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简介: 马献涛, 男, 1986 年生, 博士, 副教授, 硕士生导师, 信阳市学术技术带头人, 信阳师范学院 2021 年度教师教学创新大赛一等奖获得者, 入选信阳师范学院南湖学者奖励计划 B 类人才。

个人经历

教育经历:

2005.9-2009.6	学士	河南师范大学	化学与环境科学学院	化学
2009.9-2014.6	博士	中国科学技术大学	化学与材料科学学院	有机化学

工作简历:

2014.8-2014.12	中国石油大连润滑油研发中心	研发工程师
2015.5-2017.5	深圳大学-新加坡国立大学二维材料国际联合实验室	博士后
2017.5-2019.12	信阳师范学院化学化工学院	讲师
2019.12-至今	信阳师范学院化学化工学院	副教授

研究领域与兴趣

1. 绿色有机合成
2. 生物质化学

主讲课程

本科生: 《有机化学》、《有机化学实验》、《有机波谱分析》

研究生: 《高等有机化学》、《有机波谱化学》

主持科研项目

1. 国家自然科学基金: 脂肪醇的催化取代及在碳-杂键绿色构建中的应用, 22101243, 30 万, 2022.1-2024.12, 主持
2. 河南省科技攻关: 醇基生物质资源的绿色转化及在烯丙基硫醚高效合成中的应用, 192102310031, 10 万, 2019.1-2021.12, 主持
3. 中国博士后基金面上项目: 过渡金属催化下烷基胺的偶联反应研究, 2016M592520, 5 万, 2016.5-2017.5, 主持

代表性研究成果

期刊论文:

1. **Xiantao Ma**,* Yingying Zhu, Jing Yu, Ran Yan, Xiaoni Xie, Lijun Huang, Qi Wang, Xue-Ping Chang* and Qing Xu*, Water oxidation by Brønsted acid-catalyzed in situ generated thiol cation: dual function of the acid catalyst leading to transition metal-free substitution and addition reactions of S-S bonds, *Org. Chem. Front.* **2022**, DOI: 10.1039/D2QO00169A.
2. Jing Yu, Chao Wu, Chenyang Li, Danfeng Chen, Liuyue Ding, **Xiantao Ma***, Catalyst-free and Highly Efficient O-Silylation of Alcohols and Phenols, *Chem. J. Chin. Univ.* **2022**, *43*, 20210588.
3. Zhenlei Zhang*, Jiushi Yang, Kairui Wu, Renjie Yu, Jiping Bu, Zijun Huang, Shaoke Li, **Xiantao Ma***, Access to α,α -dihaloacetophenones through anodic Cdouble bondC bond cleavage in enaminones, *Tetrahedron Lett.* **2022**, *88*, 153575.
4. **Xiantao Ma**,* Yingying Zhu, Jing Yu, Geng Zhao, Jiabin Duanmu, Yiyun Yuan, Xue-Ping Chang,* Dongli Xu and Qiuju Zhou*, Unprecedented observation and characterization of sulfur-centred bifurcated hydrogen bonds, *Phys. Chem. Chem. Phys.* **2021**, *23*, 26519.
5. Qiuju Zhou, Lingyun Zheng, Bing Ma, Lijun Huang, Aoqi Liu, Xinhua Cao, Jing Yu, and **Xiantao Ma***, Insights into Substrate Self-Assisted Activation of Allylic Alcohols Guiding to Mild Allylic Substitution of Tautomerizable Heteroarenes, *J. Org. Chem.* **2020**, *85*, 5097.
6. Jing Yu, Xueping Chang, Ruitian Ma, Qiuju Zhou, Mengmeng Wei, Xinhua Cao, and **Xiantao Ma***, Water-Promoted Dehydrative Tsuji–Trost Reaction of Non-Derivatized Allylic Alcohols with Sulfinic Acids, *Eur. J. Org. Chem.* **2020**, 7238.
7. **Xiantao Ma**,* Jing Yu, Zilong Wang, Yun Zhang, Qiuju Zhou, Efficient Activation of Allylic Alcohols in Pd-Catalyzed Allylic Substitution Reactions, *Chin. J. Org. Chem.* **2020**, *40*, 2669.
8. **Xiantao Ma**,* Jing Yu, Ran Yan, Mengli Yan, and Qing Xu*, Promoting Effect of Crystal Water Leading to Catalyst-Free Synthesis of Heteroaryl Thioether from Heteroaryl Chloride, Sodium Thiosulfate Pentahydrate, and Alcohol, *J. Org. Chem.* **2019**, *84*, 11294.
9. Lin Tang,* Zhen Yang, Jingchao Jiao, Ying Cui, Guodong Zou, Qiuju Zhou, Yuqiang Zhou,* Weihao Rao, and **Xiantao Ma**,* Chemoselective Mono- and Difluorination of 1,3-Dicarbonyl Compounds, *J. Org. Chem.* **2019**, *84*, 10449.
10. **Xiantao Ma**,* Jing Yu, Qiuju Zhou,* Ran Yan, Lingyun Zheng, and Lingling Wang, Substrate Self-Assisted Secondary Bond Activation of Allylic Alcohol in a Tsuji–Trost Reaction Revealed by NMR Methods, *J. Org. Chem.* **2019**, *84*, 7468.
11. **Xiantao Ma**,* Jing Yu, Mengyuan Jiang, Mengyu Wang, Lin Tang,* Mengmeng Wei, and Qiuju Zhou*, Mild and Regioselective Bromination of Phenols with TMSBr, *Eur. J. Org. Chem.* **2019**, 4593.
12. **Xiantao Ma**,* Kunjie Zhou, Mengjuan Ren, Mengyu Wang, Jing Yu, Steric Hindrance Effect Leading to Regioselective Bromination of Phenols with HBr, *Chin. J. Org. Chem.* **2019**, *39*,

