

1. Record Nr.	UNINA9910366620503321
Autore	Wu Jianqi
Titolo	Advanced Metric Wave Radar [[electronic resource] /] / by Jianqi Wu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-10-7647-2
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (392 pages)
Disciplina	621.3848
Soggetti	Microwaves Optical engineering Electronics Microelectronics Signal processing Image processing Speech processing systems Microwaves, RF and Optical Engineering Electronics and Microelectronics, Instrumentation Signal, Image and Speech Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Target Characteristics in Metric Wave Band -- System Design of Advanced Metric Wave Radar -- Height Finding Technology of Metric Wave Radar -- Metric Wave Radar Anti-Jamming Technology -- Antenna Technology for Metric Wave Band -- Transmit/Receive Technology for Metric Wave Band -- Target Classification and Recognition Technologies of Advanced Metric Wave Radar -- Cooperative Detection Technology for Metric Wave Radar -- Structural Design of Large Metric Wave Radar -- System Test and Verification.
Sommario/riassunto	This book systematically describes advanced metric wave radar and its practical applications, offering a comprehensive introduction to the engineering design methods from the perspectives of system design, antenna/feed and transmit/receive subsystems, as well as mechanical structure design. Focusing on the height-finding method, it describes in detail how the super-resolution technique can be used to solve the

problem of low-angle height finding in metric wave radar. It also discusses the anti-jamming method for the unique jamming environment. Further, it presents narrowband target recognition methods to overcome the limitations of narrow absolute bandwidth in metric wave radar and to further explore the technique's potential. Cooperative detection for metric wave radar netting is also addressed, and the main experimental results are included. The book offers a valuable resource for professional engineers, researchers and teachers, as well as graduate students engaged in radar system engineering, electronic engineering, and signal processing.

---