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ISBN	1-63081-435-0
Descrizione fisica	1 online resource (220 pages) : illustrations
Collana	Artech House microwave library
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Sommario/riassunto	This comprehensive new resource based on the classic Artech House title, Microwave Materials for Wireless Applications, introduces the use of new microwave materials for passive devices including ferrites, magnetization garnets, dielectric materials, and absorbers for wireless and antenna applications. This book explores a new set of magnetic and dielectric materials that assist with size reduction of passive devices such as ferrite isolators and circulators. Revised data on the applications of absorbers, including examples of different combinations of magnetic, dielectric, and absorber materials into integrated devices is presented. Meta-materials for antennas and potential antenna integration onto soft boards or LTCC filter technologies using tunable devices with new materials are covered. nnProfessionals learn how new material designs use properties of certain ions in oxide compounds to reduce their physical size, including in cellular base stations designed for 4G and 5G cell phone communication systems. This book exhibits how the integration of new materials into cellular systems using common transmission lines will further save size and reduce complexity. New technologies are presented demonstrating the use of sol-gel processing and ceramic processing in the use of low temperature co-fired ceramics, plastic molding, and 3D printing demonstrating improved device designs.