

[1]陈志芬, 蔺昊, 邹亮, 等. 城市抗震防灾规划中次生火灾风险快速评估方法[J]. 自然灾害学报, 2013, 01: 207-213.

CHEN Zhifen, LIN Hao, ZOU Liang, et al. A rapid method for post-earthquake fire risk assessment in urban planning on earthquake resistance and disaster prevention[J]. , 2013, 01: 207-213.

[点击复制](#)

## 城市抗震防灾规划中次生火灾风险快速评估方法(PDF)

《自然灾害学报》[ISSN:/CN:23-1324/X] 期数: 2013年01期 页码: 207-213 栏目: 出版日期: 2013-07-18

**Title:** A rapid method for post-earthquake fire risk assessment in urban planning on earthquake resistance and disaster prevention

**作者:** [陈志芬](#); [蔺昊](#); [邹亮](#); [朱思诚](#)  
中国城市规划设计研究院 城市公共安全研究中心, 北京 100044

**Author(s):** [CHEN Zhifen](#); [LIN Hao](#); [ZOU Liang](#); [ZHU Sicheng](#)  
Research Center of Urban Public Safety, China Academy of Urban Planning and Design, Beijing 100044, China

**关键词:** [城市抗震防灾规划](#); [地震次生火灾](#); [风险评估](#)

**Keywords:** [urban planning on earthquake resistance and disaster prevention](#); [post-earthquake fire](#); [risk assessment](#)

**分类号:** S429

**DOI:** -

**文献标识码:** -

**摘要:** 地震次生火灾风险评估是城市抗震防灾规划的重要内容之一。由于引起地震次生火灾的因素较多,因此,需要综合多因素进行地震次生火灾风险评估。从致灾因子危险性、承灾体易损性、环境因素三个方面研究地震次生火灾风险的评估方法,引入分类地块的概念,建立了致灾因子危险性评估的模型,以火灾荷载和人口密度作为财产损失和人员伤亡的衡量指标,评估承灾体易损性,并借助GIS的分析手段,发展了一套在抗震防灾规划中快速评估地震次生火灾风险的方法。案例研究的结果表明,该方法的评估结果能更全面地反映城市地震次生火灾风险的分布特征。

**Abstract:** Post-earthquake secondary fire risk assessment is one of the important content in urban planning on earthquake resistance and disaster prevention. Integrated method is required to assess the post-earthquake fire risk for the reason that fire risks are affected by many factors, which can be classified into hazard, hazard-affected bodies and environment. In this paper, a rapid method was built to assess the post-earthquake fire risk based on GIS analysis. The method includes the statistics method for hazard risk assessment, matrix method for calculating the vulnerability of hazard-affected bodies and the correction of environmental influence. The provided case study show good performance of this method for the urban planning on earthquake resistance and disaster prevention for a wide range of cities.

[导航/NAVIGATE](#)

[本期目录/Table of Contents](#)

[下一篇/Next Article](#)

[上一篇/Previous Article](#)

[工具/TOOLS](#)

[引用本文的文章/References](#)

[下载 PDF/Download PDF\(3710KB\)](#)

[立即打印本文/Print Now](#)

[推荐给朋友/Recommend](#)

[统计/STATISTICS](#)

[摘要浏览/Viewed](#) 127

[全文下载/Downloads](#) 106

[评论/Comments](#)



---

备注/Memo: 收稿日期:2012-6-12;改回日期:2012-8-20。

基金项目:地震行业科研专项(201008005);国家自然科学基金项目(41101512)

作者简介:陈志芬(1979-),女,博士,主要从事防灾减灾规划、风险评估研究.E-mail: runfenfen@163.com

---