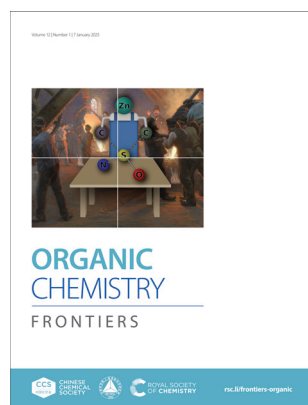


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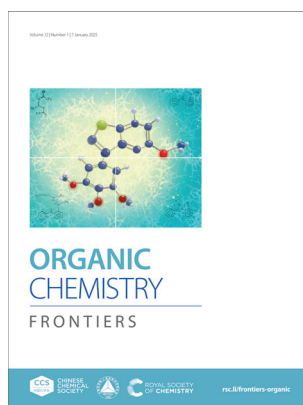


Cover

See Edgars Suna *et al.*, pp. 14–23.

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Acknowledgment: Cover art created by Dzonatans Melgalvis, based on The Iron Foundry by P. S. Krøyer.



Inside cover

See Olivier Provot, Christine Tran, Abdallah Hamze *et al.*, pp. 24–32.

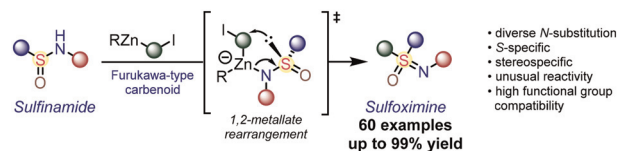
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S-Alkylation of sulfinamides with Zn-carbenoids: expanding stereoselective sulfoximine synthesis beyond NH derivatives

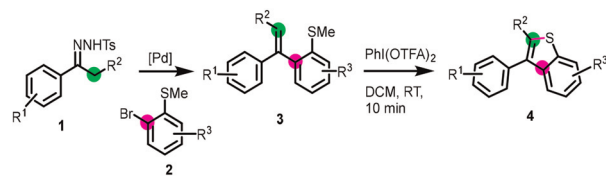
Glebs Jersovs, Dzonatans Melgalvis, Artis Kinens, Pavel A. Donets and Edgars Suna*



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PIFA-mediated cyclization of methyl(2-(1-phenylvinyl)phenyl)sulfane for the concise, flexible, and scalable *de novo* synthesis of C3-arylated benzo[*b*]thiophenes

Xinya Liu, Olivier Provot,* Christine Tran,* Jean François Soulé and Abdallah Hamze*



⊗ Mild condition for the cyclization step ⊗ Access to C3 arylated benzothiophenes ($R^2 = H$)
 ⊗ Access to disubstituted 2,3 benzothiophenes ($R^2 = Me, cycle$)



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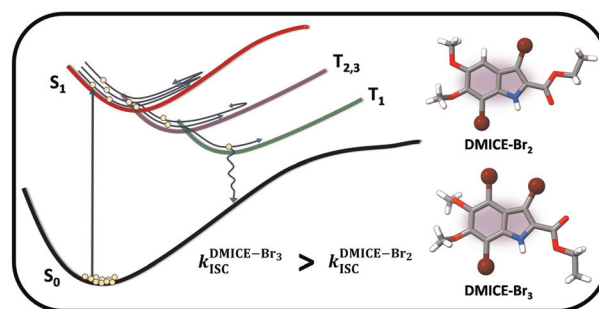
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Probing intersystem crossing in multi-brominated eumelanin through transient absorption and surface hopping dynamics

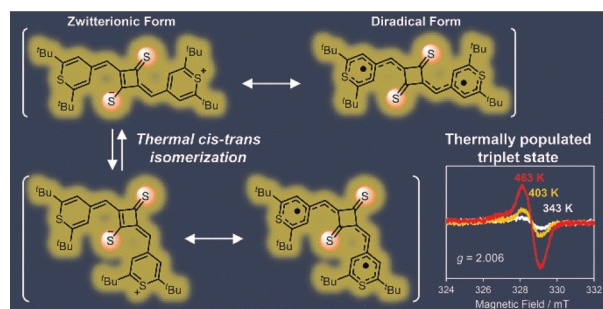
Kavya Vinod, Lukhmanul Hakeem K., Diana Thomas, Pallavi Panthakkal Das and Mahesh Hariharan*



