

有机化学

ISSN 0253-2786

CN 31-1321/O6

http://sioc-journal.cn



QK2037280

Chinese Journal of Organic Chemistry

第40卷 第7期 Vol. 40 No. 7 2020



ISSN 0253-2786



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中国化学会主办
中国科学院上海有机化学研究所

有机化学 (月刊)

Chinese Journal of Organic Chemistry

(YOUJI HUAXUE)

第 40 卷 第 7 期 (总 380 期) 2020 年 7 月

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* 通讯联系人.

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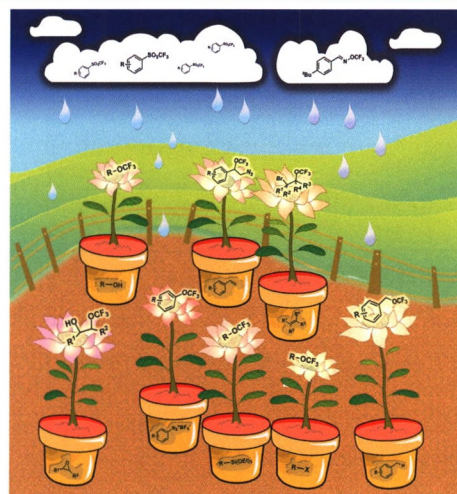
<i>N</i> -取代苯甲酰基- <i>N'</i> -4,7-二甲氧基-[1,2,4]三唑并[1,5- <i>c</i>]嘧啶(硫)脲的设计、合成及生物活性研究	魏凯伦 石瑞静 姜 林 苗成霞 李 映*	(2127)
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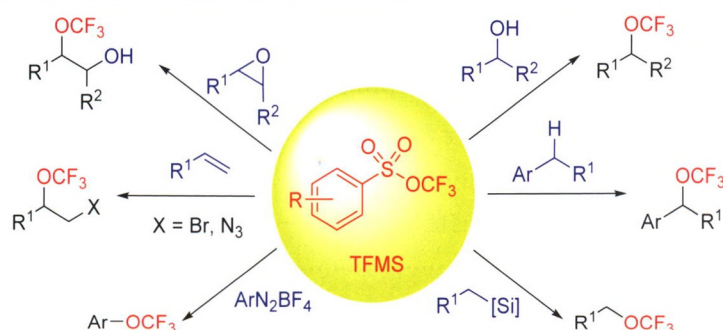
Cover Picture: Recent Advances in Trifluoromethoxylation Reactions

In recent years, some innovative strategies have been used to synthesize compounds containing trifluoromethoxy group. This account focuses on the research results in the field of direct trifluoromethoxylation by using trifluoromethyl aryl sulfonate (TFMS) and (*E*)-*O*-trifluoromethyl-benzaldoximes (TFBO) as trifluoroethoxylation reagents, and some challenges faced by trifluoromethoxy reaction. This paper is reported by Wang, and Tang on page 1805.



ACCOUNTS

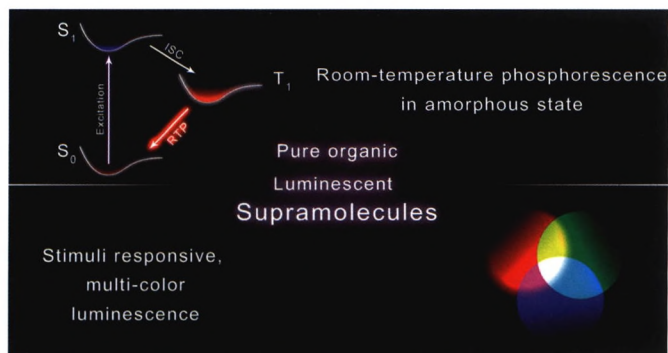
Recent Advances in Trifluoromethoxylation Reactions



The synthesis of trifluoromethoxylated organic molecules is difficult owing to the decomposition of trifluoromethoxide anion and limited trifluoromethoxylation reagents. This account mainly focuses on the research of trifluoromethoxy reaction in our group, and some challenges faced by trifluoromethoxy reaction.

Wang, Feng; Tang, Pingping*
Chin. J. Org. Chem. **2020**, 40(7), 1805

Recent Advances in Pure Organic Luminescent Supramolecular Materials

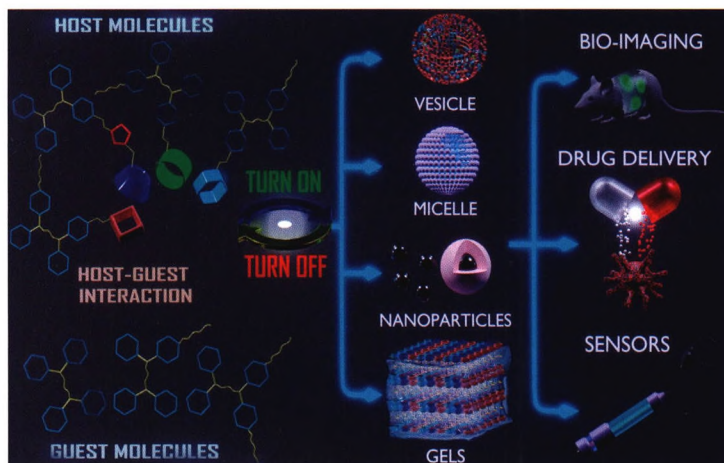


The recent advances in pure organic, luminescent supramolecular materials are summarized. Room-temperature phosphorescence was achieved with decent quantum yields. Multi-color luminescence was accomplished with stimuli responsive character. This account also proposes possible directions for further research.

Yan, Zi'ang; Zou, Lei; Ma, Xiang*
Chin. J. Org. Chem. **2020**, 40(7), 1814

REVIEWS

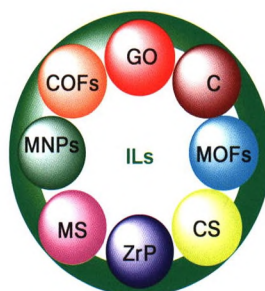
Research Advances of Host-Guest Supramolecular Self-assemblies with Aggregation-Induced Emission Effect and Their Applications in Biomedical Field



Tian, Xueqi; Zuo, Minzan*; Niu, Pengbo; Wang, Kaiya; Hu, Xiaoyu*
Chin. J. Org. Chem. **2020**, 40(7), 1823

The recent advances of aggregation-induced emission (AIE) supramolecular self-assemblies based on host-guest interaction by utilizing macrocycles such as cyclodextrin, calixarene, cucurbituril, pillararene and other water-soluble molecules as the hosts, and their applications in the biomedical field are summarized.

Research Progress in the Application of Supported Functional Ionic Liquids in Organic Transformations

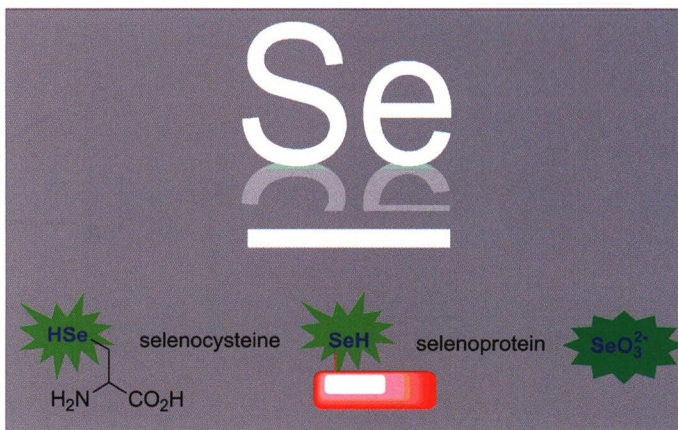


GO: graphene oxide
 C: Carbon material
 MOFs: Metal organic framework
 CS: Chitosan
 ZrP: Zirconium phosphate
 MS: Molecular sieve
 MNPs: Metal nanoparticles
 COFs: Covalent organic frameworks

Li, Shengnan; Zhao, Wenxin; Liu, Yujing; Liu, Zhongqiu*; Ying, Anguo*
Chin. J. Org. Chem. **2020**, 40(7), 1835

This paper mainly reviews the recent achievements over supported functional ionic liquids (SFILs) in respects of the preparation of ionic liquids supported on various carriers like magnetic nanoparticles, graphene oxide, molecular sieves, organic-metal skeleton *etc.*, the applications as the heterogeneous catalysts to organic transformations, and the understanding of the catalytic mechanism.

