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Titolo	Understanding Electromagnetic Waves [[electronic resource] /] / by Ming-Seng Kao, Chieh-Fu Chang
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Descrizione fisica	1 online resource (XXI, 444 p. 246 illus., 195 illus. in color.)
Disciplina	539.2
Soggetti	Electronic circuits Microwaves Optical engineering Electronic Circuits and Devices Circuits and Systems Microwaves, RF and Optical Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
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Note generali	Includes index.
Nota di contenuto	Introduction -- Maxwell’s Equations -- Plane Waves and Wave Equations -- Characteristics and Parameters of EM Waves -- Boundary Conditions and Behavior of EM Waves -- Transmission Line -- Smith Chart -- Antenna.
Sommario/riassunto	This one-semester textbook teaches students Electromagnetic Waves, via an early introduction to Maxwell’s Equations in the first chapter. Mathematics fundamentals are used as needed, but rigor is de-emphasized in preference to understanding the basic ideas and principles of EM waves. Each chapter includes extensive, step-by-step, solved examples, as well as abundant exercises. Designed for a one-semester course in electromagnetic waves; Introduces Maxwell’s equations in the first chapter; De-emphasizes mathematical rigor in order to make key ideas and principles easy to understand; Makes material accessible to readers of varying backgrounds, with extensive use of solved examples; Includes abundant exercises for each chapter.