

论文

复杂山区高等级铁路选线工程地质的若干问题

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摘要:

为科学地进行复杂山区高等级铁路选线,提出了高山峡谷区重力地质作用与物质运动、地壳形变与断裂活动振动力学、大高差高位铁路选线工程地质以及深埋隧道山体变形与物质运动等与之相关的问题. 基于近年来复杂山区新线建设的实践,提出了活动断裂区隧道洞口位置选择与隧道洞口结构设计动力学、重力地质强烈发育区桥位选择与评价原则以及桥位岸坡稳定性评价等复杂山区高等级铁路选线工程地质若干新的重大课题.

关键词: 复杂山区 铁路选线 工程地质

Problems about Engineering Geology of High-Grade Railway Route Selection in Complicated Mountainous Areas

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Abstract:

In order to scientifically carry out high-grade railway route selection in complicated mountainous areas, some major engineering geological problems in railway route selection were put forward. These problems are the gravitational process and movement of substance in high-mountain gorge areas, the crustal deformation and fault vibration mechanics, the engineering geological route selection of large elevated railway with a large difference in elevation, and the rock mass deformation and substance movement of deep-seated tunnels and so on. Based on the construction cases of the new railway lines in mountainous areas in China, several new research topics on the engineering geology of high-grade railway in complicated mountainous areas were advanced. They are the theory, principle and method of tunnel location selection and the slope stability evaluation of tunnel portal, and the location selection and slope stability evaluation of bridge sites in alpine-gorge areas.

Keywords: complicated mountainous area railway route selection engineering geology

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