Record Nr. UNINA9910462914503321 Titolo Microwave photonics / / edited by Chi H. Lee Boca Raton:,: Taylor & Francis,, 2013 Pubbl/distr/stampa **ISBN** 1-351-83248-4 1-315-21659-0 1-4665-0287-8 Edizione [2nd ed.] Descrizione fisica 1 online resource (489 p.) Altri autori (Persone) LeeChi H Disciplina 621.382/7 Optical communications - Equipment and supplies Soggetti **Optoelectronics** Microwave communication systems **Photonics** Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references. Nota di bibliografia Nota di contenuto Front Cover; Contents; Preface; Contributors; Chapter 1 - Microwave Photonics: From Concepts to Devices and Applications; Chapter 2 -Femtosecond All-Optical Devices for Ultrafast Communication and Signal Processing: Chapter 3 - Ultrawide-Band Sub-THz Photonic Wireless Links; Chapter 4 - Fiber Bragg Gratings for Microwave Photonics Applications; Chapter 5 - Hybrid Fiber Radio: Concepts and Prospects; Chapter 6 - High Dynamic Range, 100 km Digital Radioover-Fiber Links; Chapter 7 - Photonic Synthesis of Ultrabroadband Arbitrary Electromagnetic Waveforms Chapter 8 - Application of Ultrafast Optoelectronics and Monolithic Distributed Microwave Photonic DevicesChapter 9 - Tera Sample-per-Second Time Stretched Analog-to-Digital Conversion; Chapter 10 -THz Photonics; Back Cover Sommario/riassunto In the past decade, we have witnessed world-wide growth of the field of microwave photonics. As microwave photonics deals with interaction between microwaves and optical waves, it leads to new communication systems called fiber-radios which transmit radio frequency signal over

optical carriers. Updated to reflect advances in the field, this book

provides a systematic introduction by giving a clear overview of many key technologies. In addition a complete revision, the second edition includes new chapters on fiber bragg gratings and applications in microwave photonics and ultrawide band millimeter photonics wireless links--