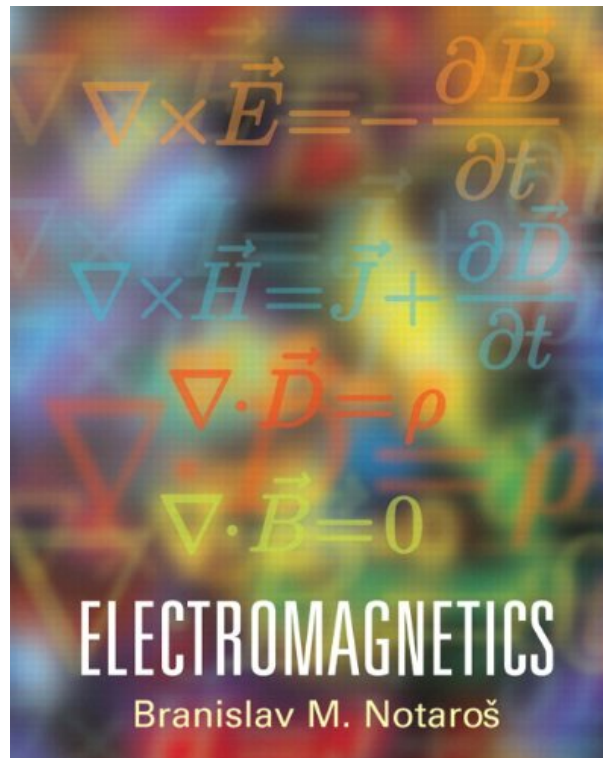
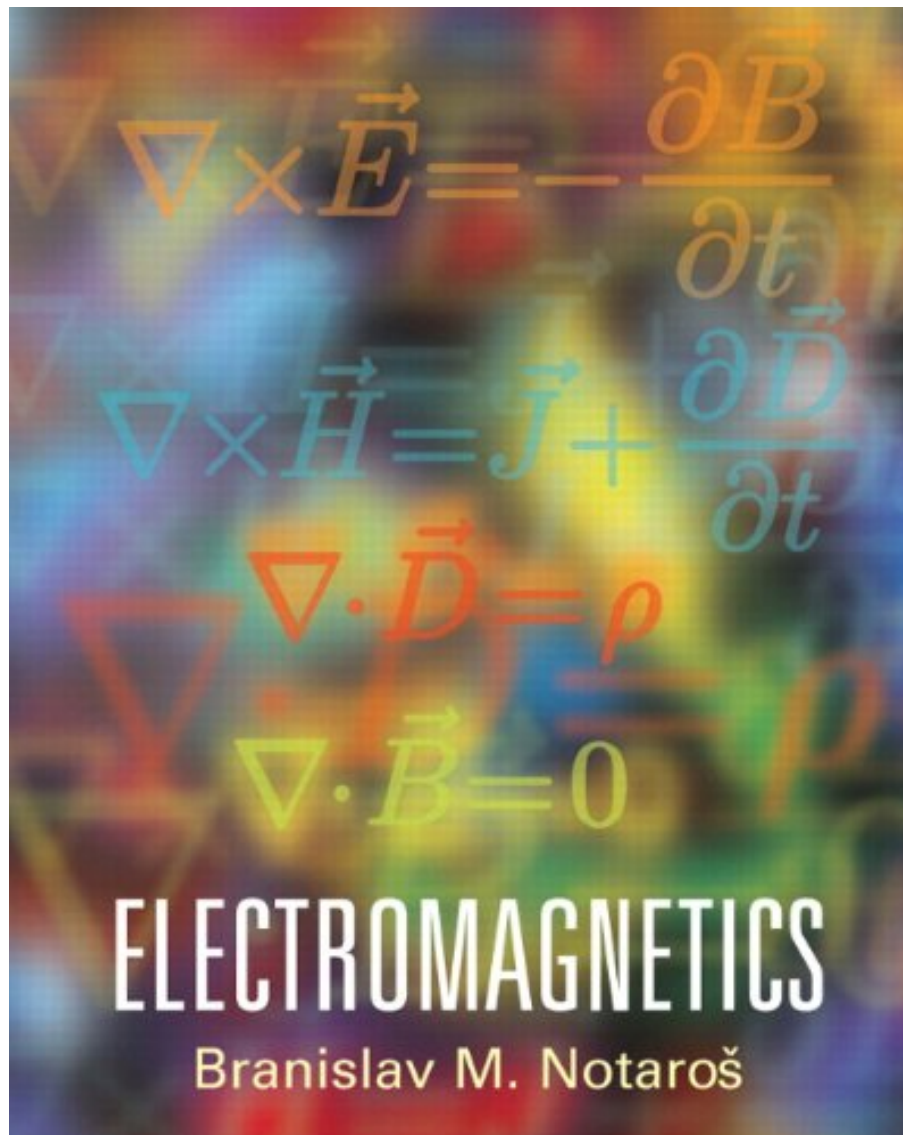


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Most helpful customer reviews

15 of 16 people found the following review helpful.

