

1. Record Nr.	UNINA990006976930403321
Autore	Fréchet, Maurice <1878-1973>
Titolo	Les Mathématiques et le concret / par Maurice Fréchet ; préface de Raymond Bayer
Pubbl/distr/stampa	Paris : Presses Universitaires de France, 1955
Descrizione fisica	436 p. ; 22 cm
Collana	Philosophie de la matière
Disciplina	510.92
Locazione	FGBC
Collocazione	XI L 65
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910350340603321
Autore	Liu Yuanxue
Titolo	Plastic Mechanics of Geomaterial [[electronic resource] ] / by Yuanxue Liu, Yingren Zheng
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-3753-5
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (258 pages)
Collana	Springer Geophysics, , 2364-9119
Disciplina	620.11233
Soggetti	Hydraulic engineering Geotechnical Engineering & Applied Earth Sciences Geoengineering, Foundations, Hydraulics Geophysics and Environmental Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

## Nota di contenuto

Introduction -- Stress and strain and its basic equations -- The basic mechanical characteristics of the geomaterial -- The elastic model of geomaterial -- Classical Plasticity Theory -- The development of the plastic theory of geomaterial -- The static elastoplastic model for geomaterial -- Generalized plastic mechanics considering the rotation of principal axis of stress -- The dynamic constitutive model of geomaterial -- Limit analysis for geotechnical engineering.

---

## Sommario/riassunto

This book presents the basic theories of Plastic Mechanics of Geomaterial, including the static and dynamic mechanical properties, nonlinear and classical plastic theory, yield surface theory, hardening model, flow rule and loading–unloading criterion, the calculation theory of principal stress axe rotation, and limit analysis of geomaterial and the latest advances in FEM limit analysis. It also set forth the typical static and dynamic constitutive model of geomaterial in detail. Broadening our understanding of the basic mechanical properties and constitutive model for geomaterial, the book helps readers to establish and select the most appropriate constitutive model according to the specific engineering problems and geomaterial characteristics. This book is a valuable resource for designers and researchers in fields related to geotechnical engineering, and it can also be used as a textbook for graduate courses.

---