



The Physics of Semiconductors

By Marius Grundmann

Springer-Verlag GmbH Jan 2016, 2016. Buch. Condition: Neu. Neuware - The 3rd edition of this successful textbook contains ample material for a comprehensive upper-level undergraduate or beginning graduate course, guiding readers to the point where they can choose a special topic and begin supervised research. The textbook provides a balance between essential aspects of solid-state and semiconductor physics, on the one hand, and the principles of various semiconductor devices and their applications in electronic and photonic devices, on the other. It highlights many practical aspects of semiconductors such as alloys, strain, heterostructures, nanostructures, that are necessary in modern semiconductor research but typically omitted in textbooks. Coverage also includes additional advanced topics, such as Bragg mirrors, resonators, polarized and magnetic semiconductors, nanowires, quantum dots, multi-junction solar cells, thin film transistors, carbon-based nanostructures and transparent conductive oxides. The text derives explicit formulas for many results to support better understanding of the topics. The Physics of Semiconductors requires little or no prior knowledge of solid-state physics and evolved from a highly regarded two-semester course. In the third edition several topics are extended and treated in more depth including surfaces, disordered materials, amorphous semiconductors, polarons, thermopower and noise. More than 1800 references guide the...



[READ ONLINE](#)
[2.64 MB]

Reviews

I just began looking over this pdf. It is one of the most amazing pdf i have study. I discovered this book from my dad and i recommended this pdf to understand.

-- Merritt Kilback II

Good e book and useful one. I have got read and that i am confident that i will likely to go through once more again later on. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- Angela Blick