

研究简报

水-盐酸两步法分离瓜环混合物

毕强*, 胡英鹏, 杨琴, 马彩莲, 李东亮

(西安建筑科技大学理学院 西安 710055)

收稿日期 2006-7-7 修回日期 网络版发布日期 2007-7-18 接受日期 2007-1-17

摘要 根据各元瓜环在水和盐酸两种溶剂中溶解度的不同, 提出了一种通过水-盐酸两步分离混合瓜环的方法. 探讨了溶剂用量、盐酸浓度等因素对分离效果的影响, 确定了最佳的分离工艺条件, 使CB[5], CB[6], CB[7]和CB[8]的分离产率分别达到78.9%, 92.0%, 88.0%和75.0%. 分离得到的瓜环单体经核磁共振检测, 纯度在95%以上, 其中CB[5]的纯度达到98%. 研究结果表明, 本工艺是一种简单有效的分离混合瓜环的方法.

关键词 [瓜环](#) [分离](#) [核磁共振](#) [水-盐酸](#) [两步法](#)

分类号

A Two-Step Approach for Cucurbit[*n*]uril Compound Separating by Water and Hydrochloric Acid

BI Qiang*, HU Ying-Peng, YANG Qin, MA Cai-Lian, LI Dong-Liang

(School of Science, Xi'an University of Architecture and Technology, Xi'an 710055)

Abstract This article developed a two-step separating approach of cucurbit[*n*]uril compound, which was based on the different solubility of cucurbit[*n*]uril in water and hydrochloric acid. Several factors of separating were deliberated and the optimized separating conditions were fixed. The productivity of CB[5], CB[6], CB[7] and CB[8] is 78.9%, 92.0%, 88.0% and 75.0% respectively. The purity of cucurbit[*n*]uril is higher than 95% determined by NMR spectra. Especially for CB[5], the detected purity is up to 98%. The results proved the discussed method to be a simple and reliable CB[*n*] monomers separating process.

Key words [cucurbit\[*n*\]uril](#) [separating](#) [nuclear magnetic resonance](#) [water and hydrochloric acid](#) [two-step approach](#)

DOI:

通讯作者 毕强* bxqiang12@126.com

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“瓜环”的 相关文章](#)
- ▶ 本文作者相关文章

- [毕强](#)
- [胡英鹏](#)
- [杨琴](#)
- [马彩莲](#)
- [李东亮](#)