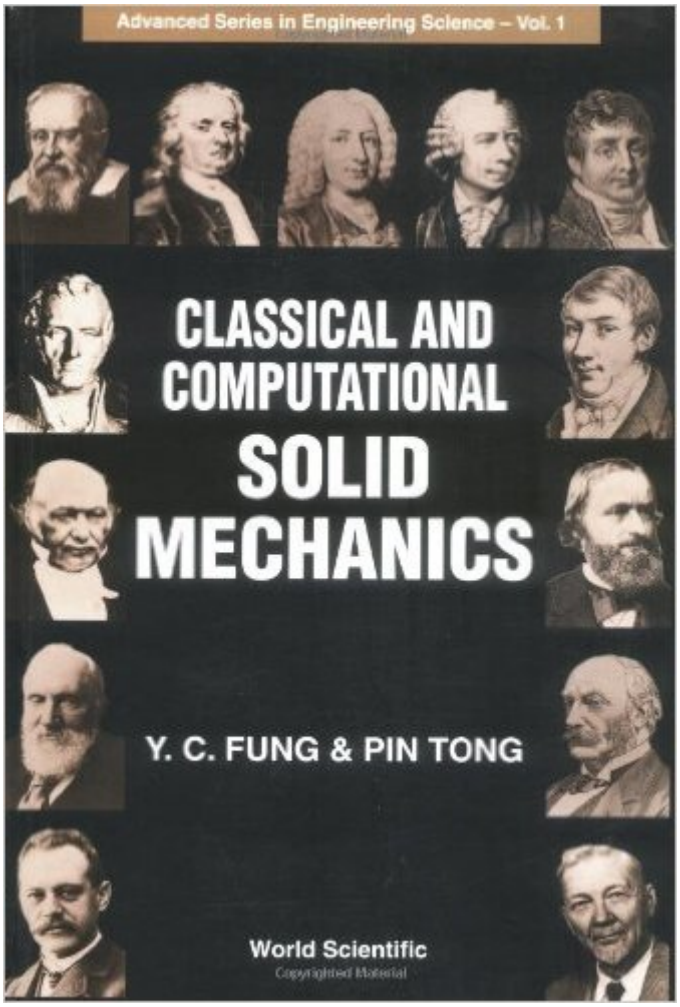
Classical And Computational Solid Mechanics (Advanced Series In Engineering Science)



Synopsis

This invaluable book has been written for engineers and engineering scientists in a style that is readable, precise, concise, and practical. It gives first priority to the formulation of problems, presenting the classical results as the gold standard, and the numerical approach as a tool for obtaining solutions. The classical part is a revision of the well-known text Foundations of Solid Mechanics, with a much-expanded discussion on the theories of plasticity and large elastic deformation with finite strains. The computational part is all new and is aimed at solving many major linear and nonlinear boundary-value problems.

Book Information

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Customer Reviews

I was an acquaintance of Professor Y.C. "Burt" Fung when he wrote his classic Solid Mechanics book - "Foundations of Solid Mechanics." He had just left Cal Tech to work in the field of Biomechanics at UC San Diego. This book contains much of the same material, updated to the present time, with very nice historical writings about the founders of Solid Mechanics. This is an excellent reference for anyone that considers themself a solid mechaniker.

A great bible in solid mechanics created by 2 excellent masters from China, which have fundamantal contributions to contemperary mechanics and FEM.In first part, you will read the complete methodology in classic solid mech. While in second part, the outline of FEM has been

demonstrated clearly.

It’s good to have a wide overview in Solid Mechanics, but it’s not very clear explaining finite non-linear deformations and finite element analysis. There are better and more modern books for that. Sometimes it’s confusing.

In this book, the elastic wave is introduced in detail, and it is good for graduated student in seismological field.

To many typos for my liking.

My professor was new to teaching and, coupled with his heavy Chinese accent, it soon became obvious that a book would be necessary for me to learn and understand the material in this class. So I purchased two books before acquiring this one, and this one is by far the best of them all. It explains everything in detail and rarely skips steps when deriving an equation and always states the assumptions upon which that equation is derived. I have not read the entire book - probably about half - but the portions I have read explained concepts in a non-boring, easy-to-understand way. This book helped me a lot in class and, after the end of the course, I decided to keep it for future reference rather than sell it. This is a good book. Buy it!

Bought this book for a class I am taking. Well written and easy to understand.

The authors are very keen on this area. The book is suite for the researcher.

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