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Titolo	Theoretical Physics 3 : Electrodynamics // by Wolfgang Nolting
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ISBN	3-319-40168-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIV, 659 p. 275 illus., 12 illus. in color.)
Disciplina	537.6
Soggetti	Optics Electrodynamics Magnetism Magnetic materials Lasers Photonics Classical Electrodynamics Magnetism, Magnetic Materials Optics, Lasers, Photonics, Optical Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Mathematical Preparations -- Electrostatics -- Magnetostatics -- Electrodynamics -- Solutions of the Exercises.
Sommario/riassunto	This textbook offers a clear and comprehensive introduction to electrodynamics, one of the core components of undergraduate physics courses. It follows on naturally from the previous volumes in this series. The first part of the book describes the interaction of electric charges and magnetic moments by introducing electro- and magnetostatics. The second part of the book establishes deeper understanding of electrodynamics with the Maxwell equations, quasistationary fields and electromagnetic fields. All sections are accompanied by a detailed introduction to the math needed. Ideally suited to undergraduate students with some grounding in classical and analytical mechanics, the book is enhanced throughout with learning features such as boxed inserts and chapter summaries, with key

mathematical derivations highlighted to aid understanding. The text is supported by numerous worked examples and end of chapter problem sets. About the Theoretical Physics series Translated from the renowned and highly successful German editions, the eight volumes of this series cover the complete core curriculum of theoretical physics at undergraduate level. Each volume is self-contained and provides all the material necessary for the individual course topic. Numerous problems with detailed solutions support a deeper understanding. Nolting is famous for his refined didactical style and has been referred to as the "German Feynman" in reviews.
