Qiangguo Yang, Jiakang Guo, Qianhui Ren, Taichen Liu, Kai Wei and Zhenghui Kang*



RESEARCH ARTICLES

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Synthesis of cyclic phosphonium-borate compounds through reaction of benzyne and frustrated Lewis pairs

Pei Xie, Fang Zhang, Zhihua Cai,* Yating Zheng, Leifang Wu and Lin He*

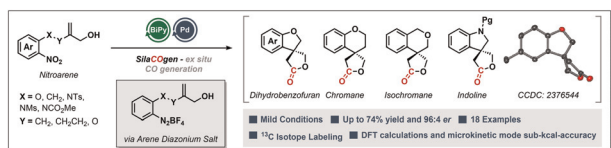
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Hierarchical amplification of chirality in anion-coordinated tetrahedral cages

Jie Zhao,* Mingli Lian, Zijian Ni, Le Yu and Dong Yang*

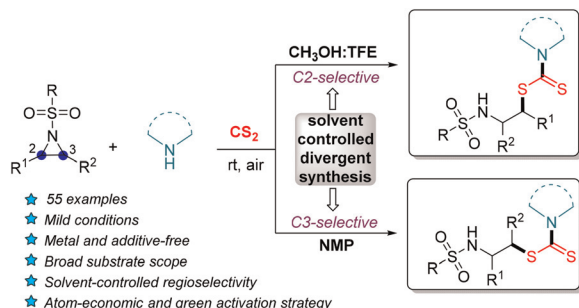
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Tandem synthesis of enantioenriched spiroactones via one-pot Heck-Matsuda reactions directly from nitroarenes

Tomaz Henrique Duarte Chorro, Clemens Kaussler, Julia V. Kolodiaznaia, Frank Jensen, Troels Skrydstrup* and Carlos Roque D. Correia*

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Solvent-controlled C2/C3-regioselective ring-opening/coupling of aziridines with amines and CS₂: synthesis of 2-aminoethyl dithiocarbamates

Wenxue Li, Xueying Yang, Man Miao, Fengkai Sun, Hui Yuan, Xiao-Bing Lan, Jian-Qiang Yu, Jian Zhang* and Zhenyu An*

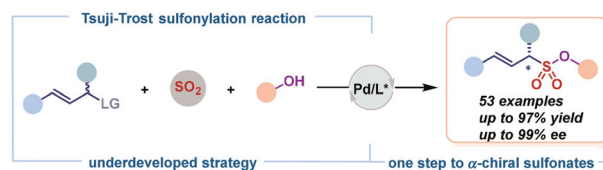


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Enantioselective synthesis of α -chiral sulfonates through palladium-catalyzed Tsuji–Trost sulfonylation with sulfur dioxide

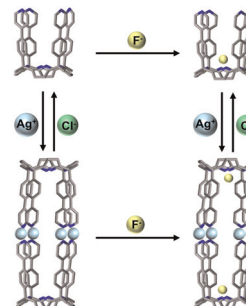
Xiaochun He, Fei Zhou, Qingqing Wang, Xiaohong Wang, Zhiqian Chang, Xuemei Zhang* and Zhong Lian*



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An Ag(I)-linked bis-calix[4]pyrrole molecular capsule and its selective recognition of fluoride anions

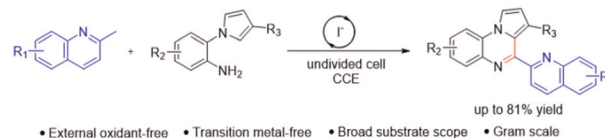
Xiaolong Chen, Zhiye Zheng, Shunfeng Peng, Ying Guo, Ying Gao, Chenxing Guo, Jonathan L. Sessler and Hongyu Wang*



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Synthesis of pyrrolo[1,2-*a*]quinoxalines via an electrochemical C(sp³)–H functionalization

