



Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition

By Grigory Vekstein

Download now

Read Online ➔

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein

Based on the author's many years of lectures and tutorials at Novosibirsk State University and the University of Manchester, **Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition** takes a problems-based approach to teaching continuous media. The book's problems and detailed solutions make it an ideal companion text for advanced physics and engineering courses.

Suitable for any core physics program, this revised and expanded edition includes a new chapter on magnetohydrodynamics as well as additional problems and more detailed solutions. Each chapter begins with a summary of the definitions and equations that are necessary to understand and tackle the problems that follow. The text also provides numerous references throughout, including Landau and Lifshitz's famous course of theoretical physics and original journal publications.

⬇ [Download Physics of Continuous Media: Problems and Solution ...pdf](#)

📖 [Read Online Physics of Continuous Media: Problems and Soluti ...pdf](#)

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition

By Grigory Vekstein

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein

Based on the author's many years of lectures and tutorials at Novosibirsk State University and the University of Manchester, **Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition** takes a problems-based approach to teaching continuous media. The book's problems and detailed solutions make it an ideal companion text for advanced physics and engineering courses.

Suitable for any core physics program, this revised and expanded edition includes a new chapter on magnetohydrodynamics as well as additional problems and more detailed solutions. Each chapter begins with a summary of the definitions and equations that are necessary to understand and tackle the problems that follow. The text also provides numerous references throughout, including Landau and Lifshitz's famous course of theoretical physics and original journal publications.

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein Bibliography

- Sales Rank: #4021470 in Books
- Brand: Brand: CRC Press
- Published on: 2013-03-07
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x .60" w x 6.10" l, .95 pounds
- Binding: Paperback
- 260 pages

 [Download Physics of Continuous Media: Problems and Solution ...pdf](#)

 [Read Online Physics of Continuous Media: Problems and Soluti ...pdf](#)

Editorial Review

Review

This book presents an excellent and exemplary collection of up-to-date exercises and their solutions on continuous media, covering a wide range of topics from electro-, magnetohydro- and fluid dynamics, and from the theory of elasticity. The author is an international expert with many years of research and teaching experience in the field. Each chapter begins with a comprehensive summary of definitions and the mathematical description of the physical laws necessary to understand and solve the series of problems that follow. The problems and exercises are a gradual built up in each of the topics and they introduce the reader step by step into the principles of the subject. The solutions are well explained and detailed with additional readings when necessary. This exercise book is written in a true scholarly manner that allows the reader to understand the basic principles and physical laws of continuous media. This problem-solving book is highly recommended to graduate and postgraduate students, postdoctoral researchers or to scientists who want to refresh their knowledge or teach the subject at university level.

?Robert Erdelyi, University of Sheffield

Professor Vekstein's book is a wonderful resource for both condensed-matter physics courses and self-study. The problems are chosen to illustrate physical phenomena without unnecessary complications. The solutions are very clear; they set the student on a sure path to solution, while still leaving some details to be worked out by the student. I think this is a pedagogically efficient format. I recommend this book to every student of continuous matter, as well to any scientist wishing to familiarize themselves with this important branch of physics. I fondly remember a few of the problems in this book from being a student in Professor Vekstein's Physics of Continuous Media class at Novosibirsk University some 30 years ago.

?Dmitry Budker, University of California, Berkeley

Vekstein is a brilliant scientist with a strong international reputation. His book is highly recommended and fills a unique niche. It will be invaluable to final year physics and applied mathematics undergraduates, together with masters and PhD students, by complementing the standard textbooks on electromagnetism, fluid dynamics and MHD. Drawing on his long experience of superb teaching of these subjects at a high level, Vekstein has compiled an intriguing set of problems in these areas that reveal common themes often missing from the standard texts. He also masterfully guides the reader through the complexities of their solutions.

?Eric Priest, University of St Andrews

Classical physics constitutes a major cornerstone in the foundation of contemporary science. There are several well-known textbooks presenting the theoretical background, but much less handbooks providing practical exercises which are indispensable for the learning process.

This book written by Grigory Vekstein provides readers with a unique opportunity of studying the fundamentals of classical physics "hands on," by doing some important and original exercises following the detailed, extended comments. Thanks to the pedagogical talent and experience of the author, readers have an opportunity to grasp all basic elements of mechanics of fluids and solids as well as electrodynamics in one nicely composed and relatively compact book.

?Vladimir Tikhonchuk, University of Bordeaux

Users Review

From reader reviews:

Carrie Freeman:

Why don't make it to become your habit? Right now, try to ready your time to do the important behave, like looking for your favorite guide and reading a guide. Beside you can solve your problem; you can add your knowledge by the reserve entitled Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition. Try to stumble through book Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition as your friend. It means that it can to become your friend when you truly feel alone and beside regarding course make you smarter than ever. Yeah, it is very fortunated in your case. The book makes you far more confidence because you can know anything by the book. So , we need to make new experience as well as knowledge with this book.

Wanda Stamper:

What do you in relation to book? It is not important along? Or just adding material when you require something to explain what your own problem? How about your free time? Or are you busy man or woman? If you don't have spare time to do others business, it is gives you the sense of being bored faster. And you have extra time? What did you do? Every person has many questions above. They need to answer that question simply because just their can do that. It said that about book. Book is familiar on every person. Yes, it is appropriate. Because start from on pre-school until university need this Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition to read.

Virginia Hause:

Reading a e-book can be one of a lot of pastime that everyone in the world really likes. Do you like reading book and so. There are a lot of reasons why people love it. First reading a e-book will give you a lot of new information. When you read a book you will get new information mainly because book is one of a number of ways to share the information as well as their idea. Second, studying a book will make anyone more imaginative. When you reading through a book especially fictional works book the author will bring one to imagine the story how the figures do it anything. Third, you may share your knowledge to other individuals. When you read this Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition, you can tells your family, friends along with soon about yours publication. Your knowledge can inspire average, make them reading a guide.

Wanda Riddle:

You could spend your free time to study this book this book. This Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition is simple to develop you can read it in the recreation area, in the beach, train and soon. If you did not possess much space to bring the particular printed book, you can buy the particular e-book. It is make you simpler to read it. You can save the book in your smart phone. Thus there are a lot of benefits that you will get when one buys this book.

Download and Read Online Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein #X9RO0651SPJ

Read Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein for online ebook

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein books to read online.

Online Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein ebook PDF download

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein Doc

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein Mobipocket

Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein EPub

X9RO0651SPJ: Physics of Continuous Media: Problems and Solutions in Electromagnetism, Fluid Mechanics and MHD, Second Edition By Grigory Vekstein