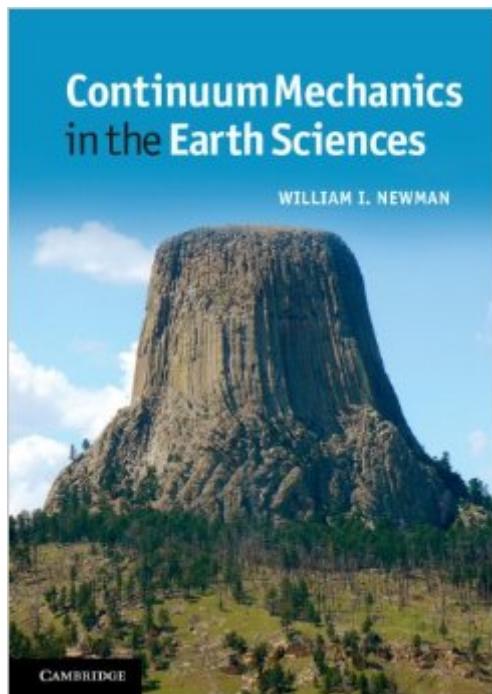


The book was found

# Continuum Mechanics In The Earth Sciences



## Synopsis

Continuum mechanics underlies many geological and geophysical phenomena, from earthquakes and faults to the fluid dynamics of the Earth. This interdisciplinary book provides geoscientists, physicists and applied mathematicians with a class-tested, accessible overview of continuum mechanics. Starting from thermodynamic principles and geometrical insights, the book surveys solid, fluid and gas dynamics. In later review chapters, it explores new aspects of the field emerging from nonlinearity and dynamical complexity and provides a brief introduction to computational modeling. Simple, yet rigorous, derivations are used to review the essential mathematics. The author emphasizes the full three-dimensional geometries of real-world examples, enabling students to apply this in deconstructing solid earth and planet-related problems. Problem sets and worked examples are provided, making this a practical resource for graduate students in geophysics, planetary physics and geology and a beneficial tool for professional scientists seeking a better understanding of the mathematics and physics within Earth sciences.

## Book Information

Hardcover: 194 pages

Publisher: Cambridge University Press; 1 edition (April 23, 2012)

Language: English

ISBN-10: 0521562899

ISBN-13: 978-0521562898

Product Dimensions: 6.8 x 0.6 x 9.7 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 starsÂ  See all reviewsÂ  (2 customer reviews)

Best Sellers Rank: #1,142,879 in Books (See Top 100 in Books) #251 inÂ  Books > Science & Math > Earth Sciences > Geophysics #701 inÂ  Books > Science & Math > Physics > Mechanics #979 inÂ  Books > Textbooks > Science & Mathematics > Mechanics

## Customer Reviews

An interesting book that explains some of the mains aspects in continuum mechanics, which are important to know for geologist and geophysicists in order to understand the faults behavior and earthquakes.

Great book, timely delivery.

[Download to continue reading...](#)

Continuum Mechanics in the Earth Sciences Computational Fluid Mechanics and Heat Transfer, Third Edition (Series in Computational and Physical Processes in Mechanics and Thermal Sciences) Schaum's Outline of Continuum Mechanics The Techniques of Modern Structural Geology, Volume 3: Applications of Continuum Mechanics in Structural Geology Continuum Mechanics Continuum Mechanics and Thermodynamics Mother Earth's Beauty: Types of Landforms Around Us (For Early Learners): Nature Book for Kids (Children's Earth Sciences Books) Mother Earth's Beauty: Types of Air Around Us (For Early Learners): Nature Book for Kids - Earth Sciences (Children's Weather Books) Robotics: The Beginner's Guide to Robotic Building, Technology, Mechanics, and Processes (Robotics, Mechanics, Technology, Robotic Building, Science) Soil Mechanics in Highway Engineering (Series on Rock and Soil Mechanics) Reinforced Concrete: Mechanics and Design (4th Edition) (Civil Engineering and Engineering Mechanics) Mechanics II: Mechanics of Materials + Process Fluid Mechanics, (Prentice-Hall International Series in the Physical and Chemical Engineering Sciences) Fuel: Poems (American Poets Continuum Series) Fuel (American Poets Continuum) Book of My Nights: Poems (American Poets Continuum, 68) Diwata (American Poets Continuum) The End of Pink (American Poets Continuum) Kingdom Animalia (American Poets Continuum) Not for Specialists: New and Selected Poems (American Poets Continuum)

[Dmca](#)