1. Record Nr. UNINA9910882891503321

Autore	Kumar Hemant
Titolo	RF, Microwave and Millimeter Wave Technologies / / edited by Hemant Kumar, E. S. Gopi
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-62526-9
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (196 pages)
Collana	Signals and Communication Technology, , 1860-4870
Altri autori (Persone)	GopiE. S
Disciplina	621.3
Soggetti	Telecommunication Electronic circuits Microwaves, RF Engineering and Optical Communications Communications Engineering, Networks Electronic Circuits and Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Important Concepts of RF Microwave and Millimeter Wave Technologies -- Finite Circular Ground Plane Effects A Case Study of Monopole Antenna -- Mode Compression Theory Dipole Antennas -- Multiple resonators loaded Electrically small antennas for wireless devices -- Textile Antennas for RFID Applications -- Recent Trends in the Design and Development of Dielectric Resonator Antennas -- A Low Profile Perturbed Convex Conformal CDRA -- Offset fed Reflectarray Antenna Design -- Antennas for Full duplex Communication State of the art and Way Forward -- Understanding Metasurface Based Microwave Absorbers Using Transmission Line Theory -- Frequency Selective Surface and its Applications in Radome Technology -- Algorithmic Applications for Massive MIMO Technology -- Regression model for Antenna Design.
Sommario/riassunto	This book provides in-depth exposure to emerging technologies and recent advancements in RF, Microwave, and Millimetre Wave Technologies. The book covers the basic concepts along with the recent advancements in designing and developing antennas and circuits for the latest technologies. The concepts of mode compression, Full Duplex communication, massive MIMO, frequency selective

surfaces, reflectarrays, and metasurfaces have been discussed in detail. Various types of antennas, such as electrically small antennas, textile antennas, dielectric resonator antennas, etc., to be used for the latest wireless devices, RFID applications are also thoroughly explored. The concept of machine learning to develop data-driven models for antenna design is also discussed briefly to provide readers with an introduction to the ML algorithms. The readers will be able to understand the theoretical concepts and practical design aspects of various antennas, high-frequency circuits, and device modeling. The target audience includes but is not limited to undergraduates, post-graduates, research scholars, academicians, scientists, and professionals who are interested in getting the latest knowledge in the field of RF, Microwave, and Millimetre Wave Technologies. Presents recent advancements in RF, microwave, and millimetre wave technologies; Covers special topics on mode compression, full-duplex communication, reflectarrays, and metasurfaces; Geared towards those interested in latest knowledge in RF, microwave, and millimetre wave technologies.

2. Record Nr. UNINA9910983387103321

Autore	Walber Chad
Titolo	Sensors & Instrumentation and Aircraft/Aerospace Testing Techniques Vol. 8 : Proceedings of the 42nd IMAC, A Conference and Exposition on Structural Dynamics 2024 / / edited by Chad Walber, Matthew Stefanski
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	87-438-0429-2 87-438-0061-0 3-031-68188-6
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (144 pages)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Altri autori (Persone)	StefanskiMatthew
Disciplina	629.1
Soggetti	Aerospace engineering Astronautics Materials Detectors Measurement Measuring instruments Electronics Multibody systems Vibration Mechanics, Applied

	Aerospace Technology and Astronautics Sensors and biosensors Measurement Science and Instrumentation Electronics and Microelectronics, Instrumentation Multibody Systems and Mechanical Vibrations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Contents -- Green Run Modal Test of the NASA Space Launch System Core Stage -- Introduction and Motivation -- SLS Core Stage -- Core Stage Instrumentation -- Modal Excitation -- Data Acquisition -- Test Execution -- Test Results -- Challenges -- Conclusion -- References -- Noncontact Modal Testing of Structures with Closely Spaced Modes Using Multireference Impact Testing and Scanning Laser Vibrometry -- Nomenclature -- Introduction -- Test Article -- Experimental Setup -- Impact Testing -- Modal Shaker Testing -- Results -- Conclusion -- Vibration Analysis of Morphing Wings -- Introduction -- The Model -- Moment of Inertia -- Frequency Analysis -- The Undamped Model -- The Damped Model -- Instability
Sommario/riassunto	Sensors & Instrumentation and Aircraft/Aerospace Testing Techniques, Volume 8: Proceedings of the 42nd IMAC, A Conference and Exposition on Structural Dynamics, 2024, the eighth volume of ten from the Conference brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on fundamental and applied aspects of Shock & Vibration, Aircraft/Aerospace Testing Techniques including papers on: Alternative Sensing & Acquisition Active Controls Instrumentation.