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Descrizione fisica	1 online resource (x, 282 pages) : illustrations, maps
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Nota di contenuto	Front matter -- Contents -- Rock Anisotropy, Fracture and Earthquake Assessment / Li, Yong-Gang -- 1. Seismic Wave Propagation in Anisotropic Rocks with Applications to Defining Fractures in Earth Crust / Wang, Yucang / Guo, William W. -- 2. Reproducing the Realistic Compressive-tensile Strength Ratio of Rocks using Discrete Element Model / Wang, Yucang / Guo, William W. -- 3. Rock Fracture under Static and Dynamic Stress / Kang, Jiming / Zhu, Zheming / Chen, Po -- 4. Multiple Linear Regression Analyses on the Relationships among Magnitude, Rupture Length, Rupture Width, Rupture Area, and Surface Displacement / Chu, Annie / Zhuang, Jiancang -- 5. PI Algorithm Applied to the Sichuan-Yunnan Region: A Statistical Physics Method for Intermediate-term Medium-range Earthquake Forecast in Continental China / Jiang, Changsheng / Rundle, John B. / Wu, Zhongliang / Zhang, Yongxian -- 6. Probabilistic Seismic Hazard Assessment for Pacific Island Countries / Rong, Y. / Park, J. / Duggan, D. / Mahdyiar, M. / Bazzurro, P.
Sommario/riassunto	This monograph provides an up-to-date overview on methods and techniques in seismology, with a focus on describing and detecting

seismic waves in anisotropic media. The author discusses structural, physical and mechanical aspects of the crust by analyzing earthquake data from field studies, rendering the book a practical reference for researchers in seismology and applied geophysics. Contents: Rock Anisotropy, Fracture and Earthquake Assessment Seismic Wave Propagation in Anisotropic Rocks with Applications to Defining Fractures in Earth Crust Reproducing the Realistic Compressive-tensile Strength Ratio of Rocks using Discrete Element Model Rock Fracture under Static and Dynamic Stress Multiple Linear Regression Analyses on the Relationships among Magnitude, Rupture Length, Rupture Width, Rupture Area, and Surface Displacement PI Algorithm Applied to the Sichuan-Yunnan Region: A Statistical Physics Method for Intermediate-term Medium-range Earthquake Forecast in Continental China Probabilistic Seismic Hazard Assessment for Pacific Island Countries