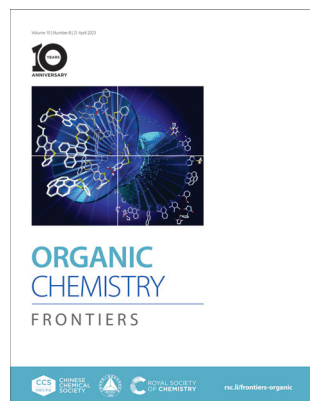


### IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 10(8) 1869–2116 (2023)



#### Cover

See Hideto Ito,  
Kenichiro Itami *et al.*,  
pp. 1880–1889.

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1880.

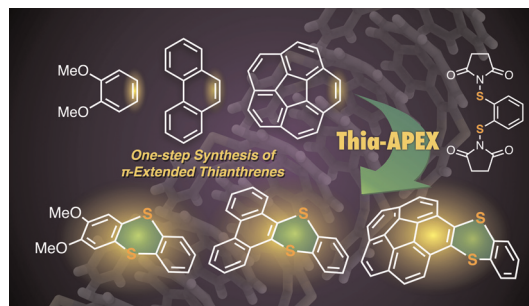
The artwork was created by  
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### RESEARCH ARTICLES

1880

#### One-step synthesis of polycyclic thianthrenes from unfunctionalized aromatics by thia-APEX reactions

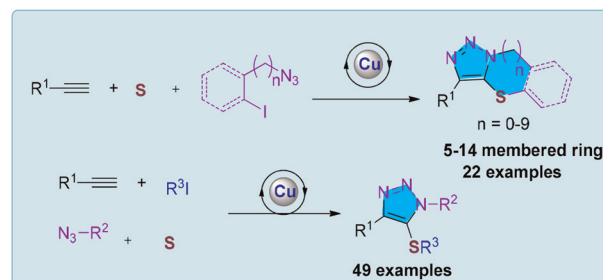
Kou P. Kawahara, Hideto Ito\* and Kenichiro Itami\*



1890

#### Copper(I)-catalyzed multicomponent interrupted click reaction: modular synthesis of triazole sulfides from elemental sulfur

Pengfei Sun, Weiguo Wang, Jilong Lai, Huang Yan,  
Chen-Ho Tung and Zhenghu Xu\*



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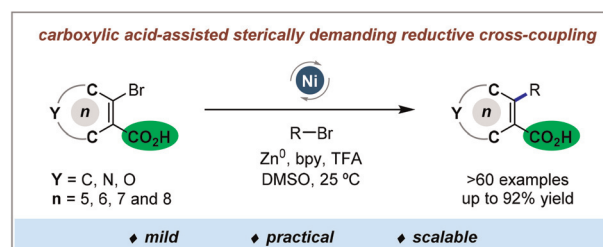


## RESEARCH ARTICLES

1897

**Carboxylic acid-assisted sterically demanding reductive cross-coupling between cycloalkenyl and alkyl bromides**

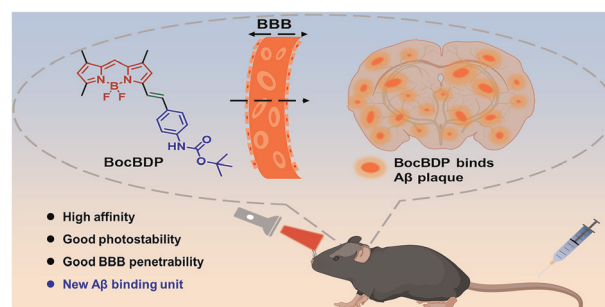
Jinglin An, Xue Zhou, Yifan Zhang, Zhenfei Ye, Qianyou Guo, Hao Song, Zhenlei Song,\* Xiao-Yu Liu and Yong Qin\*



1903

**A BODIPY-based probe for amyloid-β imaging *in vivo***

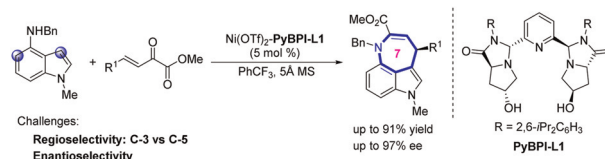
Mingguang Zhu, Guoyang Zhang, Ziwei Hu, Chaofeng Zhu, Yixiang Chen, Tony D. James,\* Lijun Ma\* and Zhuo Wang\*



