

1. Record Nr.	UNINA9910790132703321
Titolo	Imaging, modeling and assimilation in seismology [[electronic resource]] / edited by Yong-Gang Li
Pubbl/distr/stampa	Berlin ; ; Boston, : De Gruyter, c2012
ISBN	1-68015-207-6 1-280-59683-X 9786613626660 3-11-220440-9 3-11-025903-6
Descrizione fisica	1 online resource (272 p.)
Altri autori (Persone)	LiYong-Gang
Disciplina	551.2201/13
Soggetti	Seismology - Data processing Seismology - Mathematical models
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.
Nota di contenuto	Frontmatter -- Preface -- Contents -- Imaging, Modeling and Assimilation in Seismology: An Overview / Li, Yong-Gang -- Chapter 1. Full-Wave Seismic Data Assimilation: A Unified Methodology for Seismic Waveform Inversion / Chen, Po -- Chapter 2. One-Return Propagators and the Applications in Modeling and Imaging / Wu, Ru-Shan / Xie, Xiao-Bi / Jin, Shengwen -- Chapter 3. Fault-Zone Trapped Waves: High-Resolution Characterization of the Damage Zone of the Parkfield San Andreas Fault at Depth / Li, Yong-Gang / Malin, Peter E. / Cochran, Elizabeth S. -- Chapter 4. Fault-Zone Trapped Waves at a Dip Fault: Documentation of Rock Damage on the Thrusting Longmen-Shan Fault Ruptured in the 2008 M8 Wenchuan Earthquake / Li, Yong-Gang / Su, Jin-Rong / Chen, Tian-Chang -- Chapter 5. Ground-Motion Simulations with Dynamic Source Characterization and Parallel Computing / Duan, Benchun -- Chapter 6. Load-Unload Response Ratio and Its New Progress / Yin, Xiang-Chu / Liu, Yue / Zhang, Lang-Ping / Yuan, Shuai -- Chapter 7. Discrete Element Method and Its Applications in Earthquake and Rock Fracture Modeling / Wang, Yucang / Xue, Sheng / Xie, Jun

Sommario/riassunto

This work presents current approaches in geophysical research of earthquakes. A global authorship from top institutions presents case studies to model, measure, and monitor earthquakes. Among others a full-3D waveform tomography method is introduced, as well as propagator methods for modeling and imaging. In particular the earthquake prediction method makes this book a must-read for researchers in the field.
