Record Nr. UNINA9910743360603321 **Titolo** Terahertz wireless communication components and system technologies / / Mohammed El Ghzaoui [and three others], editors Pubbl/distr/stampa Singapore: ,: Springer Nature Singapore Pte Ltd., , [2022] ©2022 981-16-9181-9 **ISBN** 981-16-9182-7 1 online resource (311 pages): illustrations (black and white, and color) Descrizione fisica Disciplina 621.384 Soggetti Mobile communication systems Wireless communication systems Signal processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references. This book presents scientific and technological innovations and Sommario/riassunto advancements already developed or under development in academia, industry, and research communities. It includes fundamental ideas and advancement in terahertz technology covering high intensity terahertz wave generation, THz detection, different modes of THz wave generation, THz modulation system, and terahertz propagation channel modeling. It highlights methodologies for the design of terahertz components and system technologies including emerging applications. The chapter contents are based on theoretical, methodological, wellestablished, and validated empirical work dealing with different topics in the terahertz domain. The book covers a very broad audience ranging from basic sciences to experts and learners in engineering and technology. It would be a good reference for advanced ideas and concepts in THz technology which will best suit microwave, biomedical, and electrical and communication engineers working towards next-

generation technology.