

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Record Nr.           | UNINA9910743364403321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Autore                  | Geng Junping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Titolo                  | Spoof surface plasmon polaritons antenna / / Junping Geng [and four others]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Pubbl/distr/stampa      | Singapore : , : Springer, , [2022]<br>©2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ISBN                    | 981-16-4720-8<br>981-16-4721-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Descrizione fisica      | 1 online resource (193 pages)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Collana                 | Modern anthologies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Disciplina              | 621.3824                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Soggetti                | Antennas (Electronics)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Nota di bibliografia    | Includes bibliographical references.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Nota di contenuto       | Intro -- Preface -- Contents -- List of Figures -- List of Tables -- 1 Introduction -- 1.1 Background and Demand -- 1.2 Research Development of the Surface Plasmon Polaritons and Spoof Surface Plasmon Polaritons -- 1.2.1 Research Progress on Surface Plasmons Polaritons -- 1.2.1.1 Surface Plasmons Polaritons -- 1.2.1.2 The Development of SPPs -- 1.2.1.3 SPPs Device -- 1.2.2 Spoof Surface Plasmon Polaritons -- 1.2.3 Antenna Fed by Spoof Surface Plasmon Polaritons Waveguide -- 1.2.4 Leaky Wave Antennas Based on Spoof Surface Plasmon Polaritons -- 1.2.5 Endfire Antenna Based on Spoof Surface Plasmon Polaritons -- 1.2.6 Spoof Surface Plasmon Polaritons Antenna with Parasitic Structure -- 1.3 Development Trend and Problems -- 1.4 Book Arrangement -- References -- 2 Basic Principles of Spoof Surface Plasmon Polaritons -- 2.1 Basic Principle of Surface Plasmon Polaritons -- 2.1.1 Dispersive Material Models -- 2.1.1.1 Optical Material Properties -- 2.1.1.2 Active Media in Nano-Shells -- 2.1.1.3 Lorentz Model -- 2.1.2 Plane Wave Excitation Performance Terms -- 2.1.3 Radiated Power by Small Current -- 2.1.4 Passive CNP Model -- 2.1.5 Active Open Cylindrical CNP Excited by a Plane Wave -- 2.2 Basic Principle of Spoof Surface Plasmon Polaritons -- 2.2.1 Dispersion Characteristics of Spoof Surface Plasmon Polaritons Structure -- 2.2.2 Basic Characteristics of Spoof Surface Plasmon Polaritons -- 2.2.2.1 Strong Binding Properties of Spoof Surface |