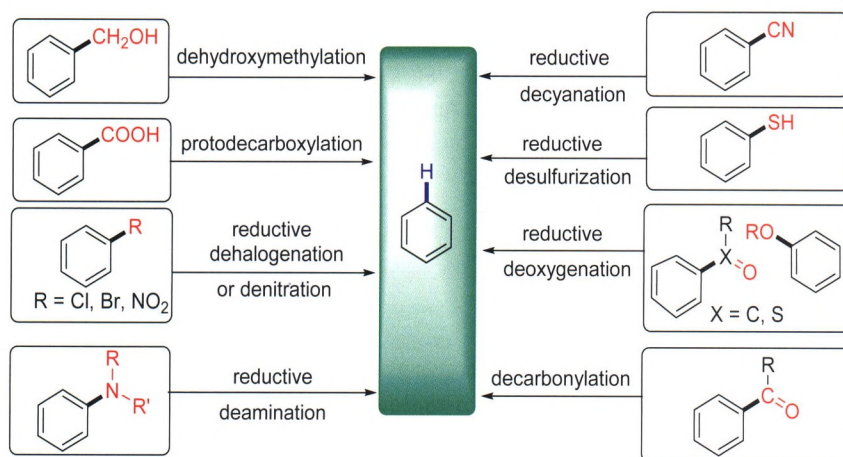
Recent Progress in Fluorescent Chemosensors for Selenium Compounds



Zhang, Jidong*; Zhan, Yan; Li-Hu, Yuewen; Qi, Yi; Wang, Ruipeng; Meng, Li
Chin. J. Org. Chem. **2020**, 40(7), 1847

In this paper, the fluorescent chemosensors for selenocysteine (Sec), hydrogen selenide and Se(IV) are summarized, and the development tendency of the sensing ensembles is prospected.

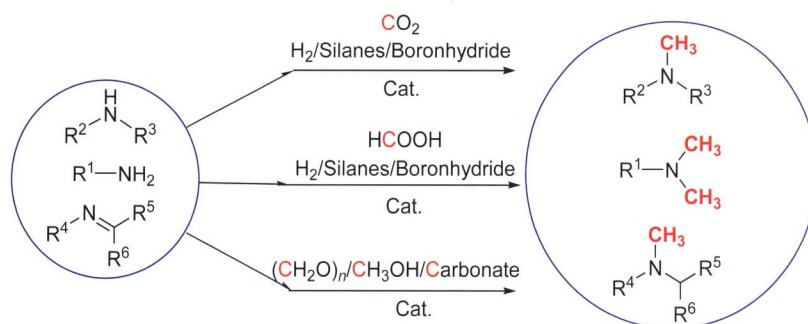
Recent Advances in Transition-Metal Catalyzed Defunctionalization Reaction



Functional groups are atoms or groups that determine the chemical properties of organic compounds and often play the role of guiding groups in synthetic organic chemistry. Defunctionalization is to chemically make a substrate with more functional groups into a compound with fewer functional groups. Metal catalysis provides a new way for defunctionalization. The defunctionalization reactions mediated by different metals in recent years and their catalytic reaction mechanisms are summarized.

Dong, Xiaojuan; Jin, Weiwei*; Liu, Chen-jiang*

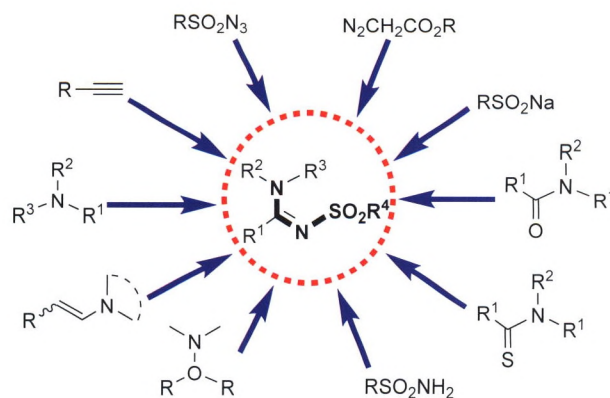
Chin. J. Org. Chem. **2020**, 40(7), 1860

Recent Advances and Applications in *N*-Methylation of Amines and Imines

The recent progress in *N*-methylation of amines and imines is reviewed. Traditional methylation reactions involve the use of flammable, explosive and toxic starting materials. In contrast, the newly developed methods have overcome this point and provide a mild strategy. Herein, the recent research progress for the *N*-methylation of amines and imines is summarized based on different C_1 carbon source.

Yan, Feng; Cai, Shuang; Wen, Wu; Wen, Wei; Li, Bojie*; Wang, Liansheng*; Zhu, Lei*

Chin. J. Org. Chem. **2020**, 40(7), 1874

Advances in the Synthesis of *N*-Sulfonyl Amidines

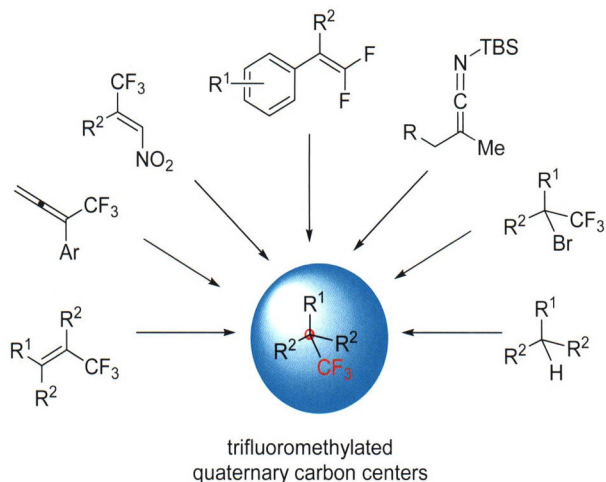
The recent progress in the synthesis of *N*-sulfonyl amidines is reviewed. Based on the known literature in the field, the research works on the *N*-sulfonyl amidine synthesis via amine oxidation, enamine carbon-carbon bond functionalization, alkyne-amine-sulfonyl azide three-component reaction, amide activation and other related synthetic methods are covered.

Zheng, Xixi; Liu, Yunyun*; Wan, Jie-Ping*

Chin. J. Org. Chem. **2020**, 40(7), 1891

CONTENT

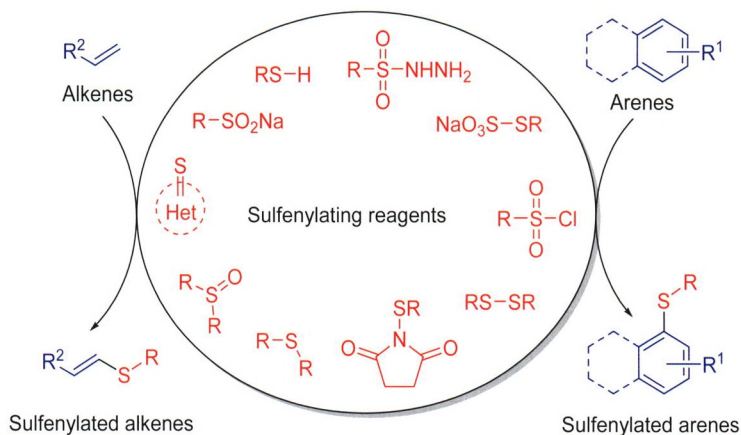
Recent Advances of the Construction of Trifluoromethylated Quaternary Carbon Center



The recent research of the synthesis of trifluoromethylated quaternary carbon centers is reviewed. The direct trifluoromethylation and reactions using trifluoromethylated synthons are mainly discussed. Finally, the future development is also prospected.

Wang, Shoufeng*; Wang, Wengui*
Chin. J. Org. Chem. **2020**, 40(7), 1901

Transition Metal-Free Direct C—H Bond Sulfenylation of Alkenes and Arenes

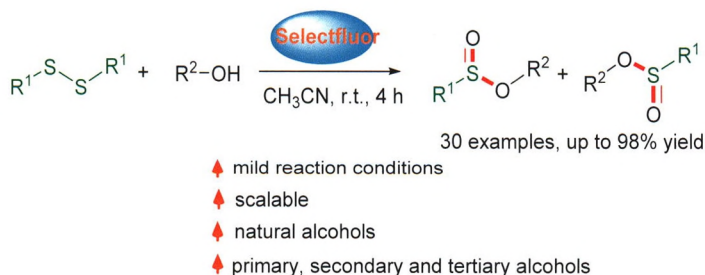


Aryl and vinyl sulfides are prevalent in natural or bioactive molecules and other potential functional organic materials. In recent years, many excellent research achievements were presented and a range of sulfenylated alkenes and arenes were synthesized using this strategy. The recent five-year progress in direct sulfenylation of C—H bond on alkenes and arenes under transition metal-free conditions is reviewed and the corresponding reaction mechanisms are discussed.

