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Wire-like Structures in the Time Domain; 1.5.3 Induced Voltage on a Finite-Sized Receive Wire-like Structure Due to a Transient Incident Field; 1.6 Conclusion; References
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3.7.11 Circular Disc Dipole3.7.12 Bow-Tie; 3.7.13 Planar Slot; 3.8 Experimental Verification of the Wideband Responses from Antennas; 3.9 Conclusion; References; Chapter 4 A Look at the Concept of Channel Capacity from a Maxwellian Viewpoint; 4.0 Summary; 4.1 Introduction; 4.2 History of Entropy and Its Evolution; 4.3 Different Formulations for the Channel Capacity; 4.4 Information Content of a Waveform; 4.5 Numerical Examples Illustrating the Relevance of the Maxwellian Physics in Characterizing the Channel Capacity
4.5.1 Matched Versus Unmatched Receiving Dipole Antenna with a Matched Transmitting Antenna Operating in Free Space

Sommario/riassunto

An analysis of the physics of multiantenna systems Multiple-Input Multiple-Output (MIMO) technology is one of the current hot topics in emerging wireless technologies. This book fills the important need for an authoritative reference on the merits of MIMO systems based on physics and provides a sound theoretical basis for its practical implementation. The book also addresses the important issues related to broadband adaptive processing. Written by three internationally known researchers, Physics of Multiantenna Systems and Broadband Processing: Provides a thorough discussion of t