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灾害地质

堰塞湖坝体稳定性研究现状及展望

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摘要:

2008年5月12日汶川发生里氏8.0级大地震,在灾区形成了30多个堰塞湖,严重威胁了下游人民群众的生命财产安全,引起了世人对堰塞湖坝体稳定的高度关注。本文在前人研究的基础上,从地形地貌、诱发原因、寿命三个方面总结了堰塞湖坝体形成及存在的机理。重点分析总结了目前堰塞湖坝体稳定性的研究进展,指出影响坝体稳定性的内因为堰塞坝的形态与规模、物质组成与结构,外因为堰塞湖湖水体积;总结了前人关于影响坝体稳定性的关键因素以及室内模型试验的研究成果。最后分析了目前研究存在的问题,展望了未来的研究方向。

关键词: 关键词 堰塞湖 坝体稳定性

RESEARCH STATUS AND PROSPECT OF THE STABILITY OF BARRIER DAM

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Abstract:

At 14: 28, on 12 May 2008, the earthquake occurred at Richter scale 8.0 at Wenchuan county, Sichuan

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province and more than 30 barrier lakes came into being, which made a great threat on people's life and property and drew great attention from all over the world. On the base of previous research, the paper summarizes the mechanism of forming and existence of barrier dams from topography and geomorphology, induced factors and lifetime. The focus is on the research progress of the stability of barrier dams. It is pointed out that the internal causes of the stability of barriers are morphology and scale, material composition and structure of barrier dams, and that the external causes is the volume of barrier lake. Then the paper summarizes the previous research results of key causes of the stability of barriers and of indoor model test. At last, the existing problems and future research direction of barrier dams is pointed out.

Keywords: Barrier lake Stability of barrier dams

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