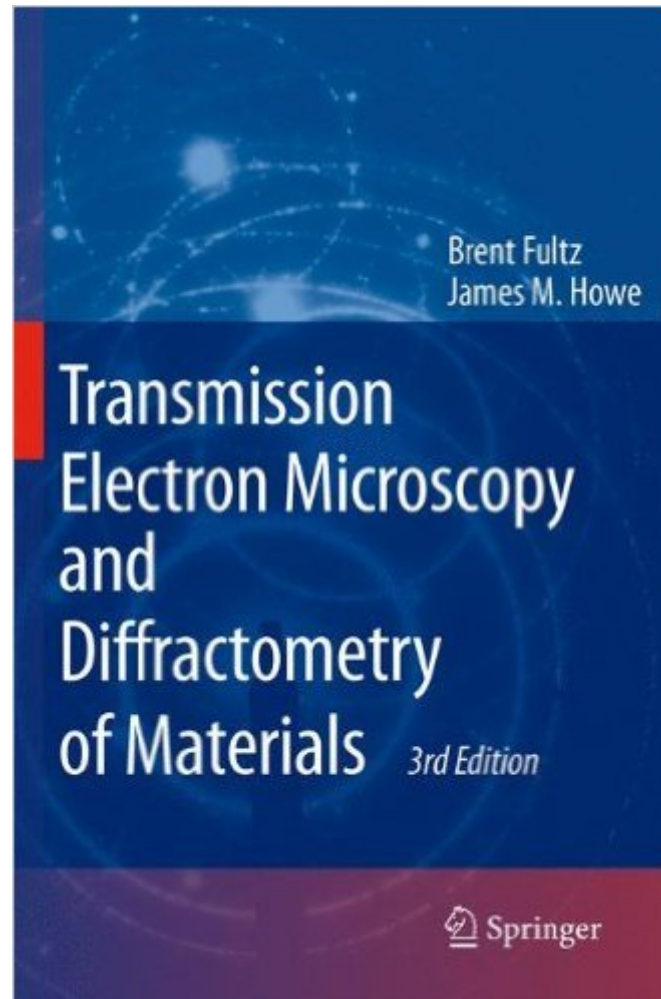


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# Transmission Electron Microscopy And Diffractometry Of Materials



## Synopsis

This hugely successful and highly acclaimed text is designed to meet the needs of materials scientists at all levels. In this third edition readers get a fully updated and revised text, too. Fultz and Howe explain concepts of transmission electron microscopy (TEM) and x-ray diffractometry (XRD) that are important for the characterization of materials. The edition has been updated to cover important technical developments, including the remarkable recent improvement in resolution of the TEM, and all chapters have been updated and revised for clarity. A new chapter on high resolution STEM methods has been added. Each chapter includes a set of problems to illustrate principles, and the extensive Appendix includes laboratory exercises.

## Book Information

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## Customer Reviews

The star-value is indicative of the quality of this textbook, if I were to rate 's treatment of this book they would get a solid 5-stars. This textbook is a useful supplement to someone who is well grounded in the physical principles of diffraction. A great deal of attention is given to the ins-and-outs of the mathematics under-riding various phenomena, but the physical interpretations of the mathematics are not nearly as clear. I would highly recommend this book to an individual with a working qualitative knowledge of TEM and diffraction who is seeking to better quantify his/her understanding, but would not advise someone unfamiliar with these topics to pick up this book as an introduction. I also want to take a moment to wax poetic about the glories of . I accidentally ordered this book to my old West Philly apartment, all the way across the country from where I now reside.

When I realized my error I contacted my old super and asked her to keep an eye out for the book so I could have it sent to my new home. It never appeared. Apparently the mail carrier thought it was a good idea to leave a package out on a doorstep where passerby could easily take it for further inspection later. When I called customer service and explained my plight, the representative I talked to was able to arrange to deliver me a new copy to the correct address at no additional cost. These people are wonderful and glorious and the experience has earned them my undying gratitude. Thanks again !

Well, the content of the book is excellent. But "print on demand" copies are being sold. Since the binding of "print on demand" copies is in general not as good as standard hardcover books, the information should be given honestly in the description of the book.

I bought this book for a TEM/Diffraction class. A friend summed it up nicely: all the information you could want about TEM is in this book, but boy, do you have to dig for it. Often rambling; hard to get the important concepts due to the large amount of verbose text. Problems in back of chapters often hard to solve unless you are making just the right assumptions. This is too bad, since Fultz's work is often interesting and his conversational style could be nice if it was reigned in a bit. Get Williams and Carter for all practical purposes. The book from Goodhew, Humphreys, and Beanland is less mathematically rigorous than Fultz's but much more effective at getting concepts across. Egerton's book seems to be common, but I find it to be a bit too brief for me. There are a zillion TEM/Diffraction books out there, spend an afternoon in the library and choose one that suits your learning style.

I cannot agree with the previous comments at all. Among all the books I've read in the area of materials characterization, this book is one of, if not, the most tedious one. Some concepts should have been explained in a much more concise and clear way. The description is very redundant and intimidating. The author fails to include more experimental contents but tells you where the sum of a geometric series comes from. Among many concepts and terms, the author smugly add much useless description which brings you nothing but headache. Other books, such as the famous TEM textbook by Williams and Carter, is obviously much much better than this one.

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