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Intermediate diradical character and thermal *cis-trans* isomerization of near-infrared absorbing thionated squaraine dyes

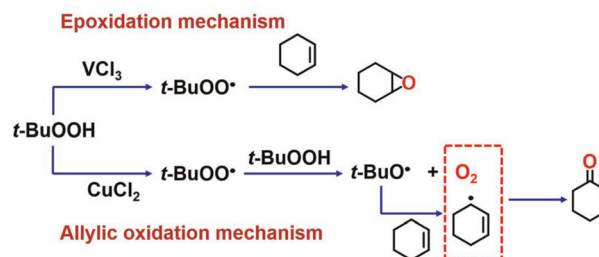
Taishi Oka, Takeshi Maeda,* Daisuke Sakamaki, Naoya Suzuki, Shigeyuki Yagi, Shintaro Kodama and Hideki Fujiwara*



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Unravelling the different pathways of cyclohexene oxidation via a peroxy radical generated from *tert*-butyl hydroperoxide (TBHP) by various metal salts

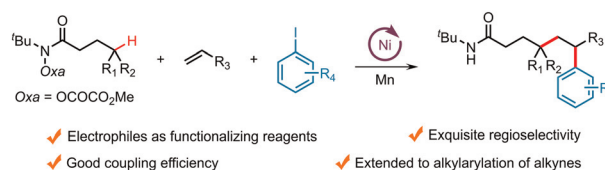
Lu-Jian Zhou, Xiao-Hui Liu,* Han-Wen Zhang, Can Xue, Han-Kang Zhong and Xian-Tai Zhou*



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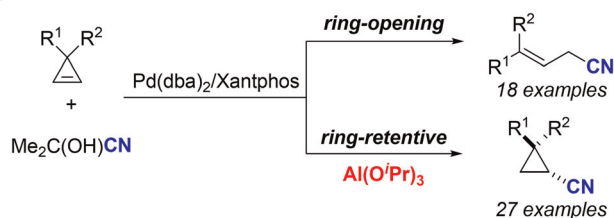
Nickel-catalyzed reductive 1,2-alkylarylation of alkenes via a 1,5-hydrogen atom transfer (HAT) cascade

Xi Chen, Qiang Wang, Xiao-Ping Gong, Rui-Qiang Jiao, Xue-Yuan Liu* and Yong-Min Liang*



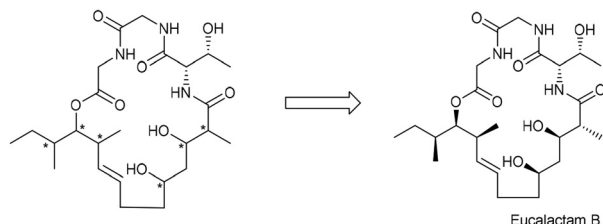
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**Lewis acid-controlled Pd-catalyzed chemodivergent hydrocyanation of cyclopropenes**

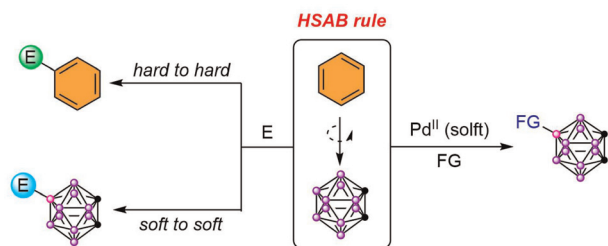
Rongrong Yu, Song-Zhou Cai and Xianjie Fang*

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**Synergy of prediction rule and total synthesis in solving the stereochemical puzzle of eucalactam B**

