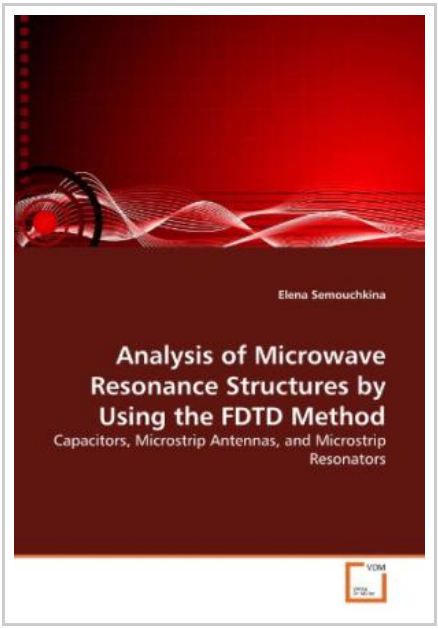

Analysis of Microwave Resonance Structures by Using the FDTD Method

By Elena Semouchkina

VDM Verlag Feb 2011, 2011. Taschenbuch. Book Condition: Neu. 221x152x18 mm. Neuware - Wireless communications, radiolocation, medical and navigation systems are just a few areas where microwave technology is rapidly advancing and where new materials, process techniques and device designs are demanded. At microwave frequencies, full-wave electromagnetic field phenomena strongly affect the propagation of signals, so that comprehensive simulation modeling becomes a necessary tool for new design evaluation. This book presents full-wave analysis of resonance phenomena in basic microwave devices, i.e. capacitors, microstrip antennas and resonators performed by using the Finite-Difference Time-Domain (FDTD) method, one of the most versatile computational techniques presently available. The key simulation results are verified experimentally. This study should provide deeper physical insight into the operation of passive microwave components through numerous details describing resonance fields in time and frequency domains; help to understand problems related to incorporation high permittivity dielectrics in the designs; and should be especially useful to microwave component designers, researchers, university instructors, students, and anyone who uses FDTD simulation method. 200 pp. Englisch.

Reviews

This book may be really worth a read through, and a lot better than other. It is really basic but excitement inside the 50 % in the pdf. I realized this pdf from my dad and i encouraged this publication to learn.

-- ***Curtis Bartell***

The book is straightforward in study better to comprehend. It is really simplistic but unexpected situations in the fifty percent of the ebook. Its been written in an exceptionally simple way which is simply after i finished reading through this ebook in which basically altered me, affect the way i really believe.

-- ***Letha Corwin***