

Modern Physics

for Scientists and Engineers

John C. Morrison

Modern Physics for Scientists and Engineers presents the ideas that have shaped modern physics and provides an introduction to current research in various fields of physics. Taking into account the needs and interests of science and engineering students, the book begins with a brief and focused account of historical events leading to the formulation of modern quantum theory, while ensuing chapters go deeper into the underlying physics.

Topics such as Bloch's theorem and semiconductor heterostructures help to give engineering students the physics background they need to benefit from the courses they will later take on semiconductor devices, while subjects like Bose-Einstein condensation and Feynman diagrams help students appreciate the range and scope of contemporary physics.

KEY FEATURES

- Emphasis on modern atomic, statistical, and condensed matter physics
- Contains a phenomenological description of semiconductor lasers
- Chapters on relativity theory include a description of the Dirac equation

ANCILLARIES

Companion Web Site with Instructor's Manual and Student Solutions Manual available online

SPECIAL FEATURE

Applets are available on the Companion Web Site to allow students to solve real problems in atomic and condensed matter physics



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