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Nota di contenuto	Introduction -- Coal Formation and Metamorphism -- Basic Physical Properties and Characteristics of Coal Pores and Fractures -- Gas Adsorption--Desorption Properties of Coal -- Foundation of Coal Mechanics -- Strength and Deformation Characteristics of Coal Containing Gas -- Seepage Properties and Permeability Evolution Model of Coal -- Geostress and Coal Seam Gas Occurrence -- Flow Theory of Gas in Coal Seams -- The Application of Coal Mechanics in the Stress Relief Gas Extraction -- Application of Coal Mechanics in Coal and Gas Outbursts.
Sommario/riassunto	This book focuses on the mechanical properties and permeability of coal, and the gas flow in coal seams. Based on coal permeability models, it establishes different models for coal seam gas, from the linear flow model to the gas–solid coupling flow model. It also provides the theoretical basis for the exploitation and safe production of coal as well as coal seam gas resources. As such, it is a valuable reference for researchers, advanced students and practitioners working in mining engineering and coalbed methane engineering. .