2796.

13. **Xiantao Ma**,* Jing Yu, Ruitian Ma, Ran Yan, Zhenlei Zhang,* Palladium-Catalyzed Dehydrative Cross Couplings of Stabilized Phosphorus Ylides with Allylic Alcohols, *Chin. J. Org. Chem.* **2019**, *39*, 830.
14. **Xiantao Ma**,* Jing Yu, Cuijie Han, Qiuju Zhou, Mengjuan Ren, Lixin Li, and Lin Tang*, Dehydrative Synthesis of Functionalized Skipped Dienes from Stabilized Phosphonium Ylides and Allylic Alcohols in Water, *Adv. Synth. Catal.* **2019**, *361*, 1023.
15. Lin Tang,* Zhen Yang, Tian Sun, Di Zhang, **Xiantao Ma**,* Weihao Rao, and Yuqiang Zhou, Unexpected Decarboxylation-Triggered *o*-Hydroxyl-Controlled Redox Condensation of Phenylglycines with 2-Nitrophenols in Aqueous Media, *Adv. Synth. Catal.* **2018**, *360*, 3055.
16. **Xiantao Ma**, Qing Xu*, Huan Li, Chenliang Su, Lei Yu, Xu Zhang, Hongen Cao, Li-Biao Han*, Alcohol-based Michaelis–Arbuzov reaction: an efficient and environmentally-benign method for C–P(O) bond formation *Green Chem.* **2018**, *20*, 3408.
17. **Xiantao Ma**, Lei Yu, Chenliang Su*, Yaqi Yang, Huan Li, Qing Xu*, Efficient Generation of C–S Bonds via a By-Product-Promoted Selective Coupling of Alcohols, Organic Halides, and Thiourea, *Adv. Synth. Catal.* **2017**, *359*, 1649.
18. **Xian-Tao Ma**, Hao Xu, Ying-Lin Xiao, Chen-Liang Su*, Jian-Ping Liu*, Qing Xu*, Cu/DMEDA/TEMPO-catalyzed aerobic oxidation of primary amines with air, *Chin. Chem. Lett.* **2017**, *28*, 1336.
19. **Xiantao Ma**, Bo Li, Yinglin Xiao, Xiaochun Yu*, Chenliang Su*, Qing Xu*, Synthesis of Alkylated Amides and Amines by Cu(OTf)₂-Catalyzed N-Alkylation of Nitriles and Amines with Alcohols., *Chin. J. Org. Chem.* **2017**, *37*, 2034.
20. **Xiantao Ma**, Quan Liu, Xiaojuan Jia, Chenliang Su*, Qing Xu*, Efficient Synthesis of Unsymmetrical Heteroaryl Thioethers and Chalcogenides by Alkali Hydroxide-Mediated S_NAr Reactions of Heteroaryl Halides and Dichalcogenides, *RSC Adv.* **2016**, *6*, 56930.
21. **Xian-Tao Ma**, Rui-Han Dai, Juan Zhang, Yonghong Gu*, Shi-Kai Tian*, Catalytic Stereospecific Substitution of Enantioenriched Allylic Alcohols with Sodium Sulfonates, *Adv. Synth. Catal.*, **2014**, *356*, 2984.
22. **Xian-Tao Ma**, Yong Wang, Rui-Han Dai, Cong-Rong Liu, Shi-Kai Tian*, Catalytic Allylation of Stabilized Phosphonium Ylides with Primary Allylic Amines, *J. Org. Chem.*, **2013**, *78*, 11071.
23. **Xian-Tao Ma**, Shi-Kai Tian*, Palladium-Catalyzed Regioselective Halogenation of Aromatic Azo Compounds, *Adv. Synth. Catal.* **2013**, *355*, 337.