Plasmon Polaritons -- 2.2.2.2 Slow Wave Characteristics of Spoof Surface Plasmon Polaritons -- 2.2.2.3 Excitation Method to SSPPs -- 2.3 Transmission Mode of Spoof Surface Plasmon Polaritons Structure -- 2.3.1 Even Mode of Spoof Surface Plasmon Polaritons -- 2.3.2 Odd Mode of Spoof Surface Plasmon Polaritons -- 2.3.3 High-Order Mode of Spoof Surface Plasmon Polaritons. 2.4 Research Methods of Spoof Surface Plasmon Polaritons -- 2.4.1 Simulation of Dispersion Curve -- 2.4.2 Radar Cross Section Simulation and Calculation -- 2.5 Summary of This Chapter -- References -- 3 Multipole Antenna Based on Spoof Surface Plasmon Polaritons Structure -- 3.1 Introduction -- 3.2 Multipole Antenna Based on Radial Spoof Surface Plasmon Polaritons Structure -- 3.2.1 2-D SPP Scatter with Plane Wave in Microwave Band -- 3.2.2 2-D SPP Antenna Fed by Short Stab -- 3.2.3 2-D SPP Antenna Fed by Stab with Small Open Loop -- 3.3 Multipole Antenna Based on the Spiral Spoof Surface Plasmon Polaritons Structure -- 3.3.1 Spoof Surface Plasmon Polaritons Scatter -- 3.3.2 Multipole Antenna Based on Spiral Spoof Surface Plasmon Polaritons Scatter -- 3.4 Summary of This Chapter -- References -- 4 Endfire Antenna Based on Spoof Surface Plasmon Polaritons -- 4.1 Establishment and Simulation of Antenna Model -- 4.1.1 Antenna Model -- 4.1.2 Antenna Performance and Analysis -- 4.1.2.1 S Parameters -- 4.1.2.2 E-field -- 4.1.2.3 Power Flow -- 4.1.2.4 Far Field -- 4.2 Design of Improved Antenna Model -- 4.2.1 Antenna Structure and Principle -- 4.2.2 Simulation Verification and Parameter Analysis -- 4.2.2.1 W1 -- 4.2.2.2 L1 -- 4.2.2.3 Triangular Slot -- 4.2.2.4 Effect of the SSPPs Structure -- 4.2.3 Experimental Result and Discussion -- 4.3 Summary of This Chapter -- References -- 5 Low Frequency Omnidirectional Antenna Based on Spoof Surface Plasmon Polaritons -- 5.1 Introduction -- 5.2 A High-Efficiency Broadband Omnidirectional UHF Patch Antenna Applying Surface Plasmon Polaritons for Handheld Terminals -- 5.2.1 Antenna Geometry Structure and Analysis -- 5.2.2 Parameter Analysis -- 5.2.3 Experiments Results and Discussion -- 5.3 UHF Antenna with Omnidirectional Vertical Polarization -- 5.4 UHF Omnidirectional Antenna with Vertical Polarization. 5.4.1 Study on Low-Profile Spoof Surface Plasmon Polaritons End-Fire Antenna with Vertical Polarization and Its Annular Array -- 5.4.1.1 Low Profile SSPPs End-Fire Antenna with Vertical Polarization -- 5.4.1.2 Low Profile Omnidirectional Antenna with Vertical Polarization Based on SSPPs Structure -- 5.4.2 Improved Low-Profile Spoof Surface Plasmon Polaritons Terminal Antenna and Its Annular Array -- 5.5 Summary of This Chapter -- References -- 6 Study on the Rotated Spoof Surface Plasmon Polaritons Structure -- 6.1 Study on the Characteristics of Rotated Spoof Surface Plasmon Polaritons Structure -- 6.1.1 Odd Mode of Rotated Spoof Surface Plasmon Polaritons Structure -- 6.1.2 Even Mode of Rotated Spoof Surface Plasmon Polaritons Structure -- 6.2 End-Fire Antenna Based on Rotated Spoof Surface Plasmon Polaritons -- 6.2.1 Antenna Model and Simulation Verification -- 6.2.2 Parametric Analysis to the End Fire Antenna Based on Str#3 -- 6.2.3 Experiment Results Analysis of Endfire Antenna Based on Str#3 -- 6.3 Omnidirectional Broadside Antenna Based on Rotated Spoof Surface Plasmon Polaritons -- 6.3.1 Antenna Model and Simulation Verification -- 6.3.2 Parameter Analysis -- 6.3.3 Experiment Results Analysis to Broadside Antenna Based on Str#3 -- 6.4 Result Comparison -- 6.5 Summary of This Chapter -- References -- 7 Irregular Shaped Spoof Surface Plasmon Polaritons Antenna -- 7.1 Introduction -- 7.2 Low Profile Vertically Polarized Endfire Antenna Based on Spoof Surface Plasmon Polaritons -- 7.3 Low Profile M-shaped Spoof Surface Plasmon Polaritons Terminal Antenna and Array -- 7.3.1 M-shaped Spoof

Surface Plasmon Polaritons Structure Analysis -- 7.3.2 Antenna Design -- 7.4 Low Profile Spoof Surface Plasmon Polaritons Endfire Antenna and Array -- 7.5 Summary of This Chapter -- References.

8 Pattern Reconfigurable Antenna Based on Spoof Surface Plasmon Polaritons -- 8.1 Basic Principle of Pattern Reconfigurable Antenna Based on Spoof Surface Plasmon Polaritons -- 8.1.1 Endfire Antenna Based on Spoof Surface Plasmon Polaritons -- 8.1.2 Broadside Antenna Based on Spoof Surface Plasmon Polaritons -- 8.1.3 Principle Verification -- 8.2 Pattern Reconfigurable Antenna Applying Spoof Surface Plasmon Polaritons -- 8.2.1 Antenna Design and Analysis -- 8.2.2 Experimental Result and Discussion -- 8.2.3 Results Analysis and Improvement -- 8.3 Conclusion -- References -- 9 Phased-Mode Spoof Surface Plasmon Polaritons Antenna -- 9.1 Broadside/End-Fire Pattern Reconfigurable Antenna Based Phased Mode Spoof Surface Plasmon Polaritons Antenna -- 9.2 Phased-Mode Spoof Surface Plasmon Polaritons Antenna -- 9.2.1 Antenna Configuration -- 9.2.2 Working Principle for Phased-Mode Spoof Surface Plasmon Polaritons Antenna -- 9.2.3 Comparison Between Measurement and Simulation Results -- 9.3 Summary of This Chapter -- References.

|                         |                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------|
| 2. Record Nr.           | UNIORUON00045180                                                                  |
| Autore                  | HINZ, Walther                                                                     |
| Titolo                  | Islamische Masse und Gewichte / umgerechnet ins metrische System von Walther Hinz |
| Pubbl/distr/stampa      | Leiden, : Brill, 1955                                                             |
| Descrizione fisica      | 66 p. ; 24 cm                                                                     |
| Classificazione         | VO XVIII B                                                                        |
| Soggetti                | SISTEMI DI MISURA - ISLAM                                                         |
| Lingua di pubblicazione | Tedesco                                                                           |
| Formato                 | Materiale a stampa                                                                |
| Livello bibliografico   | Monografia                                                                        |