Record Nr. UNINA9910627272103321 Autore Zhou Wan-Huan Titolo Practice of Discrete Element Method in Soil-Structure Interface Modelling / / by Wan-Huan Zhou, Zhen-Yu Yin Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa 981-19-0047-7 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (273 pages) Collana **Engineering Series** Disciplina 624.15136 Soggetti Engineering geology Geotechnical engineering Civil engineering Geoengineering Geotechnical Engineering and Applied Earth Sciences Civil Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia General Introduction -- DEM Model of Interface Shear Test -- Effect of Nota di contenuto Soil Particle Grading -- Effect of Particle Shape -- Effect of Morphology Parameters -- Effect of Interface Roughness -- Effect of Structural Roughness Direction -- Effect of Structural Hardness. This book is related to a parametric study of the soil-structural Sommario/riassunto interface shearing behavior based on the numerical simulations of interface shear test with DEM, which is conducted from the role of soil properties, particle properties and structural properties. To aid readers in easily understanding the generation, implementation of models and controlling modes, for each part, the relevant code is provided in the text, and the whole source code of model is given in Appendix to share with readers for practice. The book is intended for graduate-level teaching and research in soil mechanics and geotechnical engineering, as well as in other related engineering specialties. This book is also of

use to industry practitioners due to the inclusion of real-world

the industrial engineering and operations research fields.

applications, opening the door to advanced courses on modeling within