

晋城15号无烟煤的温和氧化

王玉高, 魏贤勇, 闫洪雷, 刘静, 柳方景, 李鹏, 宗志敏

中国矿业大学 煤炭加工与高效利用教育部重点实验室, 江苏 徐州 221116

Mild oxidation of Jincheng No.15 anthracite

WANG Yu-gao, WEI Xian-yong, YAN Hong-lei, LIU Jing, LIU Fang-jing, LI Peng, ZONG Zhi-min

Key Laboratory of Coal Processing and Efficient Utilization (Ministry of Education), China University of Mining & Techno

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摘要 用钌离子催化氧化法探究了晋城15号无烟煤(J15A)的结构特征,结果表明,J15A富含紧密的芳香性结构.在温和条件下,先用 H_2O_2 对J15A进行预处理,然后用NaOCl对其氧化从而生成苯多酸.结果表明, H_2O_2 预处理可提高NaOCl氧化J15A生成苯多酸的产率,而且该方法可以高收率、高选择性地获取苯多酸化学品.

关键词: 无烟煤 苯多酸 温和氧化

Abstract: Jincheng No.15 anthracite (J15A) was subjected to ruthenium ion-catalyzed oxidation to characterize its structural feature. The results show that J15A is abundant in *peri*-condensed aromatic structure. The NaOCl oxidation of J15A promoted by pretreatment with H_2O_2 was conducted under mild conditions to produce benzene polycarboxylic acids (BPCAs). The pretreatment with H_2O_2 is proved to enhance the yields of BPCAs. It is potential to obtain BPCAs in high yield and selectivity by NaOCl oxidation of pretreated J15A with H_2O_2 .

Key words: anthracite benzene polycarboxylic acid mild oxidation

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通讯作者: Wei Xian-yong E-mail: wei_xianyong@163.com

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