1910

**Asymmetric synthesis of 7-membered-ring-bridged 3,4-fused tricyclic indoles via Friedel–Crafts alkylation/annulation**

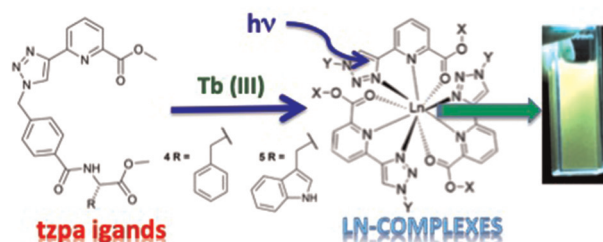
Bai-Yu Xue, Chen-Ying Hou, Xiao-Bing Wang, Ming-Sheng Xie\* and Hai-Ming Guo\*



1915

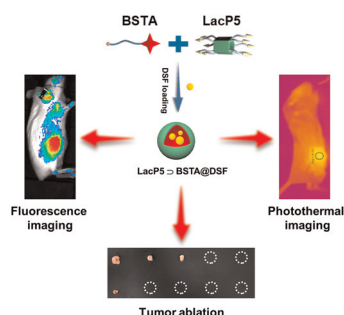
**Synthesis of α-amino acid derived (1,2,3-triazol-4-yl)-picolinamide (tzpa) ligands and their corresponding luminescent Tb(III) complexes**

Isabel N. Hegarty, Chris S. Hawes and Thorfinnur Gunnlaugsson\*



## RESEARCH ARTICLES

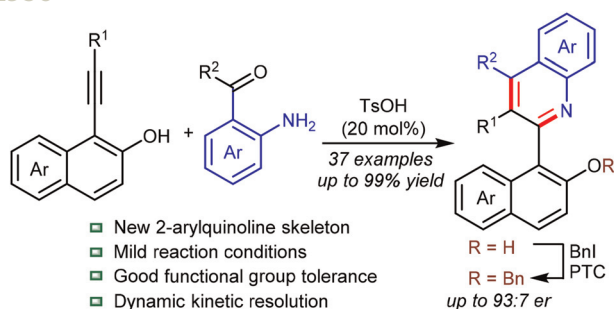
1927



### A supramolecular near-infrared nanophotosensitizer from host-guest complex of lactose-capped pillar[5]arene with aza-BODIPY derivative for tumor eradication

Jiaxuan Li, Xiaomeng Lv, Jiahui Li, Wenjuan Jin, Zelong Chen, Yafei Wen, Zhichao Pei and Yuxin Pei\*

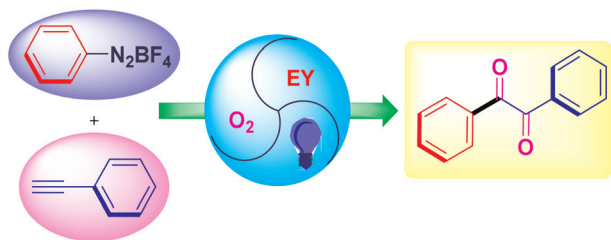
1936



### Synthesis of quinol-type heterobiaryls via an acid-catalyzed heteroannulation of alkynes and o-aminobenzaldehydes

Qing-Song Jian, Bo-Bo Gou, Shao-Jie Wang, Huai-Ri Sun, Atif Sharif, Yong-Qiang Wang, Ling Zhou\* and Jie Chen\*

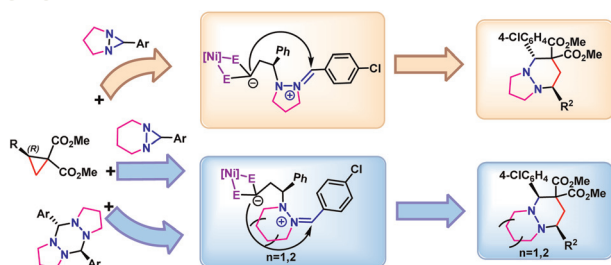
1942



### Transition metal-free, photocatalytic arylation and dioxygenation for vicinal diketone synthesis using alkynes and arene diazonium salts

Baoli Zhao, Xiaoting Yin, Haifeng Li, Kai Cheng\* and Jie-Ping Wan\*

1948



### A DFT study of Ni-catalyzed (3 + 3)-annulation between donor-acceptor cyclopropanes and diaziridines

Song-Shan Dai, Xiao-jiao Yang, Ran Fang,\* Alexander M. Kirillov and Lizi Yang\*

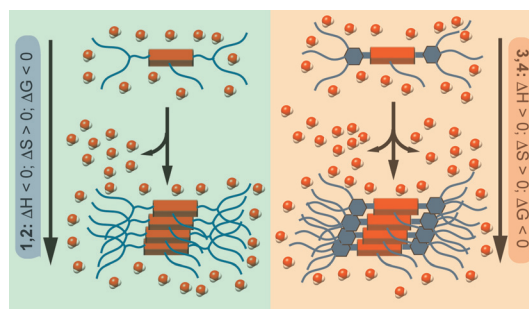


## RESEARCH ARTICLES

1959

### Thermodynamics of the self-assembly of *N*-annulated perylene bisimides in water. Disentangling the enthalpic and entropic contributions

