1. Record Nr. UNINA9910676533903321 Wireless communication security: mobile and network security **Titolo** protocols / / edited by Manju Khari, Manisha Bharti, M. Niranjanamurthy Hoboken, New Jersey:,: John Wiley & Sons, Inc.,, [2023] Pubbl/distr/stampa ©2023 **ISBN** 1-119-77746-1 1-119-77745-3 Descrizione fisica 1 online resource (290 pages) Disciplina 002 Wireless communication systems - Security measures Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover -- Title Page -- Copyright Page -- Contents -- Preface --Chapter 1 M2M in 5G Cellular Networks: Challenges, Proposed Solutions, and Future Directions -- 1.1 Introduction -- 1.2 Literature Survey -- 1.3 Survey Challenges and Proposed Solutions of M2M --1.3.1 PARCH Overload Problem -- 1.3.2 Inefficient Radio Resource Utilization and Allocation -- 1.3.3 M2M Random Access Challenges --1.3.4 Clustering Techniques -- 1.3.5 QoS Provisioning for M2M Communications -- 1.3.6 Less Cost and Low Power Device Requirements -- 1.3.7 Security and Privacy -- 1.4 Conclusion --References -- Chapter 2 MAC Layer Protocol for Wireless Security --2.1 Introduction -- 2.2 MAC Layer -- 2.2.1 Centralized Control --2.2.2 Deterministic Access -- 2.2.3 Non-Deterministic Access -- 2.3 Functions of the MAC Layer -- 2.4 MAC Layer Protocol -- 2.4.1 Random Access Protocol -- 2.4.2 Controlled Access Protocols -- 2.4.3 Channelization -- 2.5 MAC Address -- 2.6 Conclusion and Future

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Sommario/riassunto

WIRELESS COMMUNICATION SECURITY Presenting the concepts and advances of wireless communication security, this volume, written and edited by a global team of experts, also goes into the practical applications for the engineer, student, and other industry professionals. Covering a broad range of topics in wireless communication security and its solutions, this outstanding new volume is of great interest to engineers, scientists, and students from a variety of backgrounds and interests. Focusing on providing the theory of wireless communication within the framework of its practical applications, the contributors take on a wealth of topics, integrating seemingly diverse areas under one cover. Wireless Communication Security has been divided into five units. The first unit presents the different protocols and standards for developing a real-time wireless communication security. The second unit presents different widely accepted networks, which are the core of wireless communication security. Unit three presents the various device and network controlling methodologies. Unit four presents the various high performance and computationally efficient algorithms for efficient and scalable implementation of network protocols, and the last unit presents the leading innovations and variety of usage of wireless communication security. Valuable as a learning tool for beginners in this area as well as a daily reference for engineers and scientists working in these areas, this is a must-have for any library.