

1. Record Nr.	UNINA9910366657703321
Autore	Liu Yuanwei
Titolo	Non-Orthogonal Multiple Access for Massive Connectivity // by Yuanwei Liu, Zhijin Qin, Zhiguo Ding
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-30975-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIV, 101 p. 26 illus., 25 illus. in color.)
Collana	SpringerBriefs in Computer Science, , 2191-5776
Disciplina	621.382
Soggetti	Telecommunication Wireless communication systems Mobile communication systems Computer networks Communications Engineering, Networks Wireless and Mobile Communication Computer Communication Networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- Compatibility in NOMA -- Sustainability of NOMA -- Security in NOMA -- Artificial Intelligence (AI) enabled NOMA -- Open Issues and Challenges -- Conclusion.
Sommario/riassunto	This book discusses non-orthogonal multiple access (NOMA) and the various issues in NOMA networks, including capability, sustainability, and security. This book starts from the basics and key techniques of NOMA. Subsequently, the authors discuss three critical issues in NOMA networks, including compatibility, sustainability, and security. Particularly, the authors first demonstrate the applications of NOMA in different networks including MIMO-NOMA, NOMA in heterogeneous networks, and NOMA in cognitive radio networks to show the compatibility of NOMA with various networks. Then the wireless powered NOMA networks are presented to address the sustainability issues in NOMA networks to extend the network reliability and lifetime. The security enhanced NOMA networks are discussed for single antenna case and multiple antenna case, respectively. Finally, the most

recent developments on artificial intelligence (AI) enabled NOMA networks are discussed and the research challenges on NOMA to support massive number of devices are identified. Presents the NOMA enabled wireless networks to support massive connectivity Provides a framework for NOMA in the next generation of wireless communication systems Includes an overview of the AI-enabled NOMA networks to provide massive access opportunities with heterogeneous transmission requirements.
