1. Record Nr. UNINA9910299426203321

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Titolo	Strength Failure and Crack Evolution Behavior of Rock Materials Containing Pre-existing Fissures / / by Sheng-Qi Yang
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2015
ISBN	3-662-47303-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (258 p.)
Collana	Springer Environmental Science and Engineering, , 2194-3214
Disciplina	624.15132
Soggetti	Geotechnical engineering Civil engineering Geotechnical Engineering & Applied Earth Sciences Civil Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introduction -- Experimental investigation on strength failure and crack evolution behavior of brittle sandstone containing a single fissure -- Experimental investigation on crack evolution behavior of brittle sandstone containing two coplanar fissures in the process of deformation failure -- Experimental investigation on fracture evolution behavior of brittle sandstone containing three fissures -- Experimental investigation on fracture coalescence behavior of red sandstone containing two unparallel fissures -- Discrete element modeling on fracture coalescence behavior of red sandstone containing two unparallel fissures -- Fracture mechanical behavior of red sandstone containing a single fissure and two parallel fissures after exposure to different high temperature treatments -- Experimental investigation on strength and failure behavior of pre-cracked marble under conventional triaxial compression.
Sommario/riassunto	This book has following unique features that distinguish it from other works from the same area: 1) Investigates the influence of fissure geometry on strength failure and crack evolution behaviour of real rock material; 2) Analyzes the effect of pre-experiment high-temperature treatment on fracture mechanical behaviour of rock material with a single fissure or two parallel fissures; 3) Compares quantitatively

simulated results using discrete element modelling and experimental results of fracture mechanical behaviour of rock material with two fissures; 4) Constructs the relationship between crack evolution processes and acoustic emission distribution of pre-fissured rock material under entire deformation; and 5) Discusses the crack evolution mechanism of pre-fissured rock material with respect to different confining pressures. This book can become the reference for technicians in the field of geotechnical engineering, mining engineering and geology engineering. At the same time, this book can be regarded as a good reference for scientific researchers carrying out fissured rock mechanics and correlated specialties.