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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Wave Propagation in Periodic Structures -- Implementation of Three-Dimensional Lorentz-Drude-Materials -- Extraction of Dispersion Parameters -- Tunable Transmission Line Metamaterials -- Artificial Gradient-Index Lens -- Conclusion and Outlook.
Sommario/riassunto	This book presents original findings on tunable microwave metamaterial structures, and describes the theoretical and practical issues involved in the design of metamaterial devices. Special emphasis is given to tunable elements and their advantages in terms of feeding network simplification. Different biasing schemes and feeding network topologies are presented, together with extensive prototype measurements and simulations. The book describes a novel, unique solution for beam steering and beam forming applications, and thus paves the way for the diffusion of new agile communication system components. At the same time, it provides readers with an outstanding

and timely review of wave propagation in periodic structures, tunability of metamaterials and the technological constraints that need to be considered in the design of reconfigurable microwave components.