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Descrizione fisica	1 online resource (XXVII, 973 p. 858 illus., 317 illus. in color.)
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Nota di contenuto	Chapter 1. Theoretical Basics of Radiolocation -- Chapter 2. Features of Designing Digital Processing Systems for Radiolocation Systems Based on Microprocessor VLSI Sets -- Chapter 3. Ground Penetrating Radars -- Chapter 4. Antennas and Antenna Devices for Radar Location and Radio Communication -- Chapter 5. Features of Organizing the Process of Designing Radar Microcircuits -- Chapter 6. Power Electronics Device Based on Wide-Gap Semiconductors -- Chapter 7. Vacuum Electronics -- Chapter 8. Semiconductor SHF Devices for Radar Sets -- Chapter 9. HF and SHF Components for Radar Sets -- Chapter 10. Methods and Means of Ensuring Reliability of Radar and Communication Systems -- Chapter 11. Radiophotonics in Telecommunication and Radar Location Systems -- Chapter 12. Measurement of Electrophysical Parameters of Dielectric and Semiconductor Materials and Structures of Microwave Electronics -- Chapter 13. Radiation stability of SHF devices.
Sommario/riassunto	This comprehensive handbook provides readers with a single-source reference to the theoretical fundamentals, physical mechanisms and principles of operation of all known microwave devices and various radars. The author discusses proven methods of computation and design development, process, schematic, schematic-technical and construction peculiarities of each breed of the microwave devices, as well as the most popular and original technical solutions for radars. Coverage also includes the history of creation of the most widely used radars, as well as guidelines for their potential upgrading. Offers

readers a comprehensive, systematized view of all contemporary knowledge, acquired during the last 20 years, on radars and related disciplines; Provides a single-source reference on the physical mechanisms and principles of operation of the basic components of radio location devices, including theoretical aspects of designing the necessary, high-efficiency electronic devices and systems, as well as key, practical methods of computation and design; Presents complex topics using simple language, minimizing mathematics.

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