Xu, Xinming*; Yang, Hanlin; Li, Wenzhong
Chin. J. Org. Chem. **2020**, 40(7), 1912

ARTICLES

Selectfluor-Promoted Twofold Sulfination of Alcohols for the Synthesis of Sulfinic Ester from Diaryldisulfides



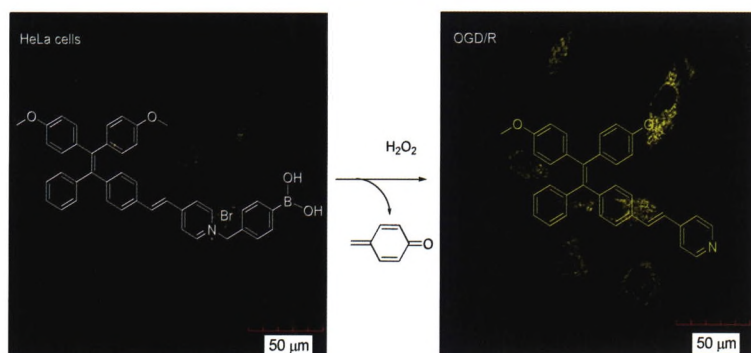
Liu, Aiyao; Liu, Jiang; Mei, Haibo*; Rösenthaller, Gerd-Volker; Han, Jianlin*
Chin. J. Org. Chem. **2020**, 40(7), 1926

A Selectfluor-promoted oxidative twofold sulfination reaction of sulfides with alcohols as coupling partners has been developed, which provides a new and convenient strategy for the preparation of sulfinic esters from available and stable diaryldisulfides.

Imaging of Hydrogen Peroxide During the Ischemia Reperfusion Process in Living Cells with An Aggregation Induced-Emission Probe

Li, Wei; Jia, Xu; Guo, Zhenbo; Jiang, Wenting; Zhang, Pingzhu; Wei, Chao*; Li, Xiaoliu*

Chin. J. Org. Chem. 2020, 40(7), 1934

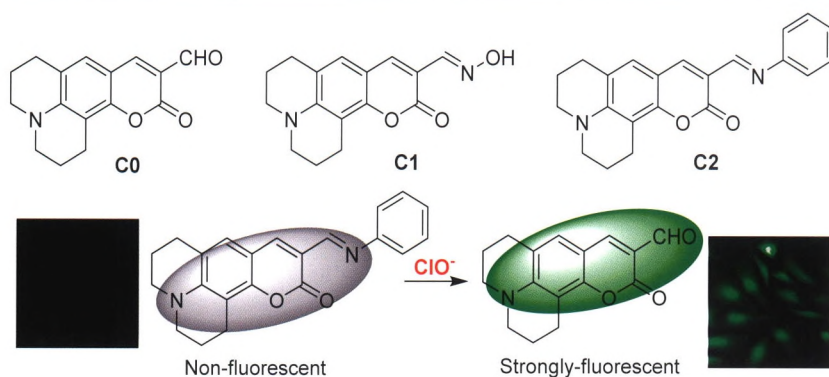


An aggregation induced-emission probe was constructed and used to imaging of endogenous hydrogen peroxide during the ischemia-reperfusion injury process in living HeLa cells.

"Turn-On" Fluorescent Probe for Hypochlorite: Successful Bioimaging and Real Application in Tap Water

Cheng, Xiaohong*; Li, Shuang; Wang, Jingyang; Li, Wangnan

Chin. J. Org. Chem. 2020, 40(7), 1941

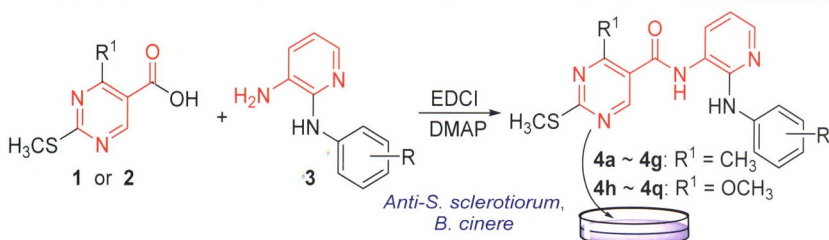


Novel "turn-on" fluorescent probe was developed for the rapid detection of ClO^- , especially application in the bioimaging and tap water.

Synthesis, Fungicidal Activity and Molecular Docking Study of Novel *N*-(2-((Substitutedphenyl)amino)pyridin-3-yl)-pyrimidine-4-carboxamides

Shi, Yanhua; Zhang, Shuai; Wan, Fuxian; Sun, Changxing; Jiang, Lin*

Chin. J. Org. Chem. 2020, 40(7), 1948

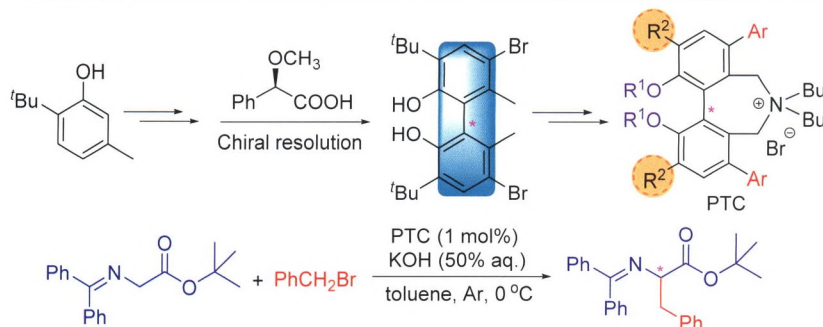


A series of *N*-(2-((substitutedphenyl)amino)pyridin-3-yl)-4-methyl/methoxy-2-(methylthio)pyrimidine-5-carboxamides were designed and synthesized. The *in vitro* bioassay showed that the most of target compounds possessed high fungicidal activity against *S. sclerotiorum*, and some compounds showed moderate inhibitory activity against *B. cinerea* at 50 $\mu\text{g/mL}$.

Chiral Resolution of Biphenol and Asymmetric Alkylation under Phase Transfer Catalysis

Ke, Cuilian; Xu, Weiping; Liu, Da; Liu, Yan*; Maruoka, Keiji*

Chin. J. Org. Chem. 2020, 40(7), 1955



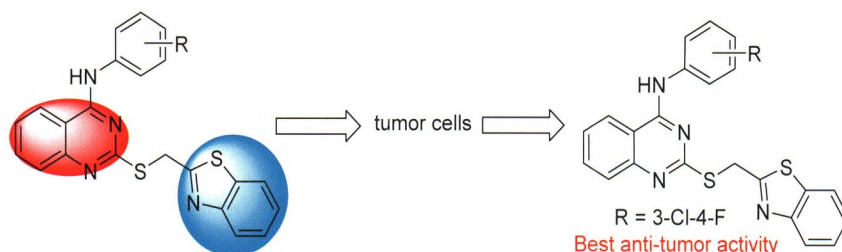
The chiral resolution of biphenyl derivatives skeleton was achieved by utilizing the readily available (*R*)- α -methoxyphenylacetic acid as resolution agent. A series of new biphenyl type of phase transfer catalysts were synthesized based on the optically pure C_2 -symmetric chiral biphenyl framework.