专利著作:

1. 国家发明专利 (ZL 201910080568.1): **马献涛**, 于静, 江梦园, 唐林, 周秋菊, 一种苯酚类化合物高区域选择性溴化的方法, 2021.8.27
2. 国家发明专利 (ZL202010051676.9): **马献涛**, 于静, 樊宇, 张倩, 唐林, 一种含 1,4-萘醌结构的硫醚类化合物的合成方法, 2021.7.13

3. 国家发明专利 (ZL201810788951.8): 马献涛, 于静, 江梦园, 燕然, 唐林, 一种 α -烯丙基取代的 α,β -不饱和酮、酯或腈化合物的合成方法, 2021.4.30
4. Xiantao Ma, Chenliang Su, Qing Xu*, Chapter 7: N-Alkylation by hydrogen autotransfer reactions, in: Hydrogen transfer reactions: reductions and beyond (Eds.: G. Guillena, D. J. Ramón), Topics in Current Chemistry, Springer, Berlin, Heidelberg, 20444 words, 2016.

奖励及荣誉

科研方面:

系信阳市学术技术带头人、信阳市绿色催化与合成重点实验室学术带头人、入选校南湖学者奖励计划 B 类人才。近年来已在 *Green Chem.*、*Org. Chem. Front.*、*Adv. Synth. Catal.*、*J. Org. Chem.* 等国际知名有机化学期刊杂志上发表 SCI 学术论文 20 余篇, 参与撰写出版专著一个章节。主持国家自然科学基金 1 项, 河南省科技攻关项目 1 项, 中国博士后基金面上项目 1 项, 授权国家发明专利 3 件。荣获信阳师范学院 2021 年度教师教学创新大赛一等奖、河南省信息化交流活动优秀成果三等奖 1 项、获批校级教改项目 1 项, 校级质量工程项目 1 项。指导学生获得第二届全国大学生实验创新设计竞赛华中赛区二等奖、获批大学生科研基金项目 3 项。指导的学生毕业考研升学至湖南大学、华南理工大学、华东理工大学、华中师范大学、郑州大学、河南大学等省内外知名双一流高校多人。

个人主页