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Titolo	Rockburst Evolutionary Process and Energy Dissipation Characteristics / / by Dazhao Song, Xueqiu He, Enyuan Wang, Zhenlei Li, Jie Liu
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Soggetti	Mineralogy Geotechnical engineering Engineering geology Engineering—Geology Foundations Hydraulics Energy storage Geotechnical Engineering & Applied Earth Sciences Geoengineering, Foundations, Hydraulics Energy Storage
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- Deformation and failure mechanism and energy conversion of coal/rock -- Time domain characteristics of energy dissipation of coal/rock in its damage process -- Spatiotemporal evolution of RADS based on energy dissipation of coal/rock -- Model for dynamic-pressure-typed rock burst evolution of RADS -- Evolution of stress field and energy field of MRADS through pressure-relief by water jet cutting -- Field verification of stress and energy fields evolutions in MRADS during pressure relief by water jet cutting -- Summary and prospect of the book.
Sommario/riassunto	This book investigates the evolution process of rockburst based on the energy dissipation theory and proposes appropriate active prevention and control technologies. It discusses the electromagnetic radiation (EMR) generated by coal rock fractures as a measurement of the

amount of dissipated energy, and the use of EMR to experimentally observe the time domain characteristics of energy dissipation during coal rock failure processes. It then proposes the concept of the rockburst activity domain system (RADS), establishes a dynamic pressure model of rockburst, and describes the energy criterion for rockburst instability. Lastly, it presents two waterjet cutting-based cases of pressure relief and rockburst prevention. The book serves as a reference resource for mine safety workers, engineering technicians, scientists, graduate students and undergraduates engaged in research on dynamic hazards such as rockburst.
