1. Record Nr. UNINA9910813373003321

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Titolo	Physics of multiantenna systems and broadband processing / / Tapan K. Sarkar, Magdalena Salazar-Palma, Eric L. Mokole ; with contributions from: Santana Burintramart ... [et al.]
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, c2008
ISBN	1-281-73253-2 9786611732530 0-470-28924-4 0-470-28923-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (589 p.)
Collana	Wiley series in microwave and optical engineering
Altri autori (Persone)	Salazar-PalmaMagdalena MokoleEric L BurintramartSantana
Disciplina	621.384/135
Soggetti	Antenna arrays - Mathematical models MIMO systems - Mathematical models Broadband communication systems - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Physics of Multiantenna Systems and Broadband Processing; Contents; Preface; Acknowledgments; Chapter 1 What Is an Antenna and How Does It Work?; 1.0 Summary; 1.1 Historical Overview of Maxwell's Equations; 1.2 Review of Maxwell-Heaviside-Hertz Equations; 1.2.1 Faraday's Law; 1.2.2 Generalized Ampere's Law; 1.2.3 Generalized Gauss's Law of Electrostatics; 1.2.4 Generalized Gauss's Law of Magnetostatics; 1.2.5 Equation of Continuity; 1.3 Solution of Maxwell's Equations; 1.4 Radiation and Reception Properties of a Point Source Antenna in Frequency and in Time Domain 1.4.1 Radiation of Fields from Point Sources1.4.1.1 Far Field in Frequency Domain of a Point Radiator; 1.4.1.2 Far Field in Time Domain of a Point Radiator; 1.4.2 Reception Properties of a Point Receiver; 1.5 Radiation and Reception Properties of Finite-Sized Dipole-Like Structures in Frequency and in Time; 1.5.1 Radiation Fields from Wire-like Structures in the Frequency Domain; 1.5.2 Radiation Fields from

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
Chapter 2 Fundamentals of Antenna Theory in the Frequency Domain2.0 Summary; 2.1 Field Produced by a Hertzian Dipole; 2.2 Concept of Near and Far Fields; 2.3 Field Radiated by a Small Circular Loop; 2.4 Field Produced by a Finite-Sized Dipole; 2.5 Radiation Field from a Linear Antenna; 2.6 Near- and Far-Field Properties of Antennas; 2.6.1 What Is Beamforming Using Antennas; 2.6.2 Use of Spatial Antenna Diversity; 2.7 The Mathematics and Physics of an Antenna Array; 2.8 Propagation Modeling in the Frequency Domain; 2.9 Conclusion; References
Chapter 3 Fundamentals of an Antenna in the Time Domain3.0 Summary; 3.1 Introduction; 3.2 UWB Input Pulse; 3.3 Travelling-Wave Antenna; 3.4 Reciprocity Relation Between Antennas; 3.5 Antenna Simulations; 3.6 Loaded Antennas; 3.6.1 Dipole; 3.6.2 Bicones; 3.6.3 TEM Horn; 3.6.4 Log-Periodic; 3.6.5 Spiral; 3.7 Conventional Wideband Antennas; 3.7.1 Volcano Smoke; 3.7.2 Diamond Dipole; 3.7.3 Monofilar Helix; 3.7.4 Conical Spiral; 3.7.5 Monoloop; 3.7.6 Quad-Ridged Circular Horn; 3.7.7 Bi-Blade with Century Bandwidth; 3.7.8 Cone-Blade; 3.7.9 Vivaldi; 3.7.10 Impulse Radiating Antenna (IRA)
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