CONTENT

Synthesis and Antitumor Activity of Novel 4-Aminoquinazoline Derivatives Containing Benzothiazole

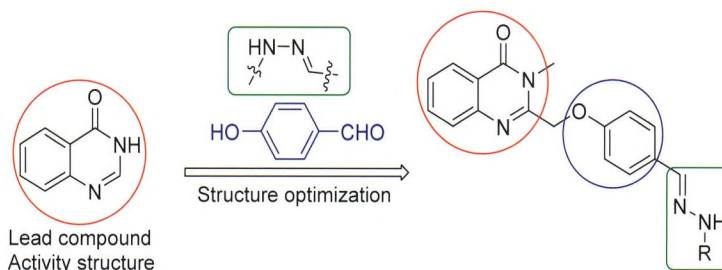
Zhang, Luye; Zhang, Yang; Wang, Zhengjie;
Wang, Tao; Liu, Limin; Liu, Xiujuan; Li,
Erdong; Song, Panpan; Zheng, Jiaxin; Ke,
Yu; Shan, Lihong*; Liu, Hongmin*; Zhang,
Qirong*

Chin. J. Org. Chem. **2020**, 40(7), 1967



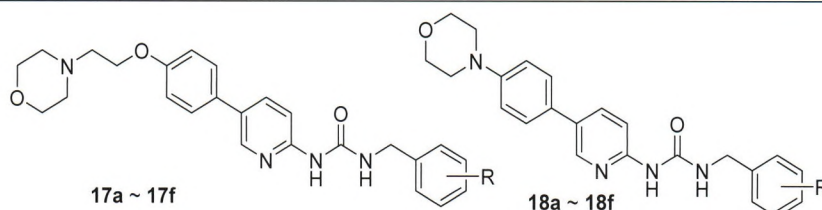
A series of novel 4-aminoquinazoline derivatives containing benzothiazole were designed, synthesized and evaluated for antitumor activities against four human cancer cell lines.

Design, Synthesis and Biological Activity of Quinazolinone Derivatives Containing Hydrazone Structural Units



A series of novel quinazolinone derivatives containing hydrazone structural units were designed and synthesized. The bioassays results revealed that partial of the target compounds exhibited better activities against *Xanthomonas oryzae* pv. *oryzae*, *Pseudomonas syringae* pv. *actinidiae* and *Xanthomonas axonopodis* pv. *citri* than the control drugs of bismethiazol and thiediazole-copper.

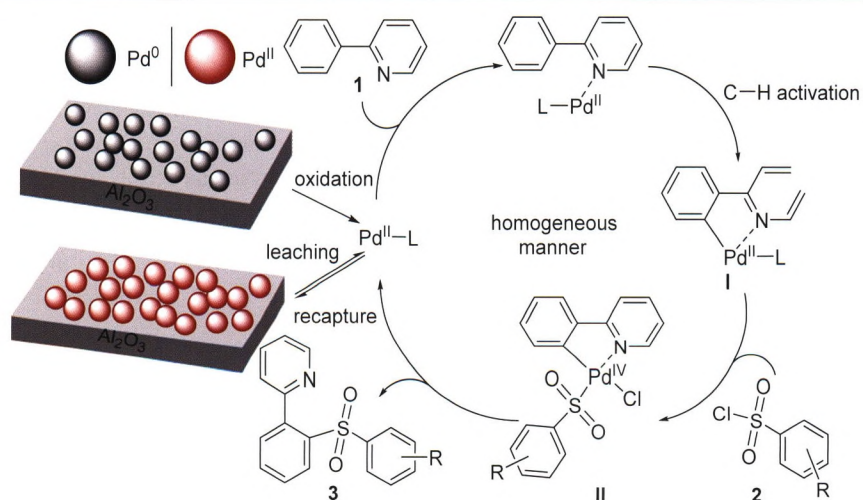
Design, Synthesis and Antitumor Evaluation of Novel Small Molecule Extracellular Regulated Protein Kinase (ERK) Inhibitors



12 urea compounds containing morpholin rings were designed and synthesized in search of novel extracellular regulated protein kinase (ERK) inhibitors by using merging strategy. ERK kinase activity and cell proliferation test results indicate that most of the target compounds have moderately inhibitory effects on human colorectal cancer cells SW480 and HCT-116.

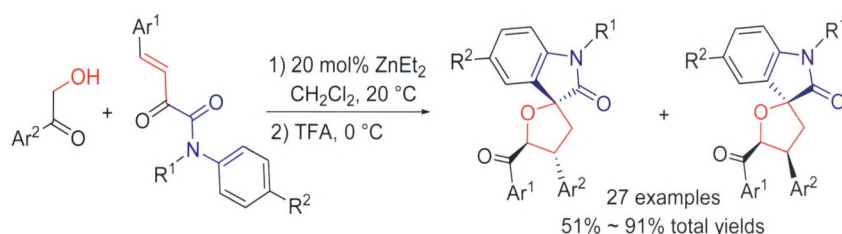
Zhu, Zhongzhen; Qiao, Yu; Zhang, Zihao;
Gu, Mingzhen; Wang, Jin; Gao, Zhiyu;
Guo, Wenhao; Liu, Mingming; Li, Rong*
Chin. J. Org. Chem. **2020**, 40(7), 1983

Insight into Catalytic Properties of Supported Palladium Nanoparticles Catalyzed *ortho*-Directed Sulfonylation



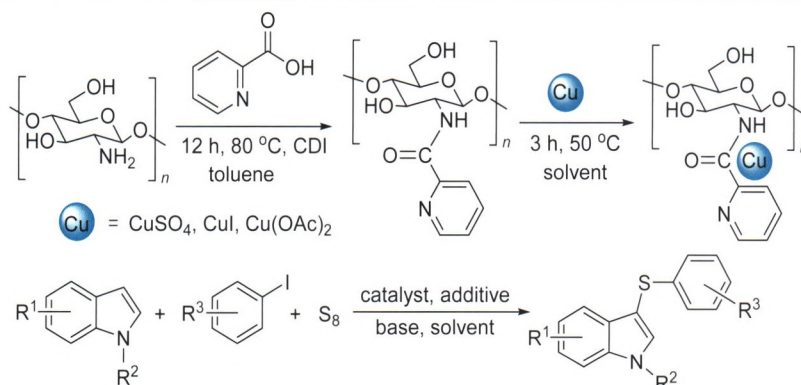
An *ortho*-directed sulfonylation reaction between 2-phenylpyridine and arylsulfonyl chlorides has been developed. The full oxidation-state change of palladium was detected.

Li, Pengshuai; Wu, Yun; Bai, Chaolumen;
 Bao, Yongsheng*
Chin. J. Org. Chem. **2020**, 40(7), 1991

Efficient Synthesis of Tetrahydrofuran
Spirooxindoles via One-Pot Reaction

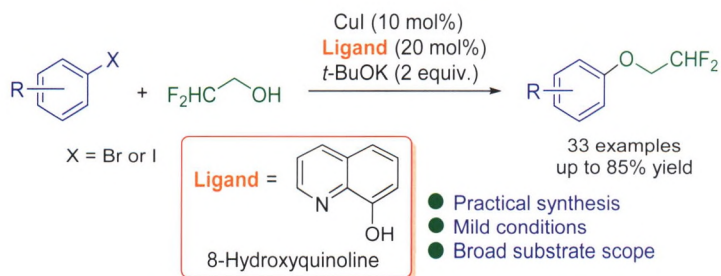
Using ZnEt_2 and trifluoroacetic acid (TFA) as catalysts, the sequential Michael/hemiketalization and Friedel-Crafts reaction of α -hydroxy aryl ketones and β,γ -unsaturated α -ketoamides led to a wide range of tetrahydrofuran spirooxindoles in moderate to good yields.

Guo, Xin; Guo, Yajun; Kong, Dezhi; Lu, Huijie; Hua, Yuanzhao*; Wang, Mincan*
Chin. J. Org. Chem. **2020**, 40(7), 1999

Chitosan@Cu-Catalyzed C3-Sulfonylation
of Indoles with Sulfur Powder and
Aryl Iodides

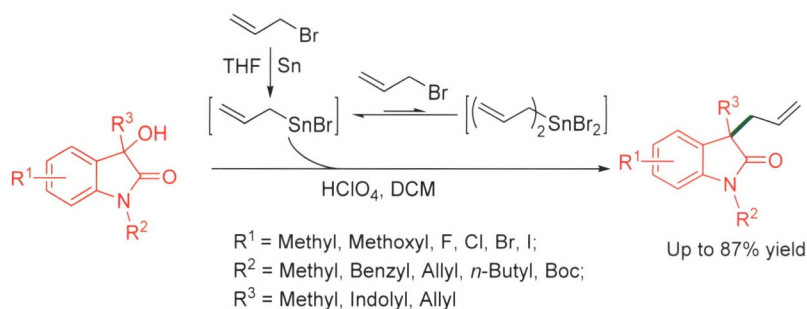
2-Pyridinecarboxylic acid modified chitosan (PACS) catalyst with different type of copper was prepared, which was used to catalyze the three-component reaction of indole, sulfur powder and iodobenzene to prepare C-3 thioether-based indole in a one-pot method. The most suitable catalyst (PACS@Cu(OAc)_2) was characterized and analyzed.

