Record Nr. UNINA9910298655503321 Autore Salvi Nicola Titolo Dynamic Studies Through Control of Relaxation in NMR Spectroscopy / / by Nicola Salvi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2014 **ISBN** 3-319-06170-4 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (118 p.) Collana Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053 Disciplina 543.0877 Soggetti Spectroscopy Molecular biology Physical measurements Measurement Biomedical engineering Spectroscopy/Spectrometry Molecular Medicine Measurement Science and Instrumentation Biomedical Engineering and Bioengineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "Doctoral Thesis accepted by Ecole Polytechnique Federale de Note generali Lausanne, Switzerland." Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Introduction -- Theoretical principles -- Analytical models for relaxation dispersion experiments -- Experimental methods --Experimental results -- Conclusions. Nicola Salvi's thesis offers a remarkably cogent view of highly Sommario/riassunto sophisticated NMR methods. Salvi developed these methods in order to characterize the amplitudes and frequency ranges of local motions in biomolecules such as proteins. These local motions play an essential role since they can explain many of the remarkable properties of proteins and enable them to carry out all sorts of vital functions, from enzymatic catalysis to intermolecular recognition and signalling in

cells. Salvi's work has led to numerous publications in high-impact

journals.