1. Record Nr. UNINA9910350299803321 Autore Chen Xiaoming Titolo Massive Access for Cellular Internet of Things Theory and Technique / / by Xiaoming Chen Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-13-6597-0 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (IX, 130 p. 48 illus., 28 illus. in color.) Collana SpringerBriefs in Electrical and Computer Engineering, , 2191-8120 Disciplina 621.382 Soggetti Telecommunication Wireless communication systems Mobile communication systems Electronic circuits Communications Engineering, Networks Wireless and Mobile Communication **Electronic Circuits and Systems** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Massive Access with Full Channel State Information --Nota di contenuto Massive Access with Channel Quantization Codebook -- Massive Access with Channel Reciprocity -- Massive Access with Channel Statistical Information -- Summary. This book focuses on massive access to the cellular internet of things Sommario/riassunto (IoT). Both theory and technique are addressed, with more weight placed on the latter. This is achieved by providing in-depth studies on a number of central topics such as channel state information acquisition, user clustering, superposition coding, and successive interference cancellation. Four typical application scenarios are examined in detail, namely the stationary IoT device scenario, frequency division duplex-based low-mobility IoT device scenario, time-division duplex-based IoT device scenario, and high-mobility IoT device scenario. The comprehensive and systematic treatment of key techniques in massive access to the cellular IoT is one of the major features of the book, which is particularly suited for readers who are

interested in finding practical solutions for the cellular IoT. As such, it

will benefit researchers, engineers, and graduate students in the fields of information engineering, telecommunications engineering, computer engineering, etc.