Cheng, Lin; Ge, Xin; Liu, Xuemin*; Feng, Yunhui*
Chin. J. Org. Chem. **2020**, 40(7), 2008

Copper-Catalyzed Arylated Etherification
of 2,2-Difluoroethanol and Its Mechanistic
Study

Huang, Shuaishuai; Nie, Yixue; Yang, Jingjing; Zheng, Zhanjiang*; Cao, Jian; Xu, Zheng; Xu, Liwen*
Chin. J. Org. Chem. **2020**, 40(7), 2018

A mild and efficient method for the preparation of difluoroethyl aryl ethers was developed by the Ullmann reaction of aryl bromides with commercial 2,2-difluoroethanol, and a new mechanism involving Cu(III) intermediate was proposed based on the ESI-MS analysis and density functional theory (DFT) calculations.

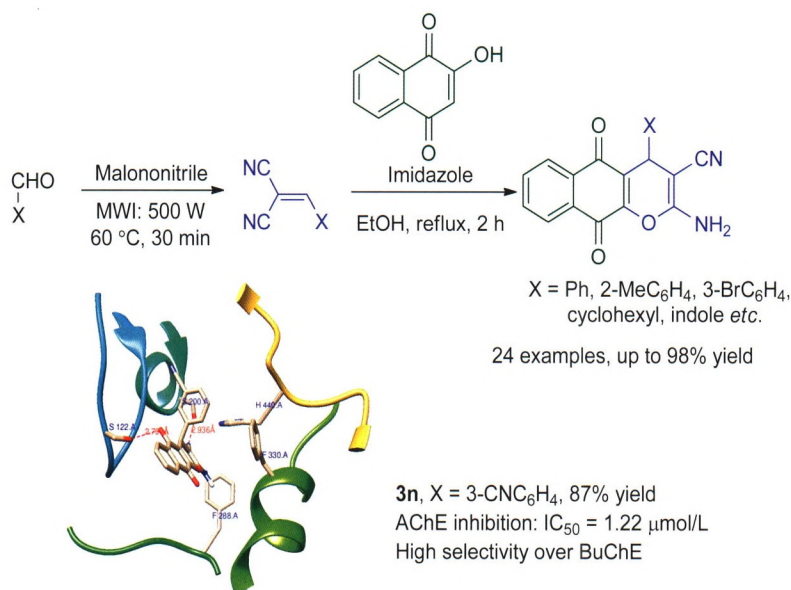
Study on Tin Powder-Promoted Allylation
of 3-Aryl-3-hydroxy-2-oxindoles

Zhao, Zhuanxia; Wang, Junjiao; Huang, Danfeng*; Yang, Zheng; Zhao, Fangxia; Hu, Yongqin; Xu, Weigang; Hu, Yulai
Chin. J. Org. Chem. **2020**, 40(7), 2026

3,3-Disubstituted-2-oxindoles were synthesized by the allylation of 3-aryl-3-hydroxy-2-oxindoles promoted by tin powder in good yields.

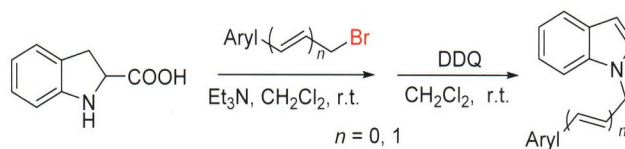
CONTENT

Design, Synthesis and Biological Evaluation of Pyrano[2,3-*b*]naphthoquinone Derivatives as Acetylcholinesterase Inhibitors



Du, Chuanqian; Xie, Baohua; He, Ming; Hu, Zhiye; Liu, Yu; He, Xue; Liu, Fanyu; Cheng, Chen; Zhou, Hai-Bing*; Huang, Shengtang*; Dong, Chun'e*
Chin. J. Org. Chem. **2020**, 40(7), 2035

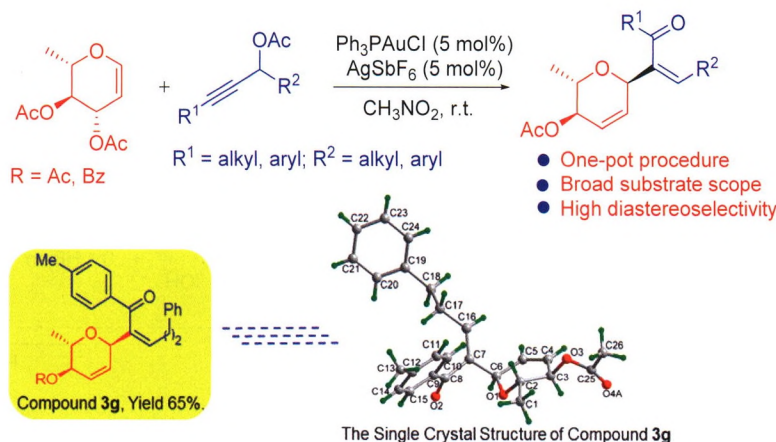
One-Pot Synthesis of *N*-Alkyl Indole from Indoline-2-carboxylic Acids and Alkyl Halides by 2,3-Dicyano-5,6-dichlorobenzoquinone (DDQ) Mediated Oxidative Decarboxylative Aromatization



Synthesis of *N*-alkyl indoles via 2,3-dicyano-5,6-dichlorobenzoquinone (DDQ) mediated intramolecular oxidative decarboxylative aromatization of *N*-alkylindoline-2-carboxylic acids is reported. The good compatibility of this process leads to the development of a mild and metal-free one-pot synthesis of *N*-alkyl indoles from alkyl halides and indoline carboxylic acid. The one-pot three-component synthesis of 1,4-bis((1*H*-indol-1-yl)methyl)benzene is also disclosed in satisfied yields.

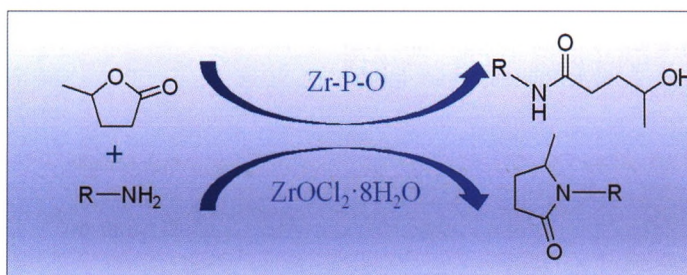
Zhu, Runyu; Zhai, Min; Liu, Shuang; Liu, Xingtong; Wang, Zhen*; Ju, Ruijun*; Yu, Xinhong*
Chin. J. Org. Chem. **2020**, 40(7), 2045

Synthesis and Cytotoxic Activity of C-Vinyl-rhamnopyranosides Derivatives

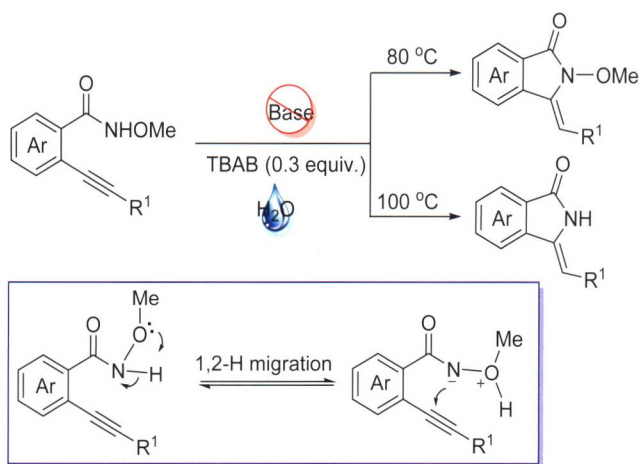


Ji, Yu; Yao, Hui; Liu, Yi; Huang, Nianyu*; Liu, Mingguo*
Chin. J. Org. Chem. **2020**, 40(7), 2051

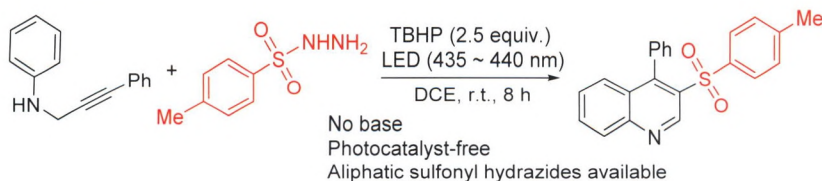
A novel gold(I)-catalyzed glycosylation method was described to synthesize C-vinyl-rhamnopyranoside derivatives. The C-glycosylation process was verified by O¹⁸ isotopic labeling experiment, and the absolute configuration of synthesized products was determined by X-ray single crystal diffraction. The cytotoxic activity was investigated by methyl thiazolyl tetrazolium (MTT).