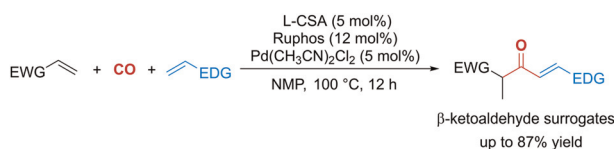
Chenqi Wang, Junyang Liu* and Tao Ye*

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**HSAB theory guiding electrophilic substitution reactions of *o*-carborane**

Yan Wang, Yi-Ge Li, Feijing Chen, Yan-Na Ma* and Xuenian Chen*

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**Palladium-catalyzed hydrocarbonylative cross-coupling with two different alkenes**

Yi Chen, Jianing Wu, Yongzheng Ding* and Hanmin Huang*

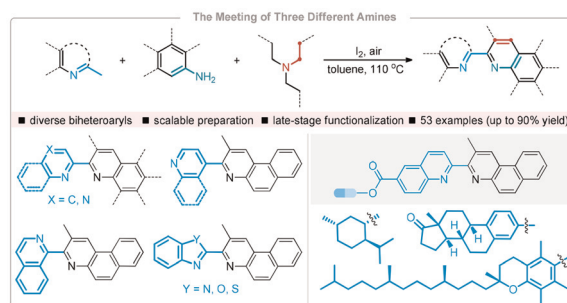


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I₂-Promoted oxidative annulation of three different amines to access diverse biheteroaryls

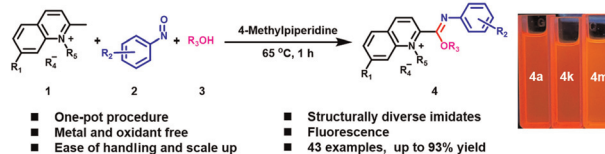
Guangping Fan, Penghui Cao, Fang Bai, Yanyan Yin, Xueyan Hou, Yani Liu, Zhenzhen Xing, Yanhui Wang, Tangqiang Sun* and Qinghe Gao*



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Facile one-pot synthesis of novel imidates as multifunctional organic fluorescent materials

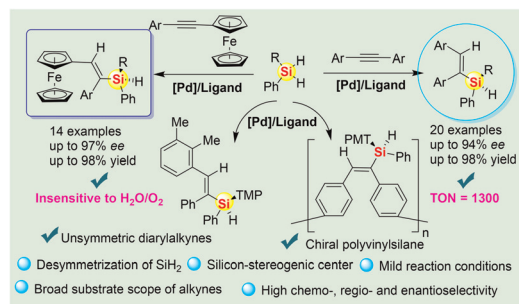
Feng-Ting Liu, Shuo Wang, Yong-Shun Chen, Jun-Ying Miao, Bao-Xiang Zhao* and Zhao-Min Lin*



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General ppm-level Pd-catalysed asymmetric diarylalkyne hydrosilylation to access structurally diverse Si-stereogenic vinylsilanes

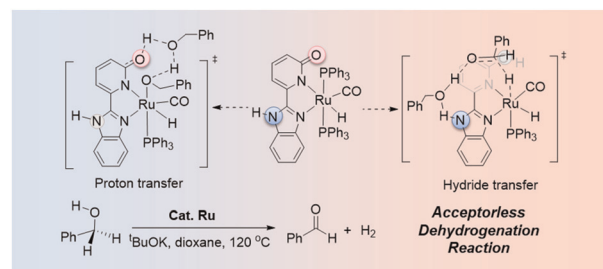
Heng Xu, Han-Xiao Yu, An-Jiu Wen, Fang-Ying Ling, Fei Ye, Li Li, Fuk Yee Kwong and Li-Wen Xu*



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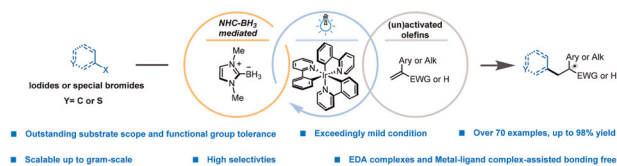
Mechanistic insight into the dehydrogenation reaction catalyzed by an MLC catalyst with dual ancillary ligand sites

