1. Record Nr. UNINA9910139043803321

Autore	Gao Steven
Titolo	Circularly polarized antennas / / Steven (Shichang) Gao, Qi Luo, and Fuguo Zhu
Pubbl/distr/stampa	Chichester, West Sussex, United Kingdom : , : John Wiley & Sons Inc., , 2014 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2013]
ISBN	1-118-79051-0 1-118-79052-9 1-118-79050-2
Edizione	[First edition.]
Descrizione fisica	1 online resource (323 p.)
Collana	Wiley - IEEE
Disciplina	621.3824
Soggetti	Antenna radiation patterns Polarized beams (Nuclear physics) Spiral antennas Transmitting antennas
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface ix -- Acknowledgements xi -- Abbreviations and Acronyms xiii -- 1 Introduction to Circularly Polarized Antennas 1 -- 1.1 Introduction 1 -- 1.2 Antenna Parameters 2 -- 1.3 Basic CP Antenna Types 7 -- 1.4 Antenna Modelling Techniques 23 -- 1.5 Typical Requirements and Challenges in CP Antenna Designs 24 -- 1.6 Summary 25 -- References 25 -- 2 Small Circularly Polarized Antenna 29 -- 2.1 Introduction 29 -- 2.2 Basic Theory of Antenna Size Reduction 29 -- 2.3 Small CP Patch Antennas 30 -- 2.4 Small Helix, QHAs and PQHAs 46 -- 2.5 Small CP Slot Antennas 53 -- 2.6 Small CP DRAs 59 -- 2.7 Other Small CP Antennas 63 -- 2.8 Summary 66 -- References 69 -- 3 Broadband Circularly Polarized Antennas 73 -- 3.1 Introduction 73 -- 3.2 Broadband CP Microstrip Patch Antennas 73 -- 3.3 Broadband Helix, QHAs and PQHAs 93 -- 3.4 Spiral Antennas 103 -- 3.5 Broadband CP Slot Antennas 106 -- 3.6 Broadband CP DRAs 116 -- 3.7 Broadband CP Loop Antennas 120 -- 3.8 Other Broadband CP Antennas 123 -- 3.9 Summary 124 -- References 126 -- 4 Multi-Band Circularly

Polarized Antennas 131 -- 4.1 Introduction 131 -- 4.2 Multi-Band CP Microstrip Patch Antennas 131 -- 4.3 Multi-Band QHAs and PQHAs 150 -- 4.4 Multi-Band CP Slot Antennas 158 -- 4.5 Multi-Band CP DRAs 171 -- 4.6 Multi-Band CP Loop Antennas 175 -- 4.7 Other Multi-Band CP Antennas 177 -- 4.8 Summary 186 -- References 187 -- 5 Circularly Polarized Arrays 191 -- 5.1 Introduction 191 -- 5.2 CP Patch Antenna Arrays 191 -- 5.3 CP Dielectric Resonator Antenna Arrays 203 -- 5.4 CP Slot Array Antenna 210 -- 5.5 CP Printed Reflectarrays 222 -- 5.6 Integrated CP Array and Active CP Array 234 -- 5.7 CP Array with Reconfigurable Beams 243 -- 5.8 Other CP Arrays 252 -- 5.9 Summary 258 -- References 258 -- 6 Case Studies 263 -- 6.1 Introduction 263 -- 6.2 Dual-Band CP Patch Array for GNSS Reflectometry Receiver on Board Small Satellites 263 -- 6.3 Small Printed Quadrifilar Helix Antenna for Mobile Terminals in Satellite communications 271 -- 6.4 Printed Broadband CP Rectangular Bi-Loop Antenna for RFID Readers 278.
6.5 CP Reflectarray for Ka Band Satellite Communications 284 -- 6.6 Circularly Polarized Logarithmic Spiral Antenna with a Wideband Balun 293 -- 6.7 Summary 301 -- References 303 -- Index 305.

