

## Toluene Nitration Catalyzed by Keggin Heteropolyacid Anionic Brønsted Acid Salt

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**Abstract:** A novel Keggin heteropolyacid anionic Brønsted acid salt  $[(\text{CH}_2)_4\text{SO}_3\text{HMim}]_2\text{H}_2\text{PMo}_{12}\text{O}_{40}$  was synthesized and used as catalyst in toluene nitration in  $\text{HNO}_3$  (67%) with good catalytic activity. With the molar ratio of toluene to nitric acid 1 : 3, catalyst to toluene 1 : 10, and reaction for 10 h at 50 °C, the yield of mononitro products is about 84.9%, and the ratio of ortho- to para-isomers about 1.21.

**Key words:** applied chemistry; Keggin heteropolyacid anion based Brønsted acidic salt; nitration; toluene; nitric acid(67%)

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## 会议信息

1. 中国化学会第 28 届年会 <http://www.ccs.ac.cn/>

时间: 2012 年 4 月 13 ~ 16 日

地点: 成都

主办单位: 中国化学会

承办单位: 四川大学

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2. 第七届国际绿色能源会议暨第一届 DNL 洁净能源会议

<http://igec2012.dicp.csp.escience.cn>

时间: 2012 年 5 月 28 ~ 30 日

地点: 大连

主办单位: 国际绿色能源协会、洁净能源国家实验室(筹)

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