Gui-Xiang Zhou and Cheng Hou*



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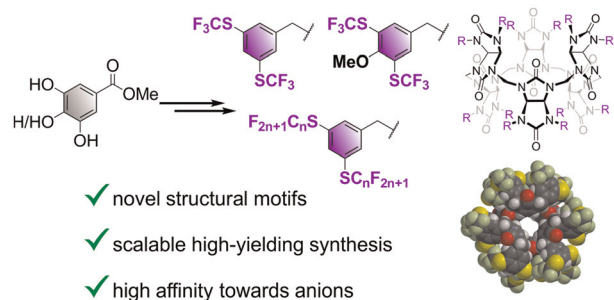
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Photocatalytic arylation/alkylation of olefins/alkynes *via* halogen-atom transfer mediated by NHC-BH₃

Xinhan Li, Yao Zhong, Fengsong Tan, Yusong Fei, Xiaohan Zhao, Jianbin Xu* and Baomin Fan*

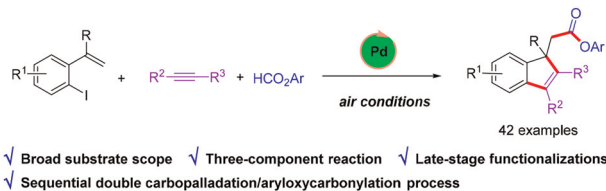
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Synthesis of bambusurils with perfluoroalkylthiobenzyl groups as highly potent halide receptors

Matuš Chvojka, Hennie Valkenier* and Vladimír Šindelář*

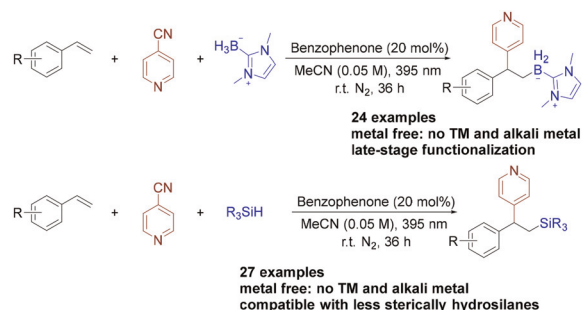
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Palladium-catalyzed synthesis of indene-1-acetates *via* sequential double carbopalladation and aryloxyacylation

Fei Sun, Yiyi Zheng, Zhongyao Jiang, Mingxia Wu, Zeng Lv, Hongsen Ji and Xin-Xing Wu*

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Metal-free visible-light-induced borylative/silylative pyridylation of vinylarenes

Yiting Zhou and Bin Liu*

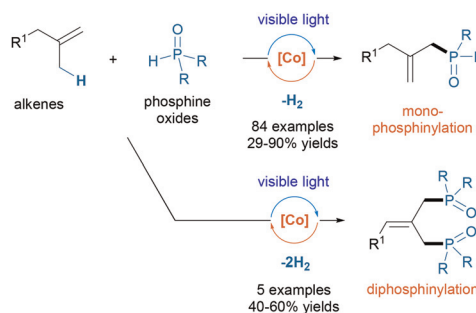


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Photoinduced cobaloxime catalysis for allylic mono- and diphosphinylation of alkenes with hydrogen evolution

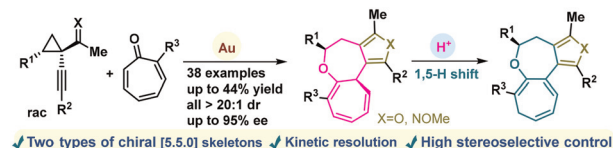
Aijun Zhang, Miao-Miao Li,* Lei Guo, Huaixiang Yang, Jiefei Guo, Da Xu and Wei Ding*