Sommario/riassunto

This book presents a comprehensive insight into the design techniques for different types of CP antenna elements and arraysIn this book, the authors address a broad range of topics on circularly polarized (CP) antennas. Firstly, it introduces to the reader basic principles, design techniques and characteristics of various types of CP antennas, such as CP patch antennas, CP helix antennas, quadrifilar helix antennas (QHA), printed quadrifilar helix antennas (PQHA), spiral antenna, CP slot antennas, CP dielectric resonator antennas, loop antennas, crossed dipoles, monopoles and CP horns. Advanced designs such as small-size CP antennas, broadband, wideband and ultra-wideband CP antennas are also discussed, as well as multi-band CP antennas and dual CP antennas. The design and analysis of different types of CP array antennas such as broadband CP patch arrays, dual-band CP arrays, CP printed slot arrays, single-band and multi-band CP reflectarrays, high-gain CP waveguide slot antennas, CP dielectric resonator antenna arrays, CP active arrays, millimetre-waveband CP arrays in LTCC, and CP arrays with electronically beam-switching or beam-steering capabilities are described in detail. Case studies are provided to illustrate the design and implementation of CP antennas in practical scenarios such as dual-band Global Navigation Satellite Systems (GNSS) receivers, satellite communication mobile terminals at the S-band, Radio Frequency Identification (RFID) readers at 2.4 GHz, and Ka-band high-speed satellite communication applications. It also includes the detailed designs for a wideband Logarithmic spiral antenna that can operate from 3.4-7.7 GHz. In addition, the book offers a detailed review of the recent developments of different types of CP antennas and arrays. -- -- . Presents comprehensive discussions of design techniques for different types of CP antennas: small-size CP antennas, broadband CP antennas, multi-band CP antennas and CP arrays.. Covers a wide range of antenna technologies such as microstrip antennas, helix, quadrifilar helix antenna, printed quadrifilar helix antenna, dielectric resonator antennas, printed slots, spiral antennas, monopoles, waveguide slot arrays, reflectarrays, active arrays, millimetre-wave arrays in LTCC, electronically beam-switching arrays and electronically beam-steerable arrays.. Reviews recent developments in different types of CP antennas and arrays, reported by industries, researchers and academics worldwide.. Includes numerous case studies to demonstrate how to design and implement different CP antennas in practical scenarios.. Provides both an introduction for

	students in the field and an in-depth reference for antenna/RF engineers who work on the development of CP antennas.Circularly Polarized Antennas will be an invaluable guide for researchers in R&D organizations; system engineers (antenna, telecom, space and satellite); postgraduates studying the subjects of antenna and propagation, electromagnetics, RF/microwave/millimetre-wave systems, satellite communications and so on; technical managers and professionals in the areas of antennas and propagation.

2. Record Nr. UNINA9910954349803321

Autore	Best Joel
Titolo	The stupidity epidemic : worrying about students, schools, and America's future / / Joel Best
Pubbl/distr/stampa	New York : , : Routledge, , 2011
ISBN	1-280-87319-1 9786613714503 1-136-16469-3 1-136-16468-5 0-203-83421-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (67 p.)
Collana	Framing 21st century social issues
Disciplina	306.43
Soggetti	Academic achievement - United States Educational accountability - United States Educational statistics Intelligence levels - United States Stupidity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 45-49) and index.
Nota di contenuto	Cover; Title; Copyright; Contents; Series Foreword; Preface; Acknowledgments; I. Our Doubts about America's Schools; II. Looking Backward at Fears of Failing Schools; III. Is There Evidence That Stupidity is Increasing?; IV. Explaining the Concern; V. Beyond Stupidity: Better Ways to Think about Educational Issues; References;

	Glossary/Index
Sommario/riassunto	Critics often warn that American schools are failing, and that our students are ill-prepared for the challenges the future holds, and may even be ""the dumbest generation."" We can think of these claims as warning about a Stupidity Epidemic. This essay begins by tracing the history of the idea of that American students, teachers, and schools are somehow getting worse; the record shows that critics have been issuing such warnings for more than 150 years. It then examines four sets of data that speak to whether educational deterioration is taking place. First, data on educational attainment s