Manuel A. Martínez, Daniel Aranda, Enrique Ortí, Juan Aragón\* and Luis Sánchez\*



1968

### Photochemical difluoromethylation of alkynes: synthesis of CF<sub>2</sub>H-substituted seven-membered dioxodibenzothiazepines and dibenzazepines

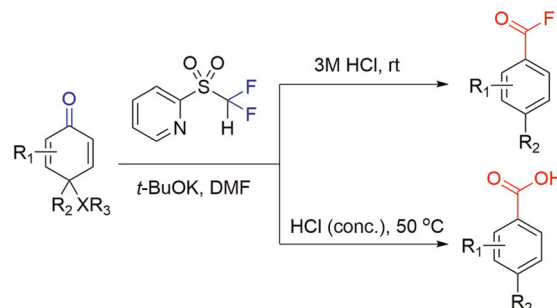
Xiaoyu Chen, Yang Geng, Bo Liu, Yu Zhu, Dapeng Zou,\* Yangjie Wu\* and Yusheng Wu\*



1975

### Preparation of benzoyl fluorides and benzoic acids from phenols via a dearomatization–rearomatization strategy

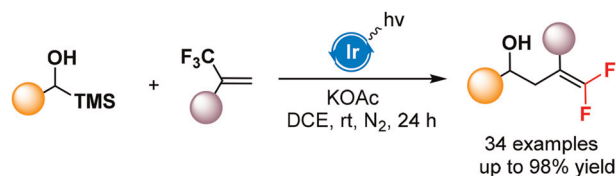
Meixian Yang, Xinyue Huang, Wenjun Miao, Lan Yi, Jiajing Cai, Zhenghuan Zhao, Jia He\* and Dachuan Qiu\*



1981

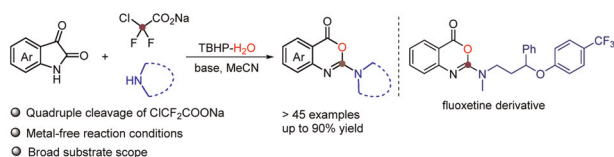
### Visible-light-promoted defluorinated alkylation of trifluoromethyl alkenes initiated by radical [1,2]-Brook rearrangement: facile synthesis of gem-difluoro homoallylic alcohol derivatives

Tao Qin, Chunlu Xu, Ge Zhang\* and Qian Zhang



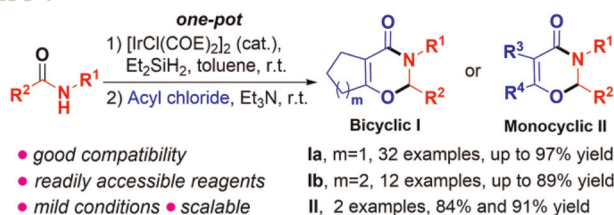
## RESEARCH ARTICLES

1988


**TBHP-promoted multicomponent reaction to access 2-aminobenzoxazinones using sodium chlorodifluoroacetate as the C1 synthon**

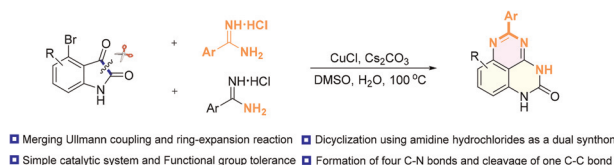
Huijuan Li, Yongfeng Wang, Cheng Xu,\* Jingwen Zou, Yaxuan Wu and Guodong Yin\*

1994


**One-pot synthesis of 1,3-oxazin-4-ones through an Ir-catalyzed mild formal condensation reaction of secondary amides with acyl chlorides**

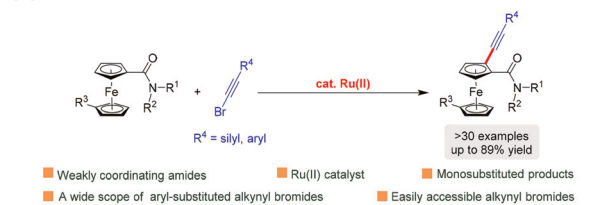
Si-Jia Yu, Jie Li, Jian-Liang Ye\* and Pei-Qiang Huang\*

