

Notes

金属铝和少量乙二酸促进羰基化合物水相噻呐偶合反应

袁仕祯*, 汪志勇, 李真

安徽建筑工业学院材料科学与工程系和中国科学技术大学化学系

收稿日期 2005-4-30 修回日期 2005-9-5 网络版发布日期 接受日期

摘要 金属铝和少量的乙二酸在水中, 能有效地促进芳香族羰基化合物水相噻呐偶合反应。得到的噻呐醇产率高, 但非对映异构体选择性差, 在同样条件下, 脂肪族羰基化合物不能进行噻呐偶合反应。

关键词 [铝金属, 噻呐偶合反应, 水相](#)

分类号

Reduction and Coupling Reaction of Carbonyl Compounds by Aluminum Powder and a Small Amount of Oxalic Acid in Water

YUAN Shi-Zhen^{*1}, WANG Zhi-Yong², LI Zhen¹

¹ Department of Material Science and Engineering, Anhui Institute of Architecture and Industry, Hefei, Anhui 230022, China

² Department of Chemistry, University of Science and Technology of China, Hefei, Anhui 230026, China

Abstract A convenient pinacol coupling of aromatic aldehydes and aryl methyl ketones has been achieved with high yields by aluminum powder in the presence of oxalic acid in water. However, the diastereoselectivities of pinacols were not satisfying, and most aliphatic aldehydes and diaryl ketones have been found to be unreactive under the same conditions

Key words [aluminum mediator](#) [pinacol coupling reaction](#) [aqueous media](#)

DOI:

通讯作者 袁仕祯 yuanshzh@mail.hf.ah.cn

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(0KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [复制索引](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“铝金属, 噻呐偶合反应, 水相”的 相关文章](#)

▶ 本文作者相关文章

- [袁仕祯](#)
- [汪志勇](#)
- [李真](#)