FULL PAPERS

New Methods and Synthetic Applications of Asymmetric Nitrogen Transfer

ARMSTRONG Alan, EDMONDS Ian, COOKE Richard S., SHANAHAN Stephen E., KNIGHT Jamie D., CUMMING Graham R.

Department of Chemistry, Imperial College London, South Kensington, London SW7 2AZ, UK

收稿日期 2005-3-29 修回日期 2005-6-15 网络版发布日期 接受日期

摘要 Structure/reactivity relationships of *N*-alkoxycarbonyl- and *N*-carboxamidooxaziridines are explored, and conditions are discovered for the efficient amination of sulfides and primary amines. Reactions of these oxaziridines with alkenes are also examined, and lead to interesting new heteroatom transfer reaction products. Finally, the aminative rearrangement of 2-alkoxydihydropyrans leads to a useful stereocontrolled synthesis of pyrrolidines which can undergo synthetic manipulations to give [2.2.1]- and [3.2.1]-azabicycles.

关键词 *N*-alkoxycarbonyl, *N*-carboxamidooxazinidine, amination

分类号

New Methods and Synthetic Applications of Asymmetric Nitrogen Transfer

ARMSTRONG Alan, EDMONDS Ian, COOKE Richard S., SHANAHAN Stephen E., KNIGHT Jamie D., CUMMING Graham R.

Department of Chemistry, Imperial College London, South Kensington, London SW7 2AZ, UK

Abstract Structure/reactivity relationships of *N*-alkoxycarbonyl- and *N*-carboxamidooxaziridines are explored, and conditions are discovered for the efficient amination of sulfides and primary amines. Reactions of these oxaziridines with alkenes are also examined, and lead to interesting new heteroatom transfer reaction products. Finally, the aminative rearrangement of 2-alkoxydihydropyrans leads to a useful stereocontrolled synthesis of pyrrolidines which can undergo synthetic manipulations to give [2.2.1]- and [3.2.1]-azabicycles.

Key words N-alkoxycarbonyl N-carboxamidooxazinidine amination

DOI:

扩展功能

本文信息

- ► Supporting info
- ▶ <u>PDF</u>(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

- ▶ <u>本刊中 包含 "*N*-alkoxycarbonyl, *N*-carboxamidooxazinidine, amination"的</u>相关文章
- ▶本文作者相关文章
- ARMSTRONG Alan
- EDMONDS Ian
- COOKE Richard S
- SHANAHAN Stephen E
- KNIGHT Jamie D
- CUMMING Graham R

通讯作者 ARMSTRONG Alan A.Armstrong@imperial.ac.uk