Study on Reaction of γ -Valerolactone
and Amine Catalyzed by Zirconium-
Based Lewis AcidsKong, Qingshan; Li, Xinglong; Xu, Hua-
jian*; Fu, Yao**Chin. J. Org. Chem.* **2020**, 40(7), 2062

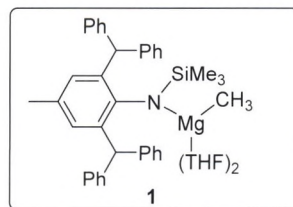
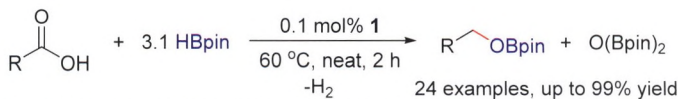
This article describes a method for the synthesis of hydroxyamides and pyrrolidones from γ -valerolactone (GVL) and amine compounds by reductive amination/cyclization reactions under mild conditions using zirconium-based Lewis acid catalysts Zr-P-O and $\text{ZrOCl}_2 \cdot 8\text{H}_2\text{O}$, respectively.

Base-Free 5-exo-dig aza-Cyclization of
N-Methoxyl-2-alkynylbenzamides in Wa-
terLiu, Renzhi; Yang, Min; Qiu, Guan-
yinsheng*; Zhang, Lianpeng*; Wang,
Yuchao; Luo, Jin**Chin. J. Org. Chem.* **2020**, 40(7), 2071

A based-free 5-exo-dig aza-cyclization of *N*-methoxyl-2-alkynylbenzamide is reported in water for the synthesis of various *N*-methoxylisindolin-1-ones. The transformation proceeds smoothly with high efficiency and good functional group tolerance.

Visible-Light-Induced Cycloaddition In-
volving *N*-Propargylanilines with Aryl-
sulfonylhydrazides: Rapid Access to 3-
Sulfonated Quinoline Derivatives without
Base and CatalystPeng, Mei; Zheng, Yangfan; Huang, Hao; Ye,
Jia; Deng, Xingguo*; He, Chunlian**Chin. J. Org. Chem.* **2020**, 40(7), 2078

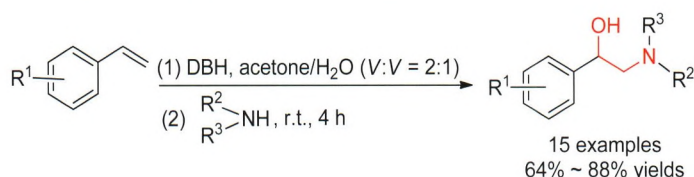
A visible-light-induced oxidative cyclization of *N*-anilines with arylsulfonylhydrazides was developed using *tert*-butyl hydroperoxide as oxidant. This transformation offers a straightforward route to 3-sulfonated quinoline derivatives with good functional group tolerance, good to excellent yields and high regio-selectivity.

Efficient Magnesium-Catalyzed Hydrob-
oration of Carboxylic AcidsZheng, Yukun; Cao, Xu; Li, Jia; Hua,
Haiming; Yao, Weiwei*; Zhao, Binlin*; Ma,
Mengtao**Chin. J. Org. Chem.* **2020**, 40(7), 2086

Sterically bulky amido magnesium methyl complex **1** has been employed as an efficient catalyst for the deoxygenative hydroboration of a variety of aromatic and aliphatic carboxylic acids with pinacolborane (HBpin) under mild reaction condition.

NOTES

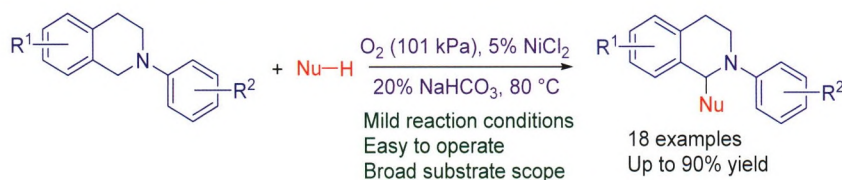
One-Pot Synthesis of Amino Alcohols from Styrenes



A two-step one-pot procedure for the synthesis of amino alcohols mediated by 1,3-dibromo-5,5-dimethylhydantoin (DBH) in aqueous acetone solution was developed. Styrene derivatives were treated with DBH at room temperature for 0.5~2.0 h followed by the addition of amine, affording the corresponding amino alcohols in 64%~88% yields. Tulobuterol, a widely used β 2-adrenergic agonist, was prepared by this protocol in gram scale with the yield of 77%.

He, Shuwang; Yan, Shiqiang; Guo, Wei; Zhai, Guangxi*; Zhang, Wei*
Chin. J. Org. Chem. **2020**, 40(7), 2094

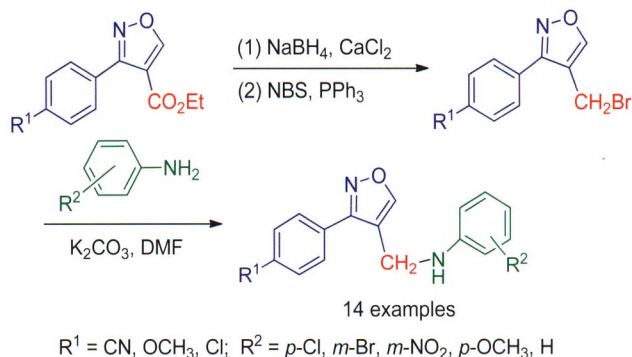
Nickel(II)-Catalyzed Aerobic Cross-Dehydrogenative Coupling for the Synthesis of *N*-Aryl Tetrahydroisoquinolines



An nickel-catalyzed aerobic cross-dehydrogenative coupling of *N*-aryl tetrahydroisoquinolines is presented. The catalytic system could tolerate various *N*-aryl tetrahydroisoquinoline derivatives and nucleophiles, and the target products could be obtained in good to excellent yields. Compared with reported methods, the protocol uses molecular oxygen as a sustainable oxidant, and provides an effective approach to the synthesis of tetrahydroisoquinoline derivatives under mild and practical conditions.

Wang, Hui; Wang, Anwei; Xia, Zhenzhen; Zhou, Weiyou*; Sun, Zhonghua; Qian, Junfeng; He, Mingyang
Chin. J. Org. Chem. **2020**, 40(7), 2099

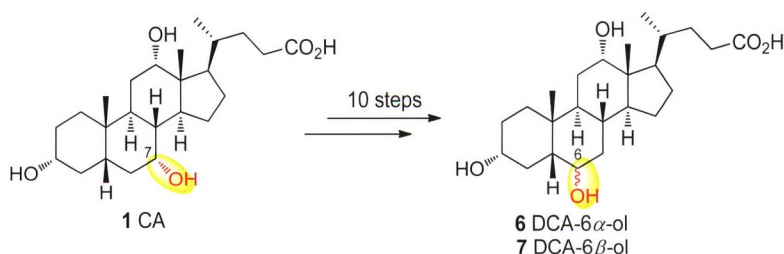
Synthesis and Preliminary Exploration of Biological Activity of 3-Aryl-4-arylamine Methyl Isoxazoles



Li, Qianqian; Wu, Zhongmei; Zhang, Min*; Zhang, Yiping; Zhou, Yingkai; Deng, Hongmei; Song, Liping*
Chin. J. Org. Chem. **2020**, 40(7), 2108

A series of 3-aryl-4-arylamine methyl isoxazole derivatives were synthesized and their inhibitory effects against aphids and armyworms were tested, respectively.

