



## Continuum Mechanics Using Mathematica 2014: Fundamentals, Methods, and Applications (Hardback)

By Antonio Romano, Addolorata Marasco

BIRKHAUSER BOSTON INC, United States, 2014. Hardback. Book Condition: New. 2nd Revised edition. 246 x 163 mm. Language: English . Brand New Book. This textbook's methodological approach familiarizes readers with the mathematical tools required to correctly define and solve problems in continuum mechanics. Covering essential principles and fundamental applications, this second edition of Continuum Mechanics using Mathematica(R) provides a solid basis for a deeper study of more challenging and specialized problems related to nonlinear elasticity, polar continua, mixtures, piezoelectricity, ferroelectricity, magneto-fluid mechanics and state changes (see A. Romano, A. Marasco, Continuum Mechanics: Advanced Topics and Research Trends, Springer (Birkhauser), 2010, ISBN 978-0-8176-4869-5). Key topics and features: \* Concise presentation strikes a balance between fundamentals and applications \* Requisite mathematical background carefully collected in two introductory chapters and one appendix \* Recent developments highlighted through coverage of more significant applications to areas such as wave propagation, fluid mechanics, porous media, linear elasticity. This second edition expands the key topics and features to include: \* Two new applications of fluid dynamics: meteorology and navigation \* New exercises at the end of the existing chapters \* The packages are rewritten for Mathematica 9 Continuum Mechanics using Mathematica(R): Fundamentals. Applications

### Reviews

*Extremely helpful for all class of people. We have read through and that i am confident that i am going to going to read through again again down the road. Its been designed in an exceedingly basic way in fact it is simply following i finished reading this pdf in which in fact altered me, alter the way i think.*

-- **Noel Stanton**

*Absolutely one of the best pdf We have ever read. I really could comprehended every little thing using this written e book. I am easily could get a satisfaction of reading a written publication.*

-- **Dr. Odie Hamill**