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Nota di contenuto	Introduction -- Part I Experimental Studies on Compression-Shear Failure Mechanism of Rock Mass -- Joint Surface Morphology and Shear Behavior -- Influence of Flaw Inclination on Shear Fracturing and Fractal Behavior -- Influence of Flaw Density on Shear Fracturing and Fractal Behavior -- Part II Failure Mechanism and Stability Analysis of Heavily Fractured Rock Slope -- Method for Determining Strength Parameters of Heavily Fractured Rock Mass -- Kinematical Element Method -- Integrated Karst Cave Stochastic Model-Limit Equilibrium Method -- Strain-Softening Behavior and Strength Reduction Method -- Three-dimensional Effects -- Part III Failure Mechanism and Stability Analysis of Rock Slope Controlled by Major Geological Discontinuities -- Joint Element and Displacement Discontinuity Method -- Discontinuity Kinematical Element Method -- Joint Element and Strength Reduction Method -- Fracture Mechanics Method.

Sommario/riassunto

This book presents in-depth coverage of laboratory experiments, theories, modeling techniques, and practices for the analysis and design of rock slopes in complex geological settings. It addresses new concepts in connection with the kinematical element method, discontinuity kinematical element method, integrated karst cave stochastic model-limit equilibrium method, improved strength reduction method, and fracture mechanics method, taking into account the relevant geological features. The book is chiefly intended as a reference guide for geotechnical engineering and engineering geology professionals, and as a textbook for related graduate courses. .