

研究简报

微波辐射下一步合成9-芳基-1,2,3,4,5,6,7,8,9,10-十氢-1,8-吡啶二酮

华国平^{1,2}, 李团结², 邹翔², 屠树江^{*2}

朱松磊², 章晓镜², 纪顺俊³, 张勇³

(¹徐州建筑职业技术学院 徐州 221008)

(²徐州师范大学化学系 江苏省药用植物生物技术重点实验室 徐州221009)

(³苏州大学化学化工学院 苏州 215006)

收稿日期 2004-12-8 修回日期 2005-4-26 网络版发布日期 接受日期

摘要 以芳醛、1,3-环己二酮、醋酸铵为原料在无溶剂条件下经微波辐射合成了一系列9-芳基-1,2,3,4,5,6,7,8,9,10-十氢-1,8-吡啶二酮. 该反应的反应时间短、产率高、环境友好、后处理方便. 产物的结构经红外光谱、核磁共振谱表征, **3d**的结构经单晶X射线衍射进一步确证.

关键词 [芳醛](#) [1,3-环己二酮](#) [吡啶二酮](#) [微波辐射](#)

分类号

One-pot Synthesis of 9-Aryl-1,2,3,4,5,6,7,8,9,10-decahydro- 1,8-acridinedione under Microwave Irradiation

HUA Guo-Ping^{1,2}, LI Tuan-Jie², ZOU Xiang², TU Shu-Jiang^{*2}, ZHU Song-Lei², ZHANG Xiao-Jing², JI Shui-Jun³, ZHANG Yong³

(¹ Xuzhou Institute of Architectural Technology, Xuzhou 221008)

(² Key Laboratory of Biotechnology on Medical Plant of Jiangsu, Department of Chemistry, Xuzhou Normal University, Xuzhou 221009)

(³ College of Chemistry and Chemical Engineering, Suzhou University, Suzhou 215006)

Abstract A series of 9-aryl-1,2,3,4,5,6,7,8,9,10-decahydro-1,8-acridinedione derivatives were synthesized via the reaction of aromatic aldehydes with 1,3-cyclohexanedione and ammonium acetate in solvent-free conditions under microwave irradiation by one-pot reaction. The reaction easily could be worked up with short reaction time, high yields and environmental friendliness. The structures of the products were confirmed by IR and ¹H NMR spectra. The structure of **3d** was further determined by X-ray analysis.

Key words [aromatic aldehyde](#) [1,3-cyclohexanedione](#) [microwave irradiation](#) [acridinedione](#)

DOI:

通讯作者 屠树江 laotu2001@263.net

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(OKB\)](#)

▶ [\[HTML全文\]\(OKB\)](#)

▶ [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“芳醛”的 相关文章](#)

▶ 本文作者相关文章

- [华国平](#)
-
- [李团结](#)
- [邹翔](#)
- [屠树江](#)
- [朱松磊](#)
- [章晓镜](#)
- [纪顺俊](#)
- [张勇](#)