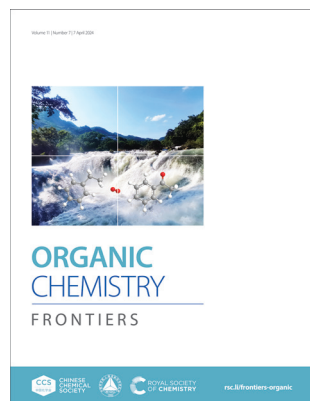


IN THIS ISSUE

ISSN 2052-4129 CODEN OCFRA8 11(7) 1899–2136 (2024)

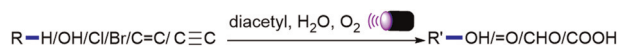


Cover

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2024, **11**, 1910.

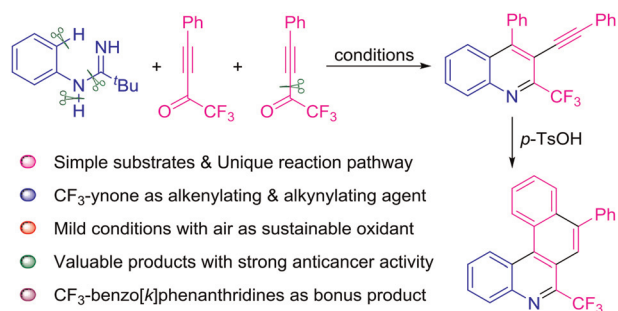
RESEARCH ARTICLES

1910

A general photoinduced oxidative strategy with
molecular oxygen in waterJianguo Gu, Hui Yang, Jinfei Deng, Dengbo Jiang,
Kaizhuo Lv, Tao Wang and Qiuli Yao*

- ✓ Solvent: H₂O
- ✓ A broad platform: 101 substrates
- ✓ Low-cost: O₂ as the oxidant

1917

Synthesis of functionalized quinolines from the
cascade reactions of *N*-aryl amidines with two
CF₃-ynones via C–H/N–H/C–N/C–C bond
cleavageHao Li, Shengnan Yan, Yuanshuang Xu, Chunhua Ma,
Xinying Zhang* and Xuesen Fan*

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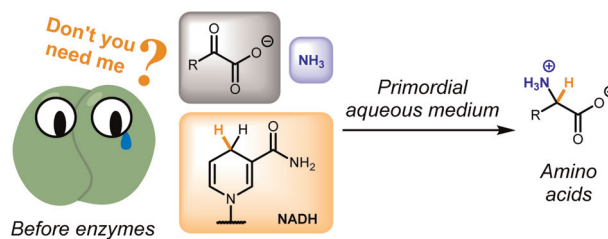
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RESEARCH ARTICLES

1924

NADH-mediated primordial synthesis of amino acids

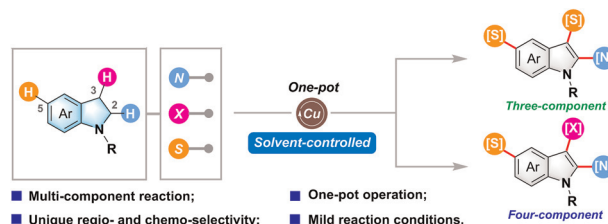
Noemí Nogal, Javier Luis-Barrera, Sonia Vela-Gallego, Fernando Aguilar-Galindo and Andrés de la Escosura*



1933

Solvent-controlled switchable multicomponent tandem oxidative triple functionalization of indolines

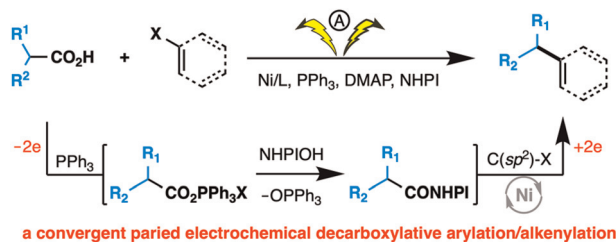
Xiaoxiang Zhang, Xiaoting Gu, Yingying Zhang, Junqiu Liao, Meilan Xu, Zhuan Zhang and Taoyuan Liang*



1941

A convergent paired electrochemical strategy for decarboxylative C(sp²)-C(sp³) bond formation

