Record Nr. UNINA9910558488803321 Printed antennas for 5G networks / / Ladislau Matekovits [and three **Titolo** others], editors Pubbl/distr/stampa Cham, Switzerland: ,: Springer Nature Switzerland AG, , [2022] ©2022 **ISBN** 3-030-87605-5 Descrizione fisica 1 online resource (viii, 371 pages): illustrations (some color) Collana PoliTO Springer series 621.38456 Disciplina Soggetti Antennas (Electronics) 5G mobile communication systems Printed electronics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Sommario/riassunto The book provides a comprehensive overview of antennas for 5G technology, such as MIMO, multiband antennas, Magneto-Electric Dipole Antenna and PIFA Antenna for 5G networks, phased array antennas for 5G access, beam-forming and beam-steering issues, 5G antennas for specific applications (smartphone, cognitive radio) and advance antenna concept and materials for 5G. The book also covers ooptimizations methods for passive and active devices in mm-Wave 5G networks. It explores topics which influence the design and characterization of antennas such as data rates, high isolation, pattern and spatial diversity, making 5G antennas more suitable for a multipath environment. The book represents a learning tool for researchers in the field, and enables engineers, designers and manufacturers to identify key design challenges of antennas for 5G networks, and characterize novel antennas for 5G networks.