Record Nr. UNINA9911021151203321 Autore Wang Xianmin Titolo Coseismic Landslides: Intelligent Prediction and Recognition / / by Xianmin Wang, Lizhe Wang, Haixiang Guo, Xuewen Wang, Qiyuan Yang, Aomei Zhang Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 981-9512-97-2 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (147 pages) Collana Earth and Environmental Science Series Altri autori (Persone) WangLizhe GuoHaixiang WangXuewen YangQiyuan ZhangAomei 551 Disciplina 363.34 Soggetti Natural disasters Machine learning Geology Artificial intelligence Natural Hazards Machine Learning Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Near real-time intelligent prediction and cause characteristics of

coseismic landslides -- Intelligent identification of coseismic landslides across an extensive region -- Cross-earthquake-event intelligent

recognition of coseismic landslides.

Sommario/riassunto Focusing on Habitable Earth for sustainability, this book develops novel

and sophisticated deep learning algorithms and explores their successful application in intelligent prediction and recognition of coseismic landslides. These algorithms have originality and unique advantages in relatively high accuracy, low false alarms, strong generalization, and good interpretability. They were successfully

applied in a series of violent earthquakes occurring worldwide from 2008 to 2022. This book provides significant techniques to support the 72-hour "golden window" for survivors in emergency rescue and to instruct postseismic rational reconstruction and development in society and economy. With cutting-edge algorithms and international urgent disaster-mitigating demands, this book caters to geoscientists, environmentalists, engineering geologists, and hazard geologists. It also appeals graduate students in the above fields.