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	Nota di contenuto	Introduction -- Design of High-Impedance Substrate (HIS) -- Design of Dipole with High-Impedance Substrate -- Low-Profile Dipole Antenna on Non-Planar High-Impedance Substrate -- Low-Profile Dipole Array on Planar and Non-Planar Dogbone Based HIS -- Conclusion.
	Sommario/riassunto	This book presents electromagnetic (EM) design and analysis of dipole antenna array over high impedance substrate (HIS). HIS is a preferred substrate for low-profile antenna design, owing to its unique boundary conditions. Such substrates permit radiating elements to be printed on them without any disturbance in the radiation characteristics. Moreover HIS provides improved impedance matching, enhanced bandwidth, and increased broadside directivity owing to total reflection from the reactive surface and high input impedance. This book considers different configurations of HIS for array design on planar and non-planar high-impedance surfaces. Results are presented for cylindrical dipole, printed dipole, and folded dipole over single- and double-layered square-patch-based HIS and dogbone-based HIS. The performance of antenna arrays is analyzed in terms of performance

parameters such as return loss and radiation pattern. The design presented shows acceptable return loss and mainlobe gain of radiation pattern. This book provides an insight to EM design and analysis of conformal arrays. This book serves as an introduction for beginners in the design and analysis of HIS-based antenna arrays. It includes pictorial description of both planar and non-planar array design and the detailed discussion of the performance analysis of HIS-based planar and non-planar antenna array. It will prove useful to researchers and professionals, alike.