1. Record Nr. UNINA9910270917503321

Autore	Shavit Reuven <1949->
Titolo	Radome electromagnetic theory and design / / by Reuven Shavit
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, , 2018 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2018]
ISBN	1-119-41084-3 1-119-41082-7 1-119-41085-1
Edizione	[1st edition]
Descrizione fisica	1 online resource (295 pages)
Disciplina	621.3848/3
Soggetti	Radomes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Sandwich radomes -- Frequency selectives surfaces (FSS) radomes -- Airborne radomes -- Scattering from infinite cylinders -- Ground based radomes -- Measurements methods.
Sommario/riassunto	A comprehensive review of the theoretical and practical aspects of radome design with simulation examples; Radome Electromagnetic Theory and Design explores the theoretical tools and methods required to design radomes that are fully transparent to the electromagnetic energy transmitted or received by the enclosed antenna. A radome is a weatherproof and camouflaged enclosure that protects the enclosed radar or communication antenna. Radomes are typically used on a fixed or moving platform such as an aircraft, ship or missile. The author - a noted expert in the field - examines the theoretical methods that apply to all types of radome: planar, conformal, airborne and ground based. The text offers a description of the various measurement methods that characterise the electrical parameters of a radome, and discusses their merits in terms of accuracy. This groundbreaking book brings together in one volume all the necessary theoretical tools to design radomes. This important text: . Includes antenna theory and applications that draw from many disciplines of electromagnetics, transmission, scattering and measuring characterisation methods. Offers information on applications that include radar and communication antennas

mounted on fixed locations, aircrafts, UAV, missiles, ships and satellite communication antennas. Contains the theoretical background of the radome. Presents a practical display of design graphs and examples, drawing on the author's background as a practicing engineer with academic theoretical design experience Written for research and industrial professional engineers, Radome Electromagnetic Theory and Design offers a comprehensive volume to all aspects of theoretical design and optimisation of radomes.