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Stereoselective access to furan-fused [5.5.0] bicyclic heterocycles enabled by gold-catalyzed asymmetric [8 + 4] cycloaddition

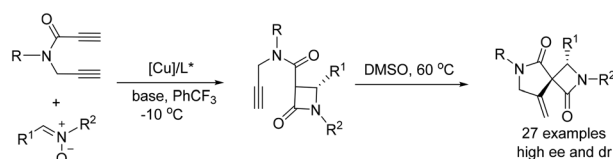
Xunhua Wang, Jianhua Wang* and Xiaoxun Li*



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A two-step Kinugasa/Conia-ene-type sequential reaction for the asymmetric synthesis of 8-methylene-2,6-diazaspiro[3.4]octane-1,5-diones

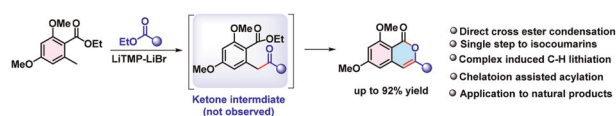
Shanyue Li, Qicai Ma, Bohua Wu, Haowen Ma, Wei Zhou* and Qian Cai*



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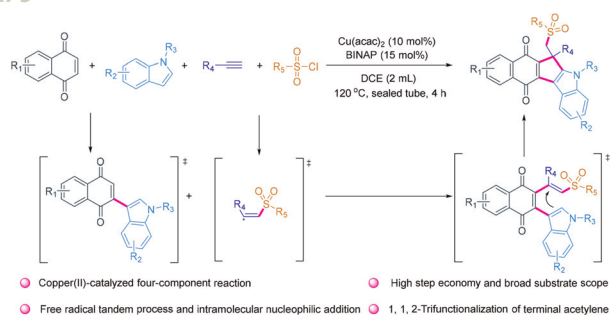
LiTMP-LiBr complex-induced lateral lithiation and cross ester condensation: direct access to isocoumarins from 2-methoxy *o*-toluate esters

Mintu Rehman, Sajib Daimary, Rasajna Madhusudhana and Rajendar Goreti*



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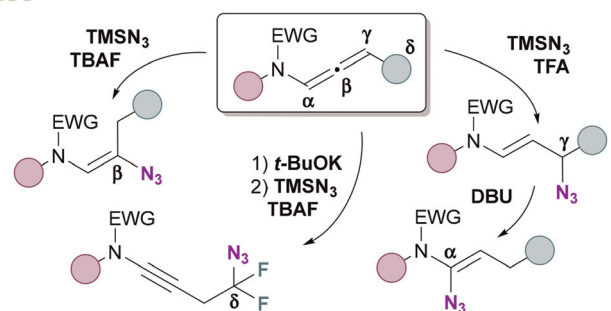
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Copper(II)-catalyzed synthesis of sulfonyl-functionalized quinone-fused cyclopenta[*b*]indoles via four-component cascade annulation

Hong Xu, Jie Liao, Fei Ren, Chuan-Rong Zhou, Xiao-Zhuo Liu, Yao Xiao, Dong-Wei Hang, Fuyu Li, Bei Wang* and Ji-Yu Wang*

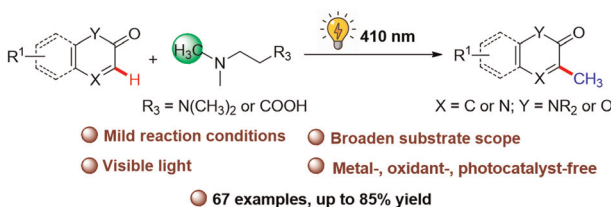
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Regio- and stereoselective azidation of activated *N*-allenamides: an entry to α , β , γ and δ -amido-azides

