

1. Record Nr.	UNINA9910633975303321
Titolo	Recent Microwave Technologies // edited by Ahmed Kishk, Kim Ho Yeap
Pubbl/distr/stampa	London : , : IntechOpen, , 2022 ©2022
ISBN	1-80355-928-4
Descrizione fisica	1 online resource (348 pages)
Disciplina	621.3813
Soggetti	Microwave devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Orbital Angular Momentum Wave and Propagation. 2. Fluidics for Reconfigurable Microwave Components. 3. Multiscale Auxiliary Sources for Modeling Microwave Components. 4. Waveguide Port Approach in EM Simulation of Microwave Antennas. 5. One Model of Microwave Heating of Water Drop. 6. Filter Designs Based on Defected Ground Structures. 7. Tunable Filter. 8. Analysis and Design of Miniaturized Substrate Integrated Waveguide CSRR Bandpass Filters for Wireless Communication. 9. Power Divider/Combiner. 10. Applications of Microwaves in Medicine and Biology. 11. Wireless Power Transmission on Biomedical Applications. 12. Theoretical Premises and Contemporary Optimizations of Microwave Tomography. 13. Additive Manufacturing of RF Waveguide Components. 14. Microwave-Assisted Pyrolysis Process: From a Laboratory Scale to an Industrial Plant.
Sommario/riassunto	Microwave bands range from 300 MHz to 300 GHz of the electromagnetic spectrum. These signals can be used in communication, networking, astronomy, and biomedical engineering, among other fields. This book provides a comprehensive overview of the physics of microwave signals, techniques for modeling these signals, uses of these signals in various fields, and the underlying principles of some of the latest microwave devices currently available.