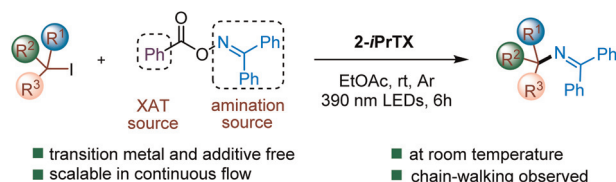
Lingjiao Li, Zijian Li, Wenxuan Sun and Chao Li*



1949

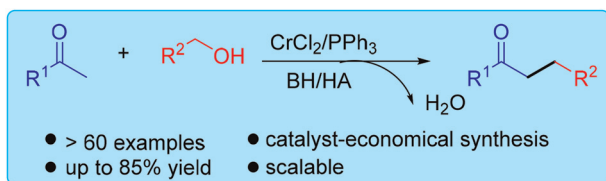
Photoinduced amination of iodoalkanes enabled by bifunctional O-benzoyl oxime

Meng-Jie Zheng, Xu-Kuan Qi, Chao Yang, Lin Guo, Yating Zhao* and Wujiong Xia*



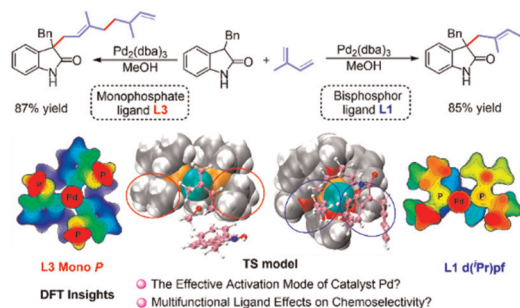
RESEARCH ARTICLES

1955


CrCl₂-catalyzed α -alkylation of carbonyl compounds via a borrowing hydrogen approach

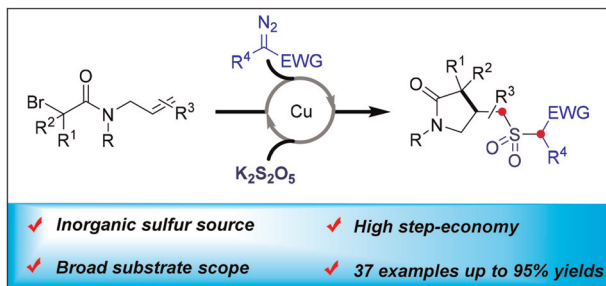
Dongyue Wei, Baojin Feng, Qing Chen, Wantong Yue, Yilei Wang and Zhihua Peng*

1963


Insights into the mechanism and origin of multifunctional ligand effects on chemoselectivity in Pd-catalyzed unnatural prenylation and geranylation of oxindoles with isoprene

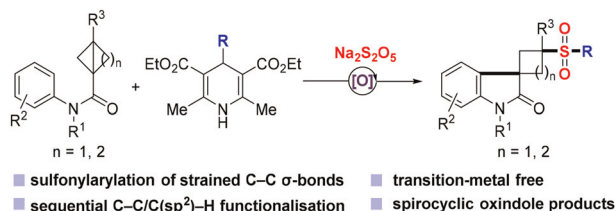
Manzhu Zhao, Haiyan Yuan* and Jingping Zhang*

1975


Alkylsulfonylation of alkenes involving copper carbene coupling: access to alkyl-alkyl sulfones

Chuan-Chong Peng, Fang Long, Rui Feng, Kai-Yi Zhang, Jin-Hui Liu and Li-Jun Wu*

1982


Oxidative sulfonylation of strained C-C σ -bonds for the synthesis of 3-spirocyclic oxindoles initiated by insertion of sulfur dioxide

Jian-Hong Fan,* Jing Yuan, Long-Jin Zhong, Yu Liu* and Ke-Wen Tang*

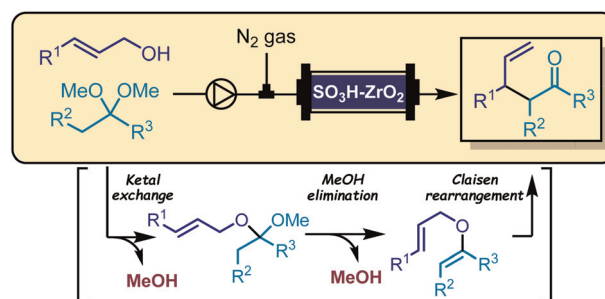


RESEARCH ARTICLES

1990

Continuous synthesis of homoallylic ketones via ketal-Claisen rearrangement using solid-acid catalysts