2002


**Merging Ullmann-type cyclization and ring-expansion: a facile assembly of pyrimidine-fused quinazolinones by copper catalysis**

Zhen-Wei Sun, Na Luo, Xiang Zhang, Wen-Jun Tuo, Xiao-Qiang Hu\* and Feng-Cheng Jia\*

2007


 **$\text{Ru(II)}$ -catalyzed C–H alkynylation of ferrocenes with bromoalkynes directed by carboxamide groups**

Ru-Yuan Zhao, Jing Zhang, Rui-Han Niu, Jin-Heng Li\* and Bo Sun\*



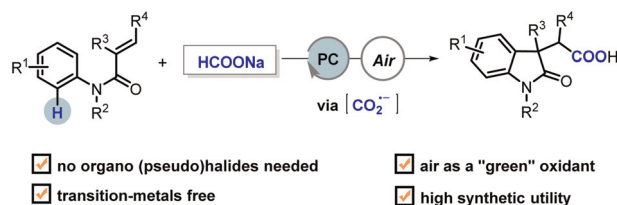


## RESEARCH ARTICLES

2013

**Transition-metal free oxidative carbo-carboxylation of alkenes with formate in air**

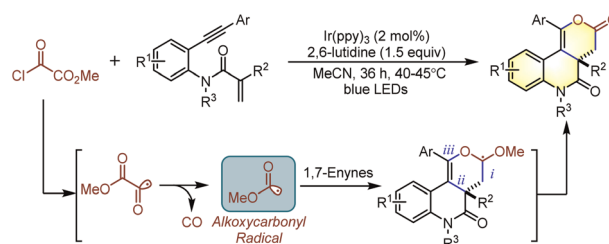
Pei Xu, Hui Xu, Sai Wang, Tian-Zi Hao, Si-Yi Yan, Dong Guo\* and Xu Zhu\*



2018

**Visible-light-induced alkoxy-carbonylation/cyclization of 1,7-enynes: synthesis of dihydropyranones containing all-carbon quaternary centers**

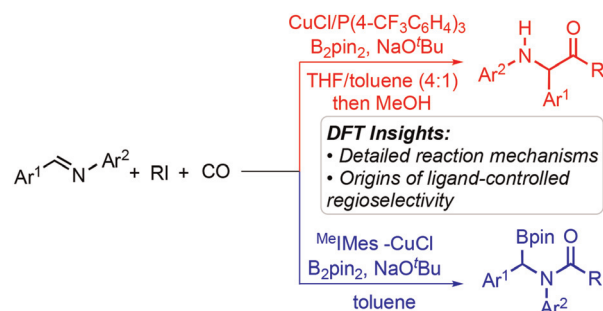
Jian-Qiang Chen, Qi Chen, Baofu Chen\* and Jie Wu\*



2024

**Mechanism and origins of ligand-controlled regioselectivity of copper-catalyzed borocarbonylation of imines with  $\text{B}_2\text{pin}_2$  and alkyl iodides: a computational study**

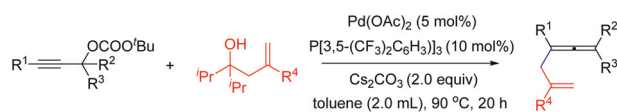
Xinyi Song, Hongli Wu, Jinjin Yang, Wentao Zhao\* and Genping Huang\*



2033

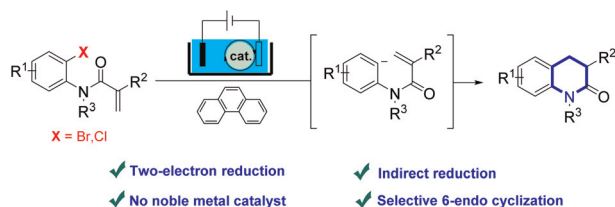
**Palladium-catalyzed allylic allenylation of homoallyl alcohols with propargylic carbonates**

Ping-Xin Zhou,\* Murong Wang, Xiang Li, Xueyan Du, Xiaozhe Yang, Han Wang, Tangqiang Sun,\* Feng Ren\* and Yong-Min Liang



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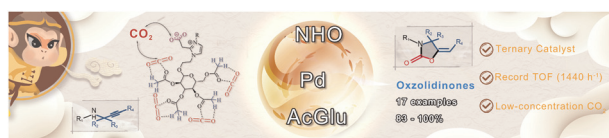
2039



