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Descrizione fisica	1 online resource (319 pages)
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Analysis and optimal synthesis of complex structural microwave radioengineering -- Modeling of complex structural microwave systems in a nonlinear environment -- Modeling, research, and results of complex structural microwave waveguide systems -- Modeling of microwave systems with complex structural mixed combinations -- Experimental study of complex structural microwave systems in a non-linear environment -- Optimal synthesis of complex structured microwave systems in a nonlinear environment -- Modeling of specially designed microwave systems -- Conclusion.
Sommario/riassunto	The book systematizes numerical methods for modelling and synthesizing radio engineering and telecommunication systems in the microwave range of rectangular and circular waveguides. The author gives the theoretical foundations for the analysis and optimal synthesis of these systems and presents the results of new research. The book uses the HFSS complex to analyse, optimize, and synthesize microwave systems operating on E-type and H-type waves while providing the outcomes. As a result of analysis and synthesis, various microwave

devices with improved technical and operational parameters have been developed, and on their basis a new system of waveguide paths is proposed that connects the transmitter and antenna in TV towers. The book is intended for engineers and scientists involved in the design of radio engineering and telecommunication systems. Systematizes numerical methods for modelling in the microwave range of rectangular and circular waveguides; Provides theoretical foundations for analysis and optimal synthesis of systems and presents the results of new research; Proposes a new system of waveguide paths that connects the transmitter and antenna in TV towers. .

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