Kwihwan Kobayashi,* Chie Negoro, Junko Takaishi, Koichiro Masuda* and Shū Kobayashi*



1996

Access to enantioenriched dihydroquinoxalinones via Cu-catalyzed propargylic substitution

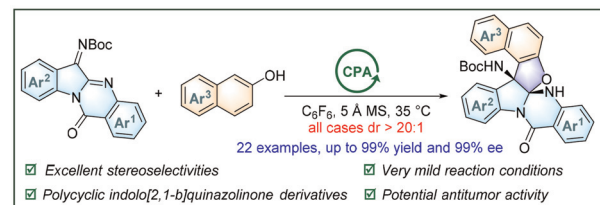
Yuxi Zhang, Xiao Shu and Wusheng Guo*



2002

Enantioselective [3 + 2] annulation of tryptanthrin-derived ketimines and 2-naphthols: access to polycyclic indolo[2,1-*b*]quinazoline derivatives

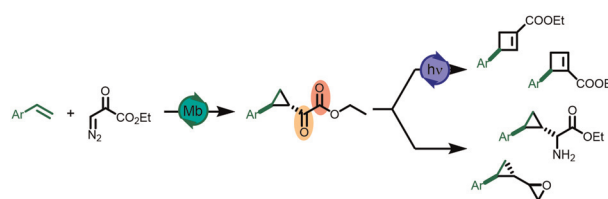
Yong You,* Guo-Ying Gan, Qun Li, Xiong-Li Liu, Yan-Ping Zhang,* Zhen-Hua Wang, Jian-Qiang Zhao and Wei-Cheng Yuan*



2008

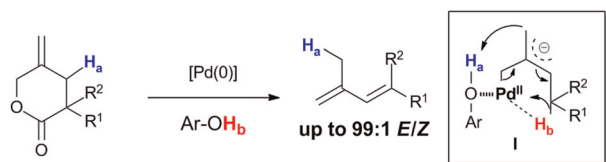
Chemoenzymatic synthesis of optically active α-cyclopropyl-pyruvates and cyclobutenates via enzyme-catalyzed carbene transfer with diazopyruvate

Raphaël Dollet, Juan D. Villada, Thomas Poisson, Rudi Fasan* and Philippe Jubault*



RESEARCH ARTICLES

2015

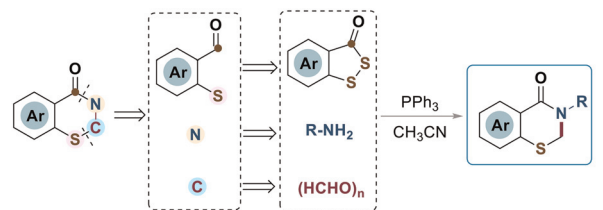


- Phenol as dual ligand and proton shuttle
- Highly stereoselective 1,3-diene
- Taming living Pd(II)-1,4-zwitterionic complex

Phenol-mediated decarboxylative proton transfer of γ -methylidene- δ -valerolactones: an approach towards (*E*)-2,4-pentadienoates

Wei Feng, Xiaoying Wu, Ran Song,* Daoshan Yang, Wen Si* and Jian Lv*

2021

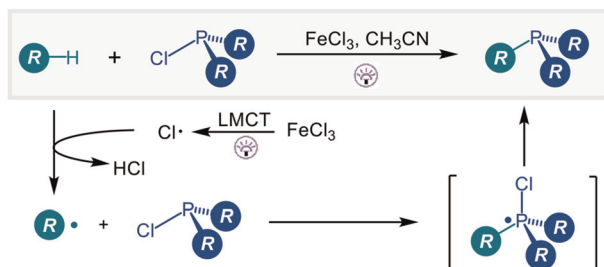


- ♦ first three-component cyclization reaction of benzo[*c*][1,2]dithiol-3-ones
- ♦ no metal reagent and oxidant
- ♦ good functional group tolerance
- ♦ unnecessary protection of inert gas
- ♦ mild conditions
- ♦ decent yields
- ♦ simple operation

Metal-free three-component tandem cyclization for modular synthesis of 2,3-dihydrobenzothiazin-4-ones

