1. Record Nr. UNINA9910571726003321 Autore Miccinesi Lapo Titolo Advanced Ground-Based Real and Synthetic Aperture Radar / / Lapo Miccinesi Pubbl/distr/stampa Firenze:,: Firenze University Press,, 2021 Descrizione fisica 1 online resource (140 pages): illustrations Collana Premio Tesi di dottorato Disciplina 621.38485 Soggetti Synthetic aperture radar Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references. Nota di bibliografia Sommario/riassunto Ground-based/terrestrial radar interferometry (GBRI) is a scientific topic of increasing interest in recent years. The GBRI is used in several field as remote sensing technique for monitoring natural environment (landslides, glacier, and mines) or infrastructures (bridges, towers). These sensors provide the displacement of targets by measuring the phase difference between sending and receiving radar signal. If the acquisition rate is enough the GBRI can provide the natural frequency, e.g. by calculating the Fourier transform of displacement. The research activity, presented in this work, concerns design and development of some advanced GBRI systems. These systems are related to the

following issue: detection of displacement vector, Multiple Input

Multiple Output (MIMO) and radars with 3D capability.