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Descrizione fisica	1 online resource (740 p.)
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Disciplina	530.14/1
Soggetti	Electromagnetic fields - Mathematics
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Basic electromagnetic theory -- Electromagnetic radiation in free space -- Electromagnetic theorems and principles -- Transmission lines and plane waves -- Fields and waves in rectangular coordinates -- Fields and waves in cylindrical coordinates.
Sommario/riassunto	Reviews the fundamental concepts behind the theory and computation of electromagnetic fields The book is divided in two parts. The first part covers both fundamental theories (such as vector analysis, Maxwell's equations, boundary condition, and transmission line theory) and advanced topics (such as wave transformation, addition theorems, and fields in layered media) in order to benefit students at all levels. The second part of the book covers the major computational methods for numerical analysis of electromagnetic fields for engineering applications. These methods include the three funda