Guan Zhang, Huimin Wan, Na Dong, Antong Zhu, Yao Zhou* and Qiuling Song*

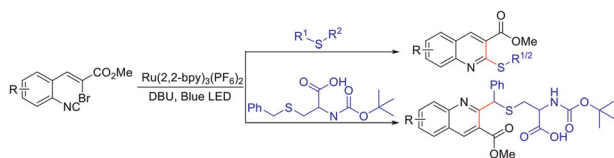
2027



Iron-catalyzed C(sp³)-H phosphorylation via photoinduced LMCT

Hongchi Liu, Kaifang Wang, Sunfeng Ye, Qiming Zhu* and Hanmin Huang*

2033



Visible light-induced radical cyclization of *o*-alkenyl aromatic isocyanides with thioethers: direct synthesis of 2-thioquinolines

Yong-Xin Liang, Yue Gong, Xue-Cen Xu, Ming Yang and Yu-Long Zhao*

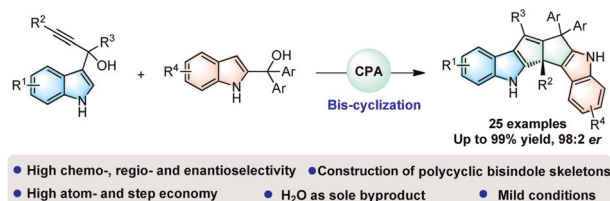


RESEARCH ARTICLES

2040

Organocatalytic asymmetric cascade bicyclization: access to chiral polycyclic bisindoles from 2-indolylmethanols and propargylic alcohols

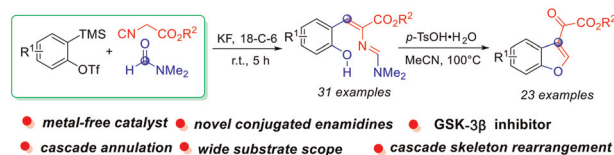
Wen-Run Zhu, Qiong Su, Xiao-Yi Deng, Ze-Long Ouyang, Jiang Weng* and Gui Lu*



2047

Modular synthesis of conjugated enamidines and cascade annulation toward benzofuran-3-oxoacetate

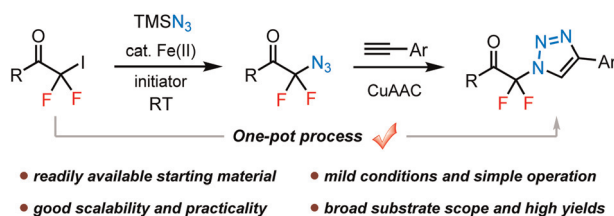
Yao Liu, Ruiqi Wang, Qinheng Zheng, Xiangguo Hu,* Fang Liu and Nan Yan*



2054

A general Fe-catalysed azidation of iododifluoroketones and its utilization for the synthesis of gem-difluoromethylenated triazoles

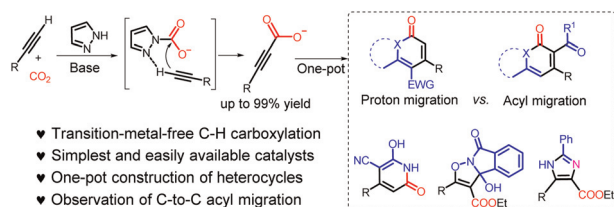
Xia Wang, Shixun Liu, Shibo Xu,* Shiguang Wu, Jingjing Wu* and Fanhong Wu*



2062

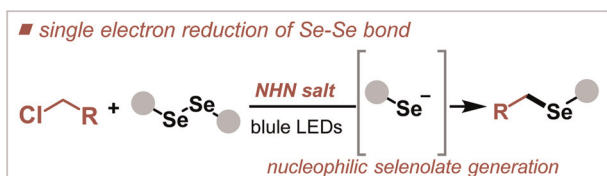
Simple pyrazoles as efficient organocatalysts for alkyne-CO₂ carboxylation and one-pot construction of heterocycles

Lin Zhang, Gen Li, En-Hui Xing, Yawei Liu, Chen Jin, Zelin Du, Yan Xu, Dawei Zhang and En-Qing Gao*



RESEARCH ARTICLES

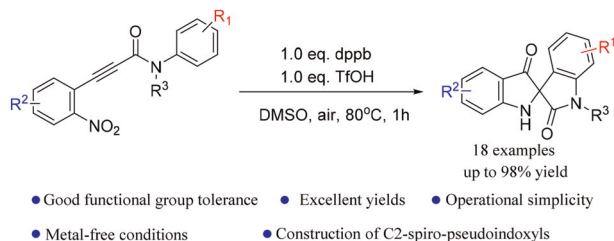
2070



Photoinduced N-heterocyclic nitrenium-catalyzed single electron reduction of Se-Se bond for the generation of nucleophilic selenolates