Dorian Schutz, Maxime Hourtoule and Laurence Miesch*

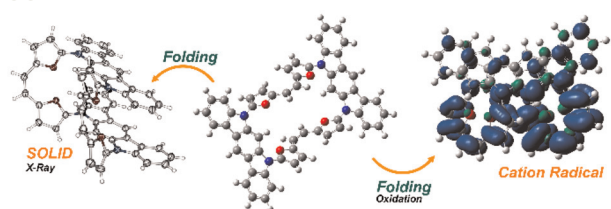
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Catalyst-free C–H methylation of heteroarenes enabled by electron donor–acceptor complex photoactivation

Jiayang Wang, Baoer Shao,* Haixia Ge, Huiyu Xue, Xiangyuan Ding, Yuqi Li and Peiyao Sheng

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Folding of a dynamic macrocyclic system to stabilize its cation radical state

Arnab Dutta, Krzysztof Dzieszowski, Marco Farinone, Łukasz Orzeł, Krzysztof Kruczata, Monika Kijewska and Miłosz Pawlicki*

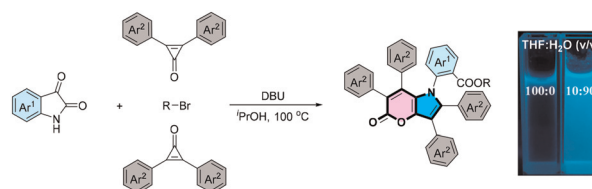


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Facile single-step synthesis of pentaaryl-substituted pyrano[3,2-*b*]pyrrol-5(1*H*)-ones showing aggregation-induced emission

Yongfeng Wang, Ruijun Chu, Yanxiao Wang, Mengyuan Zhou, Yuan Chen, Cheng Xu,* Jingyu Sun and Guodong Yin*

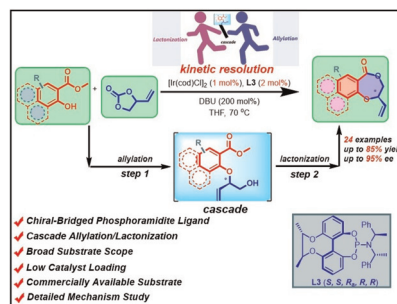


- Novel heterocyclic AIEgens
- Functional group tolerance and simplicity of operation
- >30 examples, up to 92% yield
- Easy for structural modification

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Iridium-catalyzed asymmetric cascade allylation/lactonization of methyl salicylates: enantioselective construction of chiral benzodioxepinones

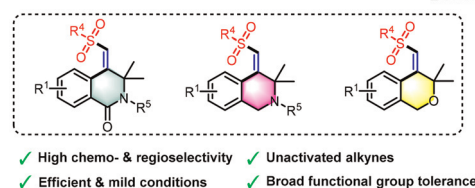
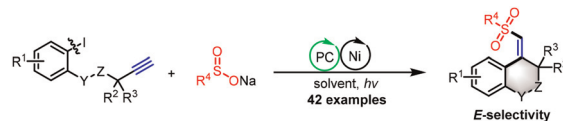
Bendu Pan, Yunru Wu, Yaqi Zhang, Xiaobo He, Long Jiang and Liqin Qiu*



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Stereocontrolled synthesis of heterocycles from unactivated alkynes by photoredox/nickel dual-catalyzed cyclization

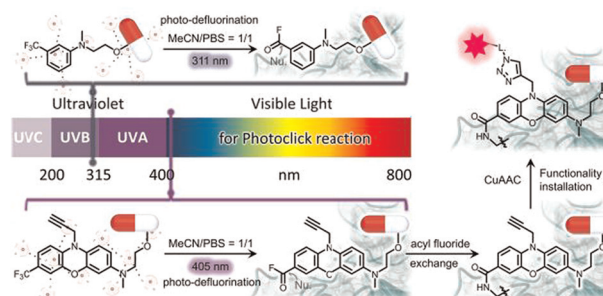
Bo-Rong Leng, Feng Yang, Jin-Lian Bai, Yu-Wen Huang, Qing-Quan Liu,* Ping Wei, De-Cai Wang* and Yi-Long Zhu*



