Record Nr. UNINA9910463070003321 Rock dynamics and applications: state of the art // editors, Jian Zhao, **Titolo** Jianchun Li Pubbl/distr/stampa London:,: CRC Press,, 2013 **ISBN** 1-138-00056-6 Edizione [First edition.] Descrizione fisica 1 online resource (632 p.) Altri autori (Persone) ZhaoJian <1960-> LiJianchun Disciplina 624.1/5132 Soggetti Rock mechanics Geotechnical engineering Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali A balkema book. Proceedings of the first International Conference on Rock Dynamics and Applications (RocDyn-1), Lausanne, Switzerland, 6-8 June 2013. Includes bibliographical references. Nota di bibliografia Nota di contenuto Keynotes -- Laboratory testing and field observation -- Dynamics theory and numerical modelling -- Engineering design and case studies. Sommario/riassunto Rock dynamics studies the response of rock materials and rock masses under dynamic loading conditions. In the last a couple of decades, the development of experimental and computational techniques has been able to capture the progress of fracturing in microsecond steps, allowing the exploration on how the fracture is initiated, propagated

under dynamic loading conditions. In the last a couple of decades, the development of experimental and computational techniques has been able to capture the progress of fracturing in microsecond steps, allowing the exploration on how the fracture is initiated, propagated and branched, leading to the development of new scientific theories. A summary of these developments on rock dynamic testing, modeling and theory will help the scientific and engineering community to consolidate the understanding of rock dynamics and to apply the knowledge to practice. Rock Dynamics and Applications - State of the Art reviews the state-of-the-art of rock dynamics scientific research and engineering applications. The 77 technical papers, including 13 keynotes cover dynamics theory and numerical modelling, laboratory testing and field observation, engineering design and case study, focus on the dynamic aspects of rock mechanics and rock engineering. The

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