Chao-Shen Zhang, Kun-Quan Chen, Ling Zhou, Zhu-Sheng Yang,* Zhi-Xiang Wang* and Xiang-Yu Chen*

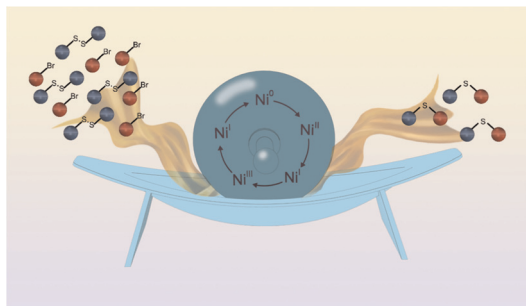
2075



dppb and TfOH promoted cascade reaction of o-nitrophenylpropiolamides to access C2-spiro-pseudoindoxyls

Qiongwen Kang, Yan Wang, Zongkang Wang, Nana Fei, Peng He, Lingkai Kong* and Yanzhong Li*

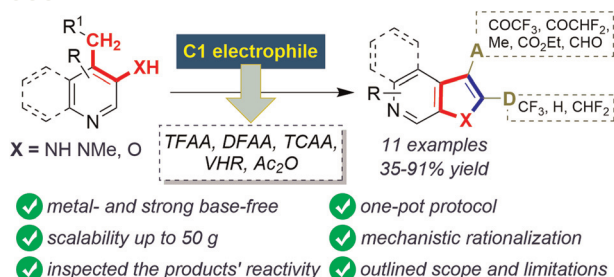
2081



A nickel-catalyzed carbon-sulfur cross-coupling reaction with disulfides enabled by mechanochemistry

Xiujia Hao, Daming Feng,* Peng Huang and Fang Guo*

2088



Synthesis of 6-azaindoles via formal electrophilic [4 + 1]-cyclization of 3-amino-4-methyl pyridines: new frontiers of diversity

Sergey P. Ivonin, Volodymyr V. Voloshchuk, Eduard B. Rusanov, Sergiy Suikov, Serhiy V. Ryabukhin* and Dmytro M. Volochnyuk*

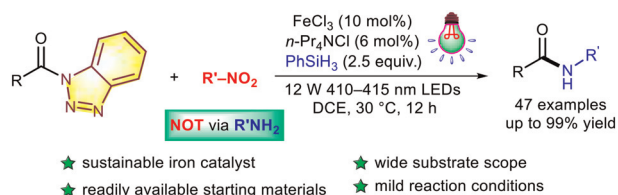


RESEARCH ARTICLES

2095

Visible-light induced FeCl_3 -catalyzed reductive transamidation of *N*-acyl benzotriazoles with nitro compounds

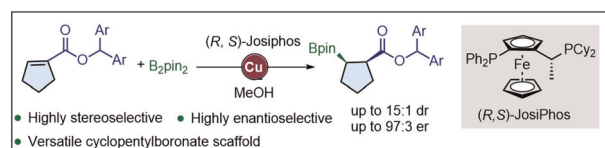
Riqian Zhu, Yang Li, Yue Shen, Mengni Pan, Wuheng Dong* and Wanfang Li*



2102

Copper catalyzed diastereoselective and enantioselective hydroborylation of cyclopentenylcarboxyesters

Yufeng Yao, Ming Huang, Chunyu Chen, Hao Zeng, Ze Li, Guo-Qiao Lai and Pinglu Zhang*

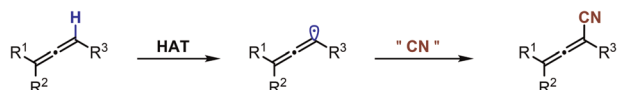


HIGHLIGHT

2108

Direct C(sp²)-H activation of allenes via hydrogen-atom transfer (HAT) in organic synthesis

Jian-Qiang Chen, Gangguo Zhu* and Jie Wu*



REVIEW

2112

Recent advances in N-heterocyclic carbene (NHC)-catalyzed fluorination and fluoroalkylation

Zefeng Jin, Fangfang Zhang, Xiao Xiao, Nengzhong Wang,* Xin Lv* and Liejin Zhou*

