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Sommario/riassunto

Complete and comprehensive application-focused reference on millimetre wave antennas Millimetre Wave Antennas for Gigabit Wireless Communications covers a vast wealth of material with a strong focus on the current design and analysis principles of millimetre wave antennas for wireless devices. It provides practising engineers with the design rules and considerations required in designing antennas for the terminal. The authors include coverage of new configurations with advanced angular and frequency filtering characteristics, new design and analysis techniques, and methods for filter miniaturization. The book reviews up-to-date research results and utilizes numerous design examples to emphasize computer analysis and synthesis whilst also discussing the applications of commercially available software. Key Features: . Advanced and up-to-date treatment of one of the fastest growing fields of wireless communications . Covers topics such as Gigabit wireless communications and its required antennas, passive and active antenna design and analysis techniques, multibeam antennas and MIMO, IEEE 802.15.3c, WiMedia(R), and advanced materials and technologies . Offers a practical guide to integrated antennas for specific configurations requirements . Addresses a number of complex, real-world problems that system and antenna engineers are going to face in millimetre-wave communications industry and provides solutions . Contains detailed design examples, drawings and predicted performance This book is an invaluable tool for antenna professionals (engineers, designers, and developers), microwave professionals, wireless communication system professionals, and industries with microwave and millimetre wave research projects. Advanced students and researchers working in the field of millimetre wave engineering will also find this book very useful.