One of the best EM textbooks ever written for a complete and in depth electromagnetic education

By Ergun Simsek

I am writing a book review for the first time in my life, and the reason I am doing this is not that the author was my former advisor but rather because this is a really great textbook and I believe more instructors/students should use it.

Let me briefly mention my experience with EM books. When I was an undergraduate student at Bilkent, we used D. K. Cheng's book. It was a great book for sure, everything was well explained, there were so many examples but, frankly, with all the proof and derivation requiring problems, it was a difficult book for a junior student. After studying other great EM books written by Balanis and Pozar, I had the unique chance to work with Prof. Notaros during my graduate study. In the following years, first as a PhD student, then as a post doc, and finally as a professor of electrical engineering, I had a chance to examine almost all the EM textbooks (Hayt & Buck, Stratton, Inan & Inan, Jackson, Griffiths, Sadiku, Kraus, etc.) and I can safely say that Notaros' book is one of the best EM textbooks ever written for a complete and in depth EM education.

To me, here are the pros and cons.

pros:

- in depth analysis
 - detailed explanations
 - step by step derivations
 - problems requiring creativity and thinking
 - lots of examples
 - visualization improvement via Matlab exercises
 - biographies of scientists and engineers, who shaped electromagnetics, stimulate intellectual curiosity
- (Last three items are main differences between Notaros and Cheng's books)

cons:

- some examples are difficult for an undergraduate student
- there are so many referrals which make it difficult to follow sometimes (e.g. a problem in chapter 8 might refer to one of the solved examples from the same chapter, which depends on the result of another example in chapter 6 that uses a figure from chapter 3)
- (for an instructor) it is almost impossible to finish the whole book in 2 semesters

- lacks pictures of the modern EM tools and devices (students like them)

I should also compare this book to the most commonly used EM textbook at US universities: Ulaby's book. Students love it due to its light content. It provides fancy pictures and explanations of many electromagnetic (EM) tools and devices but we have to accept that it is weak from the theoretical point of view. It lacks coherent derivations and it is really difficult for a student to gain intuitive understanding of most of the fundamental concepts of electromagnetics using Ulaby's book only. Notaros', Cheng's, or Hayt & Buck's EM books provide much deeper electromagnetics.

Overall, I strongly recommend this book for the instructors, who would like to have a complete reference, and students, who would like to specialize in electromagnetics.

6 of 6 people found the following review helpful.

A must have for EE students

By MrTibbs

I have to say, as a senior EE student this book is amazing. There are so many examples and references in this book that it is almost impossible not to be able to do every problem that it asks. It teaches you using a geometrical approach that is not common in most other physics and electromagnetics books. I find that the approach is much easier to learn and leads to a better understanding of how the different equations in electromagnetics change according to the situations that are presented. I would highly recommend this book to any student/professors/enthusiasts who want to either expand their understanding of this subject or an awesome reference book.

5 of 5 people found the following review helpful.

Extremely Thorough and Precise Book

By Michael R.

This book is a completely new way of looking at the field of Electromagnetics. There is a much higher emphasis on theory and conceptual understanding on a geometric level rather than a barrage of equations (although don't get me wrong, there are plenty of equations to be found here).

While this book is very difficult, yes, and the problems are a challenge, they're extremely well crafted and illuminating, and there are a lot of them! Dr. Notaros has spent a lot of time creating a series of problem questions, conceptual questions, and even hundreds of MATLAB questions complete with tutorials. This is definitely a labor of love, which is especially clear if you have actually had him as a teacher.

My only complaints are sometimes this book is TOO much, it's small but very very dense and you find yourself overwhelmed by the sheer amount of information on each page. Also it's a little annoying when you have to flip back to a figure in the first chapter to solve a problem in the 6th chapter, there's a lot of back reference, which can get old.

Electromagnetics is not an easy field to comprehend, I can only claim to understand a fraction of it, but this book certainly does a great job of making it more engaging and intuitive, particularly with its wealth of figures and examples.

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