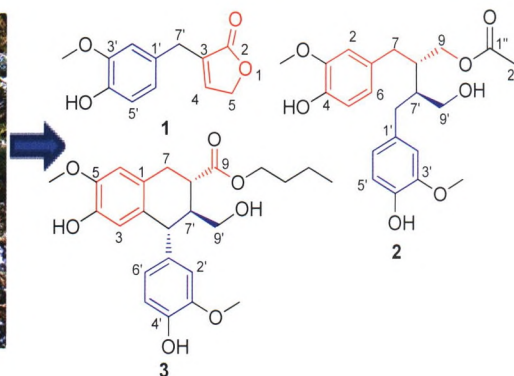
Synthesis of 6 α - and 6 β -Hydroxydeoxycholic Acid



6 α - and 6 β -hydroxydeoxycholic acids (DCA-6 α -ol (**6**) and DCA-6 β -ol (**7**)) are recently identified important tertiary bile acids derived from deoxycholic acid (**3**) in human liver. A rapid and convenient synthesis of DCA-6 α -ol (**6**) and DCA-6 β -ol (**7**) from cholic acid (**1**) in 10 steps involving Mukaiyama aldol condensation, ozone oxidative cleavage and SmI₂ promoted reductive deoxygenation as the key steps was conducted.

Niu, Wei; Xiao, Dan; Cheng, Hang; Xu, Liang*
Chin. J. Org. Chem. **2020**, 40(7), 2114

Lignans from the Heartwood of *Nothotsuga longibracteata*

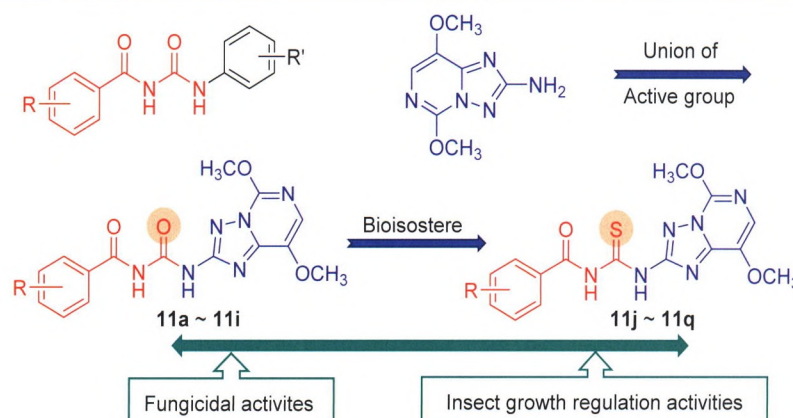


A rare norlignan, and two new lignans **2** and **3** were isolated from the heartwood of *Nothotsuga longibracteata*, together with nineteen known lignan compounds. Gastrointestinal motility test of zebrafish showed that compound **3** has the function of promoting gastrointestinal motility of zebrafish to excrete Nile red at doses 8 and 24 $\mu\text{mol/L}$ by means of acting on the cholinergic nervous system.

Liu, Guiyuan; Guo, Dale; Deng, Yun; Linghu, Lang; Zhang, Maosheng; He, Yuqi; Xiao, Shiji*

Chin. J. Org. Chem. **2020**, 40(7), 2120

Design, Synthesis and Biological Activities Evaluation of *N*-(Substitutedbenzoyl)-*N'*-4,7-dimethoxy-[1,2,4]triazolo[1,5-*c*]pyrimidine (Thio)ureas

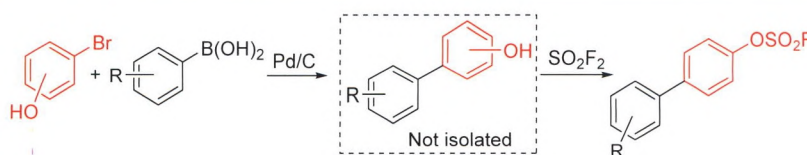


Wei, Kailun; Shi, Ruijing; Jiang, Lin; Miao, Chengxia; Li, Ying*

Chin. J. Org. Chem. **2020**, 40(7), 2127

A series of benzoyl(thio)ureas containing [1,2,4]triazolo[1,5-*c*]pyrimidine were designed and synthesized by cyclization, Dimroth rearrangement and nucleophilic addition reactions. The preliminary bioassay of fungicidal activity *in vitro* and insect growth regulation activities were tested.

Preparation of Biaryl Fluorosulfates by a Tandem Process

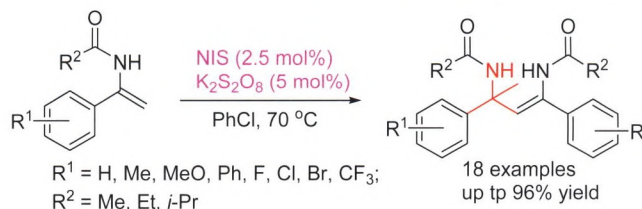


Li, Xinmin*; Hu, Rui; Chen, Zhengjun; Hu, Qinghong; Yuan, Zeli*

Chin. J. Org. Chem. **2020**, 40(7), 2135

The one-pot process for the preparation of biaryl fluorosulfates from bromophenols has been developed. Phosphine ligand and nitrogen protection were not required. Furthermore, Pd/C catalyst could be recycled and reused three times without significant loss of catalytic activity.

N-Iodo-succinide (NIS)/ $\text{K}_2\text{S}_2\text{O}_8$ Initiated Self-Coupling of Enamides to Nitrogen-Containing Quaternary Carbon Centers



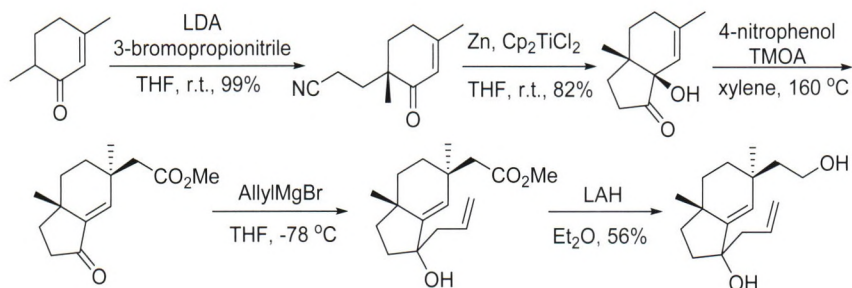
Zhou, Xiaoqiang*; Yan, Hao; Wang, Qiuya

Chin. J. Org. Chem. **2020**, 40(7), 2142

N-Iodo-succinide (NIS)/ $\text{K}_2\text{S}_2\text{O}_8$ initiated C—C bond formation reaction through self-coupling of enamides has been reported. The environmental friendliness and high atom-economy feature of this transition-metal free radical pathway offers a useful and attractive strategy to nitrogen-containing quaternary carbon centers.

CONTENT

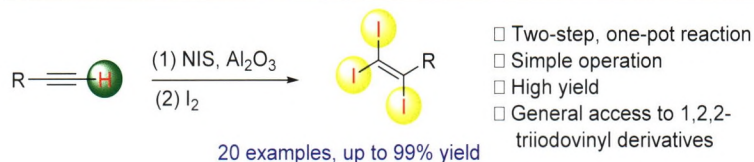
Synthesis of Key Intermediate of Cyathane Diterpenes



A synthetic method of bicyclo[5/6] key intermediate of cyathane was developed. Reactions involved such as nucleophilic substitution, radical ring-closing reaction, Johnson-Claisen rearrangement and Grignard addition were optimized for higher yields. The procedure provides a simple and efficient method for the synthesis of bicyclo-key intermediate of cyathane.

Li, Ruoxin; Han, Rui; Gao, Jinming*
Chin. J. Org. Chem. **2020**, 40(7), 2148

γ -Aluminum Oxide-Mediated Iodination of Terminal Alkynes

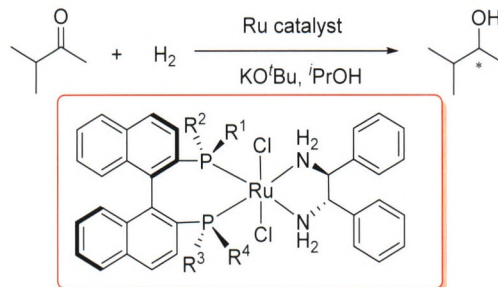


A simple two-step, one-pot synthesis of 1,2,2-triiodovinyl derivatives from terminal alkynes using *N*-iodosuccinimide and iodine as precursors, activated with γ -aluminum oxide is developed. This approach resulted in moderate to excellent yields, good functional group tolerance and utilization of an inexpensive catalyst.