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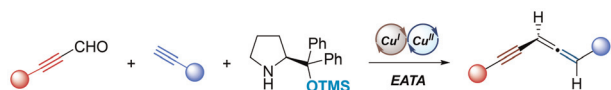
Visible-light responsive defluorination-acyl fluoride exchange for photoclick labeling based on phenoxazine chromophores

Lijun Deng, Sitong Li, Cefei Zhang, Yuqiao Zhou, Zhishan Su,* Changwei Hu, Xiaohu Zhao and Zhipeng Yu*



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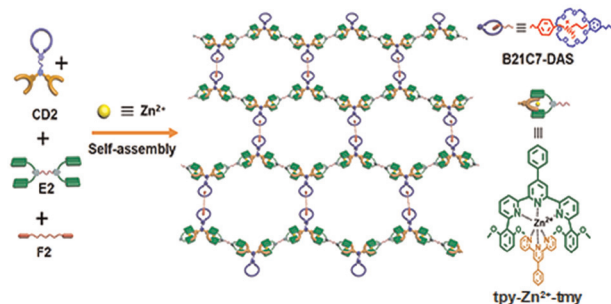


- High efficiency, enantio- and regioselectivity
- Broad substrate scope (34 examples)
- Applicable in the late-stage modification

Magic effect of diphenylprolinol silyl ether for the enantioselective allenation of 2-alkynals

Guolin Wu, Zhen Liu, Shiwen Fan, Wenyao Li, Xue Zhang,* Hui Qian* and Shengming Ma*

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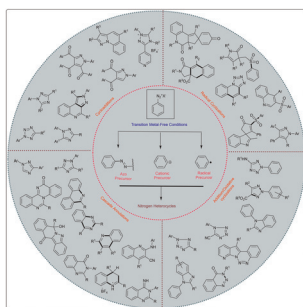


Hierarchical supramolecular assembly based on metal coordination of asymmetric ligand pairs and host-guest recognition

Hui Li,* Yan Dong, RiQiang Li, Yan Zhang, Shengyong Liu and Wei Tian*

REVIEWS

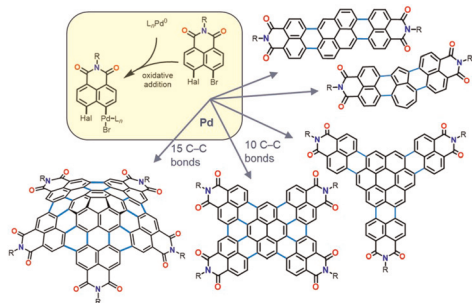
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Transition-metal-free approaches to access N-heterocycles and valuable intermediates from aryldiazonium salts

Mani Ramanathan* and Ziad Moussa*

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Convergent synthetic approaches to polycyclic aromatic dicarboximides

Kazutaka Shoyama* and Frank Würthner*

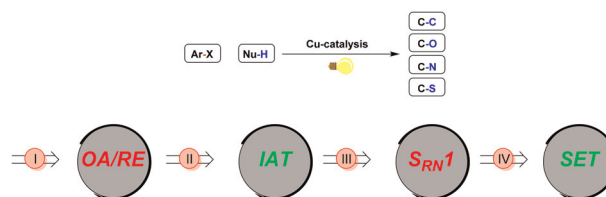


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Photoinduced Ullmann-type cross-coupling reactions: mechanistic insights and emerging challenges

Ahmed Th. Abdulghaffar, Haolong Zhang, Qiankun Zhang, Qian Tong, Ruirui Tian, Hao Xu,* Jiawei Yang* and Yuanqing Xu*



CORRECTIONS

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Correction: Calix[4]pyrrole bis-crowns as ion pair receptors: cation selectivity modulated by counter anions

Ju Ho Yang, Ju Hyun Oh, Seung-Ryong Kwon and Sung Kuk Kim*

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Correction: Hierarchical supramolecular assembly based on metal coordination of asymmetric ligand pairs and host-guest recognition

Hui Li,* Yan Dong, RiQiang Li, Yan Zhang, Shengyong Liu and Wei Tian*

