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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Review of Gyrotron Traveling-Wave-Tube Amplifiers -- Fundamental Theory of The Electron Cyclotron Maser -- Novel Propagation Characteristics of Lossy Dielectric-Loaded Wave-guides -- Instability Competition in an Ultrahigh Gain Gyro-TWT Amplifier -- A Lossy Ceramic-loaded Millimeter-Wave Gyro-TWT Amplifier -- Exploring new mechanisms for high power millimeter-wave gyrotron amplifiers -- Technologies related to gyrotron amplifiers.
Sommario/riassunto	A gyrotron traveling-wave amplifier (gyro-TWT) with the high-power and broad-band capabilities is considered as a turn-on key for next generation high-resolution radar. The book presents comprehensive

theory, methods, and physics related to gyro-TWT. The most challenging problem of instability competition has been for the first time addressed in a focused and systematic way, and reported via concise states and vivid pictures. The book is likely to meet the interest of researchers and engineers in radar and microwave technology, who would like to study the gyro-TWTs and to promote its application in millimeter-wave radars. Chao-Hai Du is a research professor, and Pu-Kun Liu is a full professor, at Peking University, Beijing, P. R. China.