Yao, Ming*; Zhang, Jingjing; Yang, Sen; Xiong, Hangxing*
Chin. J. Org. Chem. **2020**, 40(7), 2153

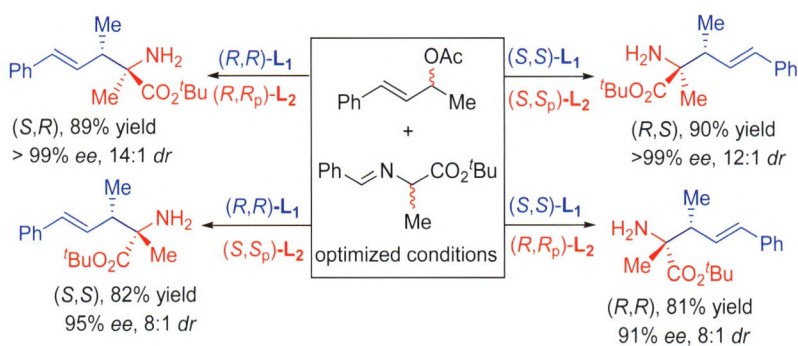
HIGHLIGHTS

Diastereoselective Synthesis of P-Chirogenic and Atropisomeric 2,2'-Bisphosphino-1,1'-binaphthyls Enabled by Inter-nal Phosphine Oxide Directing Groups



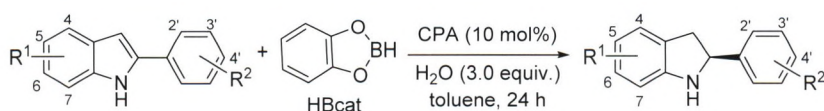
Li, Chong; Yang, Shangdong*
Chin. J. Org. Chem. **2020**, 40(7), 2159

Chirality Tailor: Stereodivergent Pd/Cu Dual Metal Catalysis for the Dynamic Kinetic Asymmetric Transformation

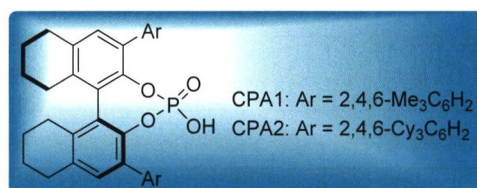


Wang, Ya'ning; Luo, Sanzhong*
Chin. J. Org. Chem. **2020**, 40(7), 2161

New Chiral Brønsted Acid for Asymmetric Reduction of Indoles

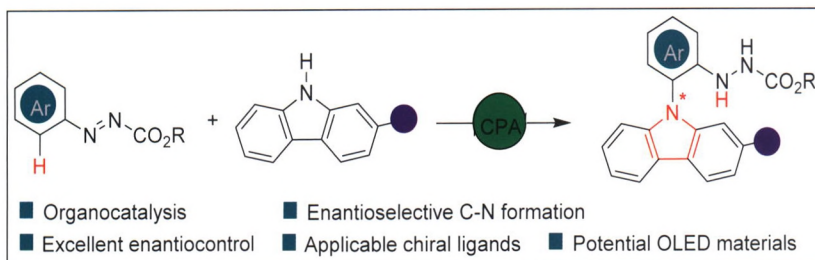


Zhu, Qing; Liu, Chao*
Chin. J. Org. Chem. **2020**, 40(7), 2164

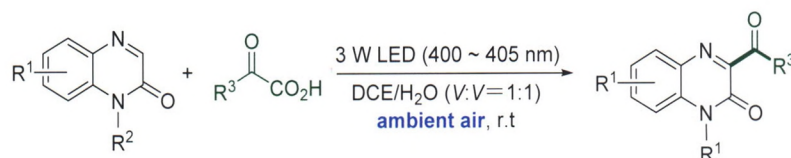


Chiral Phosphoric Acid Catalyzed Atropo-
selective C—H Amination of Arenes

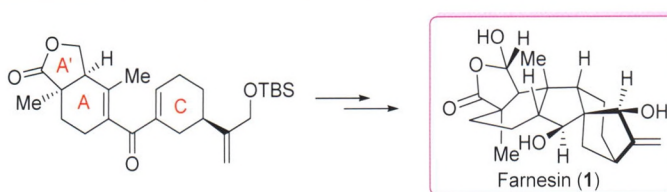
Peng, Lei; Yan, Hailong*

Chin. J. Org. Chem. **2020**, 40(7), 2167External Photocatalyst-Free Visible-Li-
ght-Induced C3-Acylation of Quinoxalin-
2(1*H*)-ones

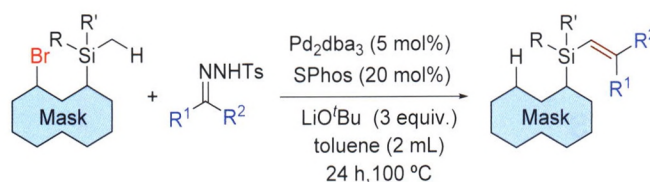
Shi, Jianwei; Wei, Wei*

Chin. J. Org. Chem. **2020**, 40(7), 2170Total Synthesis of Farnesin through Ex-
cited-State Nazarov Cyclization

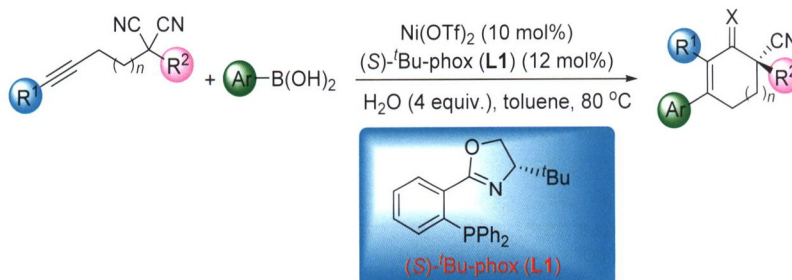
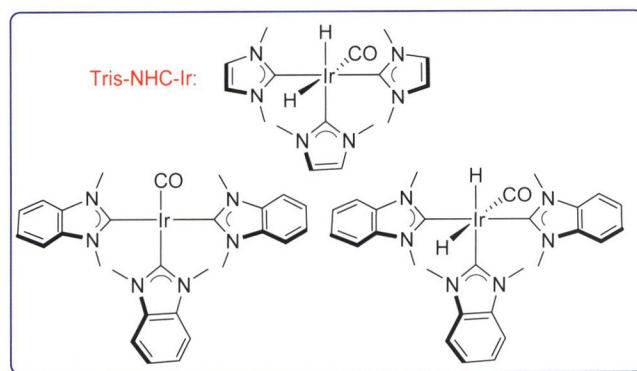
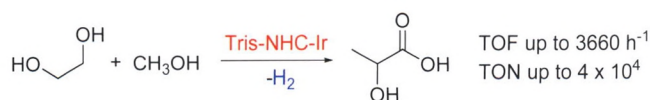
Cao, Wei; Liu, Bo*

Chin. J. Org. Chem. **2020**, 40(7), 2173C—H Bond Functionalization of Si-Bound
Methyl Group through a 1,5-Palladium
Migration Process

Song, Zhenlei*

Chin. J. Org. Chem. **2020**, 40(7), 2176Ni-Catalyzed Desymmetrization of Malo-
nonitriles to Cycloenones with a Nitrile-
Containing All-Carbon Quaternary Center

Zhou, Feng; Zhou, Jian*

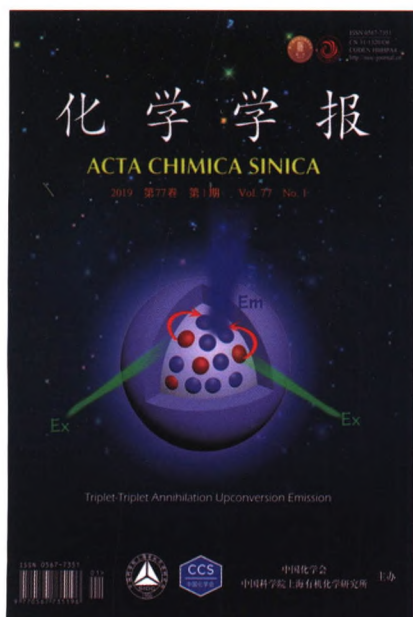
Chin. J. Org. Chem. **2020**, 40(7), 2180Iridium Catalyzed Dehydrogenative Cro-
ss-Coupling for Lactic Acid Synthesis

Wang, Chao; Xiao, Jianliang*

Chin. J. Org. Chem. **2020**, 40(7), 2182

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国际刊号: ISSN 0253-2786

国内刊号: CN 31-1321/O6

国内邮发代码: 4-285

国外发行代码: M 513