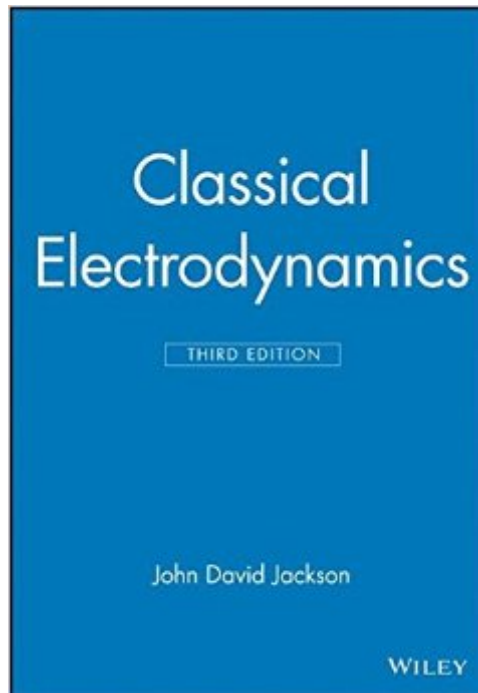


The book was found

# Classical Electrodynamics Third Edition



## Synopsis

A revision of the defining book covering the physics and classical mathematics necessary to understand electromagnetic fields in materials and at surfaces and interfaces. The third edition has been revised to address the changes in emphasis and applications that have occurred in the past twenty years.

## Book Information

Hardcover: 832 pages

Publisher: Wiley; 3 edition (August 10, 1998)

Language: English

ISBN-10: 047130932X

ISBN-13: 978-0471309321

Product Dimensions: 7.2 x 1.5 x 10.1 inches

Shipping Weight: 3.2 pounds (View shipping rates and policies)

Average Customer Review: 3.6 out of 5 stars [See all reviews](#) (137 customer reviews)

Best Sellers Rank: #35,201 in Books (See Top 100 in Books) #5 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Superconductivity](#) #6 in [Books > Science & Math > Physics > Solid-State Physics](#) #15 in [Books > Science & Math > Physics > Electromagnetism > Electricity](#)

## Customer Reviews

(...but I wish I could!!!)The title of my review just about sums my opinion on this "classic" grad electrodynamics text. The book kind of [stinks] as a textbook, but there is nothing even remotely close to it in scope out there. So like a previous reviewer said: "Jackson's here to stay; GET USED TO IT!"...P>For those who still want my opinion on the specifics of this book (I promise, they won't help you-- you still have to get through Jackson!) I offer the following brief comments, some of which you may have heard before, some which may be new:(1) The problems are hard. Damn hard. Someone else already said that, and I agree. What I WILL add, however, is that some of the problems are also simply STUPID and a waste of time, offering or enhancing physical understanding very little if at all. (Don't get me wrong-- there are some problems which, while hard, are also pretty darn cool. Unfortunately, there are too many of the other kind, too.) The type of problems I am talking about are of the following ilk: "Prove the following six-term vector identity;" "Re-derive equation #72 for a transverse magnetic field" "Prove equation #27." Quite simply: WHO CARES!?!(2) While the volume is pretty encyclopedic, it is often hard to follow. Jackson often simply

states things in the text without explaining where they come from, how they are derived, or why they are important,--- for example, as I read the text, I began to hate the two words "we see," which are used in cases like (paraphrasing now) "Therefore, we see the following relationship holds"---when it was not at all clear to me where the heck this relationship was coming from! I often felt stupid because, in fact, I often did NOT "see" at all!!!

I am currently taking the second semester of a full-year course in graduate electrodynamics. We've been using Jackson as our main textbook, but the professor sometimes use his own collection of problems as our homeworks. I've just realize why he did it, some of the problems in Jackson are extremely difficult. However, I agree with another reviewer who stated that once you are armed with full mathematical apparatus, the book would be a gold mine of electrodynamics. My own method of study involves derivations of formulas, following the discussion in Jackson. This is really hardwork, but it worth the effort. For those who are mathematically deficient, I suggest you to have your Arfken ready beside you (G.B. Arfken, H.J. Weber, Mathematical Methods for Physicist, 5th edition, Academic Press, ISBN 0120598256). As far as I know, this is the only book still in printing that provide almost all mathematical tools required for Jackson: Vector analysis, coordinate systems, tensor analysis, Lorentz group, partial differential equations and separations of variables, Sturm-Liouville theory, Green functions, Laplace, Helmholtz, modified Helmholtz (wave) equations, Bessel functions, Legendre functions (including the second solution and vector spherical harmonics), Fourier series and transform, and many more. Jackson and Arfken are really pair, you can't learn Jackson without Arfken. For those whose lack physical insights and need to brush up your undergraduate electromagnetism, I recommended one and only one textbook: D.J. Griffiths Introduction to Electrodynamics. I compared the discussion in Griffiths and Jackson, and I surprised to find that there are some identical choices of topics like Jefimenko's equations, potentials and fields, development of Maxwell tensor, even L.V.

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

Classical Electrodynamics Third Edition Classical Electrodynamics, 2nd Edition Electrodynamics and Classical Theory of Fields and Particles (Dover Books on Physics) Introduction to Electrodynamics, 4th Edition Modern Electrodynamics The Vintage Guide to Classical Music: An Indispensable Guide for Understanding and Enjoying Classical Music Ancient Geography: The Discovery of the World in Classical Greece and Rome (Library of Classical Studies) Classical Trios for All (From the Baroque to the 20th Century): Trombone, Baritone B.C., Bassoon, Tuba (Classical Instrumental Ensembles for All) Classical Duets for All (From the Baroque to the 20th Century):

Trombone, Baritone B.C., Bassoon, Tuba (Classical Instrumental Ensembles for All) Classical Music 101: A Complete Guide to Learning and Loving Classical Music Classical Sheet Music For French Horn With French Horn & Piano Duets Book 1: Ten Easy Classical Sheet Music Pieces For Solo French Horn & French Horn/Piano Duets (Volume 1) Classical Jazz Rags & Blues, Bk 1: 10 Classical Melodies Arranged in Jazz Styles for Early Intermediate Pianists The Well-Trained Mind: A Guide to Classical Education at Home (Third Edition) Crazy Horse, Third Edition: The Strange Man of the Oglalas, Third Edition Much Ado About Nothing: Revised Edition: Third Series (The Arden Shakespeare Third Series) What Your Third Grader Needs to Know (Revised Edition): Fundamentals of a Good Third-Grade Education (Core Knowledge Series) I Am Third: The Inspiration for Brian's Song: Third Edition Third Eye: Third Eye, Mind Power, Intuition & Psychic Awareness: Spiritual Enlightenment The Animator's Survival Kit, Expanded Edition: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators The Classical Style: Haydn, Mozart, Beethoven (Expanded Edition)

[Dmca](#)