1. Record Nr. UNINA9910350318703321

Autore	Wu Yongkang
Titolo	Multi-physics Coupling Analysis of Clayey Core Wall of High Earth-Rockfill Dam / / by Yongkang Wu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-1032-7
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (148 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	627.83
Soggetti	Engineering geology Engineering—Geology Foundations Hydraulics Geotechnical engineering Mechanics Mechanics, Applied Geoengineering, Foundations, Hydraulics Geotechnical Engineering & Applied Earth Sciences Theoretical and Applied Mechanics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Summary of research progress -- Experimental study on the mechanical properties of core material -- Theoretical study on unsaturated seepage-consolidation -- Numerical method of unsaturated seepage-consolidation theory -- Consolidation analysis of high earth-rockfill dam -- Conclusions and outlook.
Sommario/riassunto	Nominated by Tsinghua University as an outstanding Ph.D. thesis, this book investigates the mechanical properties of unsaturated compacted clayey soil, the multi-field coupling consolidation theory of unsaturated soil and its application to a 261.5 m high earth-rockfill dam. It proposes a multi-field coupling analysis method of consolidation, and develops an efficient and practical finite element (FE) program for large-scale complex earth-rockfill dams. The book is primarily intended for researchers studying the multi-field coupling analysis of

seepage consolidation.