### Indirect electrochemical reductive cyclization of o-halophenylacrylamides mediated by phenanthrene

Xue-Qi Zhou, Pei-Bo Chen, Qiang Xia, Ting-Kai Xiong, Xue-Jun Li, Ying-Ming Pan, Mu-Xue He\* and Ying Liang\*

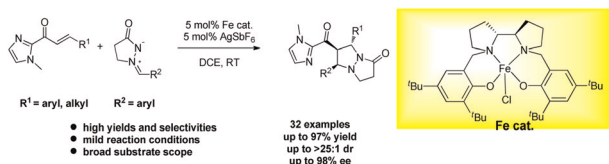
2045



### Integration of CO<sub>2</sub> capture, activation, and conversion with a ternary acetylglucosyl 2-methylimidazolium modified Pd catalyst

Zhong-Gao Zhou,\* Peng He, Jing Li, Jia Zhang, Guo-Hai Xu, Shi-Yong Zhang, Xiao-Xiao Deng, Zi-Yi Du, Guo-Tian Luo, Hong-Yu Zhen, Yi-Wang Chen and Chun-Ting He\*

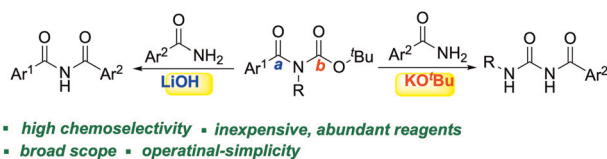
2054



### Fe-BPsalan complex-catalyzed asymmetric 1,3-dipolar [3 + 2] cycloaddition reaction of N,N'-cyclic azomethine imines with α,β-unsaturated acyl imidazoles

Hao Lu, Kai-Ge Chen, Gong-Xin Li, Kun Zhan, Hao-Yang Wang, Zhen-Jiang Xu\* and Chi-Ming Che\*

2061



### Cation-controlled chemoselective synthesis of N-arylsureas and imides via amidation of N-Boc arylamides

Jiamin Wang, Sujuan Shuai, Lishe Gan, Yongxin Luo, Huimin Jin, Lingfeng Chen, Dong Zou, Guang Liang,\* Patrick J. Walsh\* and Jie Li\*



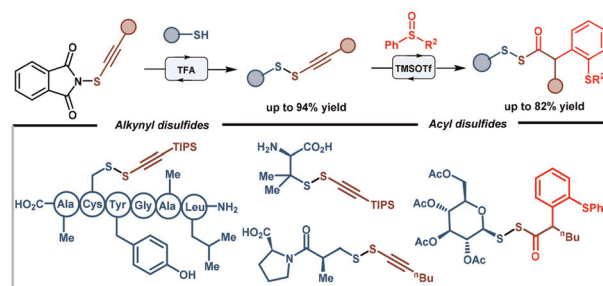


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2070

Construction of alkynyl and acyl disulfides directly through thiol-modification with *N*-alkynylthio phthalimides under acid catalysis

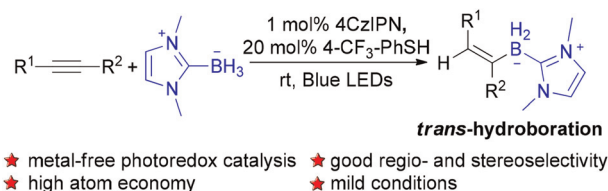
Yao-Nan Xue, Kai Feng, Jun Tian, Juan Zhang, Hong-Hong Chang and Wen-Chao Gao\*



2075

Transition metal-free radical *trans*-hydroboration of alkynes with NHC-boranes *via* visible-light photoredox catalysis

Ding-Chang Li, Jia-Hao Zeng, Yu-Hang Yang and Zhuang-Ping Zhan\*

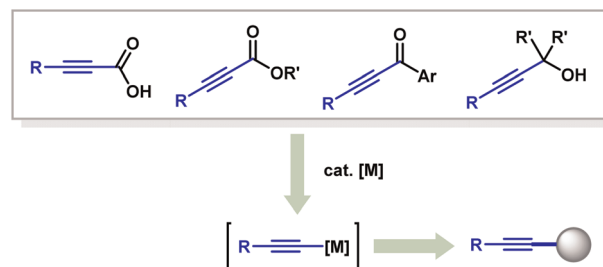


## REVIEWS

2081

Transition metal-catalyzed alkynylation reactions *via* alkynyl carbon–carbon bond cleavage

Hairui Yuan, Qi Zhou and Jianbo Wang\*



2095

## Selective preparative 'oxidase phase' in sesquiterpenoids: the radical approach

Maria Kourgiantaki, Georgia G. Bagkavou, Christos I. Stathakis\* and Alexandros L. Zografos\*

