1. Record Nr. UNINA9910830285803321 Autore Chen Zhijiao Titolo Dielectric Resonator Antennas: Materials, Designs and Applications Pubbl/distr/stampa Newark:,: John Wiley & Sons, Incorporated,, 2023 ©2024 **ISBN** 1-394-16917-5 1-394-16915-9 Edizione [1st ed.] Descrizione fisica 1 online resource (316 pages) Altri autori (Persone) DengJing-Ya LiuHaiwen 621.382/4 Disciplina Soggetti Dielectric resonators Microwave antennas Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto "Dielectric Resonator Antennas (DRAs) were first proposed in 1983 to avoid conduction losses of the metal mmWave radiating structure. Following this work, DRAs have been investigated for many advantages and benefits over metal antennas. For instance, dielectric patch antennas have been studied by different engineers to avoid severe metal loss of the mmWave patch antenna. Dielectric filled/loaded antennas provide an effective means for developing compact, high performance mmWave antennas. It is noted that some metal antennas reduce their weight by coating the metal to the 3D printed dielectric. They benefit from the dielectric by being low-cost and light-weight but they still belong to the metal antenna because there is no penetration

into the dielectric."--