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Titolo	EM Wave Propagation Analysis in Plasma Covered Radar Absorbing Material // by Hema Singh, Simy Antony, Harish Singh Rawat
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Disciplina	620
Soggetti	Microwaves Optical engineering Optics Electrodynamics Electronics Microelectronics Microwaves, RF and Optical Engineering Classical Electrodynamics Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- Role of Plasma Parameters -- Formulation for EM Propagation in Plasma covered RAM -- Results and Discussion -- Conclusion -- References -- Subject Index.
Sommario/riassunto	This book focuses on EM propagation characteristics within multilayered plasma-dielectric-metallic media. The method used for analysis is impedance transformation method. Plasma covered radar absorbing material is approximated as a multi-layered dielectric medium. The plasma is considered to be bounded homogeneous/inhomogeneous medium. The reflection coefficient and hence return loss is analytically derived. The role of plasma parameters, such as electron density, collision frequency, plasma thickness, and plasma density profile in the absorption behavior of multi-layered plasma-RAM structure is described. This book provides a clearer picture of EM propagation within plasma. The reader will get an insight

of plasma parameters that play significant role in deciding the absorption characteristics of plasma covered surfaces.

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