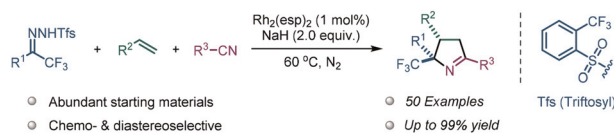
Sijie Peng, Tong Li, Kai Li, Qi Sun* and Zhiyong Wang*



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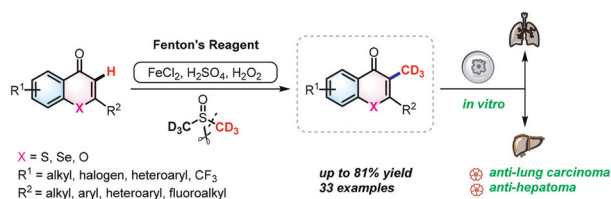
Rhodium-catalyzed [3 + 2] cycloaddition of *in situ* generated nitrile ylides with alkenes: a route to quaternary 2-trifluoromethyl-1-pyrrolines

Caicai He, Linxuan Li, Shuang Li, Hongzhu Chen, Hongru Zhang, Yong Wu, Xiaolong Zhang,* Paramasivam Sivaguru, Murali Karunanidhi and Xihe Bi*



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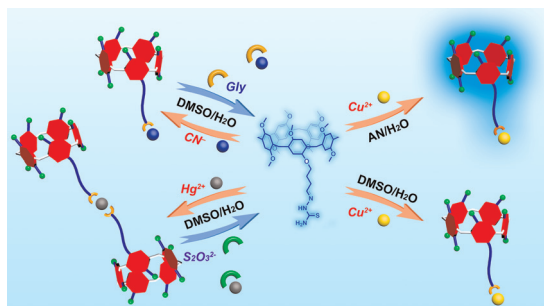
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Synthesis and biological studies of 3-trideuteromethylated chromones and their heteroatom analogues

Kaiyue Yang, Dongke Zhang, Ce Yang, Xueyan Yang, Jiaxin He, Haofeng Shi, Zichuan Liu* and Yunfei Du*

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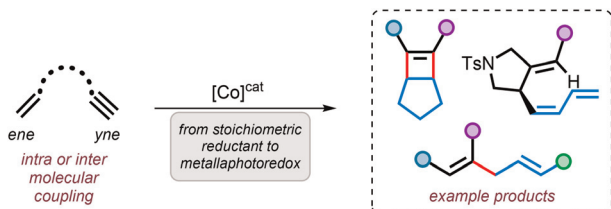


Solvent-dependent fluorescence sensing of Cu^{2+} , Hg^{2+} , and CN^- based on a thiosemicarbazone-functionalized pillar[5]arene and its applications in actual water samples and molecular logic gates

Ming-Kun Yang, Yan Chen, Suo-Luan Zhou, Cheng-Nuo Hu, Jun-Tong Zhang, Yun-Han Yang* and Li-Juan Yang*

HIGHLIGHT

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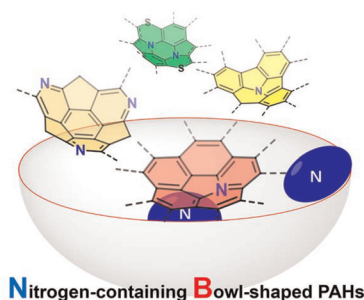


From conventional to dual Co/photoredox mediated reductive coupling of alkynes and alkenes

Balázs L. Tóth, Stephanie G. E. Amos and Arjan W. Kleij*

REVIEWS

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Nitrogen-containing polycyclic aromatic hydrocarbons (PAHs) with bowl-shaped structures: synthesis, architecture, and applications

Xu-Lang Chen,* Si-Qian Yu, Jia-Qi Liang, Xiaohuan Huang* and Han-Yuan Gong*



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Recent advances in the application of calcium(II) triflimide in organic synthesis

Haoran Li, Minyao Kuang, Yuwei Liu, Wei Yi* and Shengdong Wang*

