

<<岩石蠕变扰动效应理论及试验研究>>

图书基本信息

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内容概要

在深井软岩条件下，巷道围岩应力状态处于岩石强度极限邻域内，围岩会产生较大的蠕变变形。并且，随机扰动荷载会对蠕变变形产生很大的影响。

因此，研究岩石的蠕变特性以及岩石在扰动荷载作用下的变形效应，建立蠕变扰动效应理论，对深井软岩支护具有重要的工程实用价值。

论文结合国家自然科学基金项目“岩石在强度极限邻域内的扰动蠕变特性实验研究”，围绕岩石的非线性蠕变特性和蠕变扰动效应，应用新研制的常载三轴扰动蠕变仪和弯曲试验仪，进行了岩石单轴压缩蠕变、四点弯曲蠕变和蠕变扰动效应等系列室内试验，主要研究了岩石的非线性蠕变特征、对扰动荷载敏感的邻域范围、强度极限邻域内的蠕变扰动效应等，得到了一系列有意义的研究成果。

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