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Nota di contenuto	NMR of Biomolecules: Towards Mechanistic Systems Biology; Contents; Preface; List of Contributors; List of Abbreviations; Part One: Introduction; 1 NMR and its Place in Mechanistic Systems Biology; 2 Structure of Biomolecules: Fundamentals; 2.1 Structural Features of Proteins; 2.1.1 Introduction: From Primary to Quaternary Structure; 2.1.2 Geometrical and Conformational Properties; 2.1.2.1 Backbone Dihedral Angles; 2.1.2.2 Side-Chain Dihedral Angles; 2.1.3 Secondary Structure Elements in Proteins; 2.1.4 Prediction of Secondary Structure 2.1.5 Structural Motifs and Structural Domains - Combination of

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2.2.2.4.4 i-Motif2.2.2.4.5 Quadruplex DNA; 2.2.3 RNA Structure; 2.2.3.1 Regular RNA Structure - A-Form Helices; 2.2.3.2 Mismatches, Bulges, and Unusual Base Pairing; 2.2.3.3 Reversal and Alteration of Strand Direction: Commonly Observed Loop and Turn Motifs; 2.2.3.3.1 U-Turn; 2.2.3.3.2 K-Turn; 2.2.3.3.3 C-Loop; 2.2.3.3.4 E-Loop; 2.2.3.4 Tetraloops and Tetraloop-Receptor Contact; 2.2.3.5 Higher-Order RNA Tertiary Structure Elements: Coaxial Stacking Motifs; 2.2.3.6 DNA-RNA Hybrids; 3 What Can be Learned About the Structure and Dynamics of Biomolecules from NMR; 3.1 Proteins Studied by NMR
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Sommario/riassunto

NMR is one of the most powerful methods for imaging of biomolecules. This book is the ultimate NMR guide for researchers in the biomedical community and gives not only background and practical tips but also a forward looking view on the future of NMR in systems biology.

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