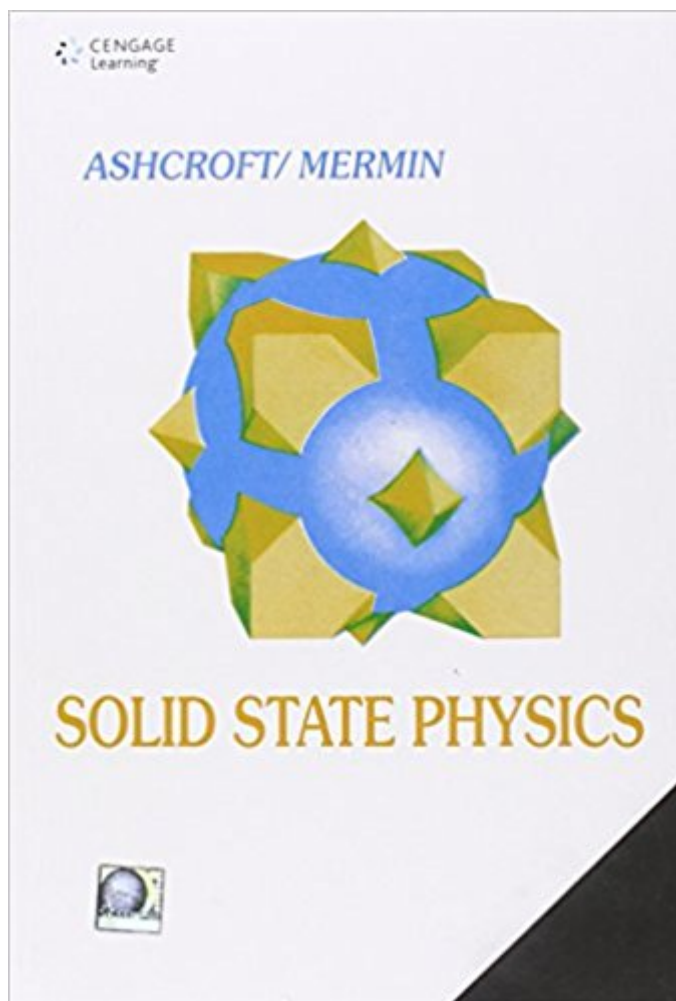


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# Solid State Physics



## Synopsis

This book provides a comprehensive introduction to the field of solid state physics for undergraduate students in physics, chemistry, engineering, and materials science. --This text refers to the Hardcover edition.

## Book Information

Paperback: 848 pages

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Neil W. Ashcroft is a British solid-state physicist. Ashcroft completed his undergraduate studies at the University of New Zealand in 1958 and received his PhD in 1964 from the University of Cambridge for research investigating the Fermi surfaces of metals. Following his PhD, Ashcroft completed postdoctoral research at the University of Chicago and at Cornell University, where he became a Professor in 1975. In 1990 he was named the Horace White Professor of Physics, and was elected to emeritus status in 2006. He served as the director for the Laboratory of Atomic and Solid State Physics at Cornell University (1979-1984), the director for the Cornell Center for Materials Research (1997-2000), and as the deputy director for the High Energy Synchrotron Source (1990-1997). Between 1986 and 1987, he served as the head of the Condensed Matter division of the American Physical Society. His textbook on solid-state physics, written with N. David Mermin, is a standard text in the field. Since 1997, he has been a member of the National Academy of Sciences. N. David Mermin is Horace White Professor of Physics Emeritus at Cornell University. He has received the Lilienfeld Prize of the American Physical Society and the Klopsteg Award of the American Association of Physics Teachers. He is a member of the U. S. National Academy of Sciences and the American Academy of Arts and Sciences. Professor Mermin has written on quantum foundational issues for several decades, and is known for the clarity and wit of his scientific writings. Among his other books are Solid State Physics (with N. W. Ashcroft, Thomson Learning 1976), Boojums all the Way Through (Cambridge University Press 1990), and It's about Time: Understanding Einstein's Relativity (Princeton University Press 2005). --This text refers to the Hardcover edition.

Good book. My school used Kittel instead so I have read both and I think this one is better if you really want to understand solid state physics.

This is a great book and I like it. I used it as my primary text book in my condensed matter class this year. If you have never taken condensed matter or at least thermal dynamics/ statistical physics you might want to supplement this book with another more qualitative book.

There is the Landau series, the Cohen QM book, Feynman, Sakurai, and then there's the Mermin classic. People will tell you they like Kittel, but really they should read, use, and refer to Mermin. By far an amazing book. This is like the Oxford Classic, Dynamic Theory of Crystal Lattices by Born, likewise essential to anyone studying solid state. The exercise problems are so much fun too!

Very Good book!

good book to start reading solid state physics. Specially for undergraduates and also for the graduate students to refresh their memory

excellent text if you're just getting into solid state, but have a background in other fields (e.g. mathematics or p. chem). would be a challenging text for undergraduates.

Canonical book for students of condensed matter.

Nice book for Condensed Matter Physics, the only downside is that it's an old book (so no chapters on TIs or HTC). Still, a highly recommended book.

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