1. Record Nr. UNINA9910688374803321 Nuclear Magnetic Resonance / / edited by Navin Khaneja Titolo London:,:IntechOpen,,2020 Pubbl/distr/stampa Descrizione fisica 1 online resource (xii, 133 pages): illustrations Disciplina 538.362 Soggetti Nuclear magnetic resonance Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Nuclear magnetic resonance (NMR) has evolved as a versatile tool in chemistry and biology. This scientific technique is based on the detection of magnetic moments of atomic nuclei arising due to an intrinsic property called spin because of their precession in static magnetic fields. Nuclei are excited by radio frequency (RF) magnetic fields and subsequently their precession is observed by the voltage they induce on an induction coil as they precess. In this book, we present some of the most exciting developments in the field of NMR: for example, new developments in NMR instrumentation, new magnet technology, RF coil design, the design of novel NMR sensors, and new developments of methods in solution and solid-state NMR These range from new methods for the fast acquisition of 2D spectrum to NMR studies of molecular interactions in ionic solutions. Solid-state methods for the analysis of polyvinyl chloride and NMR studies of torsion angles in polypeptides are also included. The book will be a useful reference for practitioners in the field and at the same time will

appeal to a broad audience interested in the general area of NMR.