1. Record Nr. UNINA9910677424703321 Autore Zeng Yong (Professor of wireless communication systems) UAV communications for 5G and beyond / / edited by Yong Zeng [et Titolo al.] Hoboken, NJ:,: Wiley,, 2021 Pubbl/distr/stampa **ISBN** 1-119-57572-9 1-119-57567-2 1-119-57579-6 Descrizione fisica 1 PDF Disciplina 629.1333902854678 Soggetti Drone aircraft - Control systems Aeronautics - Communication systems Mobile communication systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Fundamentals of UAV Communications. Overview / Qingging Wu, Yong Zeng, Rui Zhang -- A Survey of Air-to-Ground Propagation Channel Modeling for Unmanned Aerial Vehicles / Wahab Khawaja, Ismail

Guvenc, David W Matolak, Uwe-Carsten Fiebig, Nicolas Schneckenberger -- UAV Detection and Identification / Martins Ezuma, Fatih Erden, Chethan Kumar Anjinappa, Ozgur Ozdemir, Ismail Guvenc, David Matolak -- Cellular-Connected UAV Communications. Performance Analysis for Cellular-Connected UAVs / M Mahdi Azari, Fernando Rosas, Sofie Pollin -- Performance Enhancements for LTE-Connected UAVs: Experiments and Simulations / Rafhael Medeiros de Amorim, Jeroen Wigard, Istvn Z Kovcs, Troels B Srensen -- 3GPP Standardization for Cellular-Supported UAVs / Helka-Liina Mnen --Enhanced Cellular Support for UAVs with Massive MIMO / Giovanni Geraci, Adrian Garcia-Rodriguez, Lorenzo Galati Giordano, David Lopez-Perez -- High-Capacity Millimeter Wave UAV Communications / Nuria Gonzalez-Prelcic, Robert W Heath, Cristian Rusu, Aldebaro Klautau -- UAV-Assisted Wireless Communications. Stochastic Geometry-Based Performance Analysis of Drone Cellular Networks / Morteza Banagar, Vishnu V Chetlur, Harpreet S Dhillon -- UAV

Placement and Aerial-Ground Interference Coordination / Abhaykumar Kumbhar, Ismail Guvenc -- Joint Trajectory and Resource Optimization / Yong Zeng, Qingqing Wu, Rui Zhang -- Energy-Efficient UAV Communications / Yong Zeng, Rui Zhang -- Fundamental Trade-Offs for UAV Communications / Qingqing Wu, Liang Liu, Yong Zeng, Rui Zhang -- UAV-Cellular Spectrum Sharing / Chiya Zhang, Wei Zhang -- Other Advanced Technologies for UAV Communications. Non-Orthogonal Multiple Access for UAV Communications / Tianwei Hou, Yuanwei Liu, Xin Sun -- Physical Layer Security for UAV Communications / Nadisanka Rupasinghe, Yavuz Yapici, Ismail Guvenc, Huaiyu Dai, Arupjyoti Bhuyan -- UAV-Enabled Wireless Power Transfer / Jie Xu, Yong Zeng, Rui Zhang -- Ad-Hoc Networks in the Sky / Kamesh Namuduri -- Index

Sommario/riassunto

"To advantageously plan and design for the explosive near-future increase in the number of unmanned aerial vehicles (UAVs) and their demanding applications, integration of UAVs into cellular communication systems has seen increasing interest. This book provides a timely and comprehensive overview of the recent research efforts and results of unmanned aerial vehicles (UAVs)-integrated cellular network communications. The aim of the book is to provide a comprehensive coverage of the potential applications, networking architectures, latest research findings and key enabling technologies, experimental measurement results, as well as up-to-date industry standardizations for UAV communications in cellular systems, including the existing LTE as well as the future 5G-and-beyond systems"--