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ISBN	1-281-00519-3 9786611005191 0-08-049218-5
Descrizione fisica	1 online resource (375 p.)
Collana	Soft condensed matter, complex fluids and biomaterials series
Altri autori (Persone)	Ptitsyn O. B <1929-1999.> (Oleg Borisovich)
Disciplina	572.6 572.6 22
Soggetti	Amino acid sequence Proteins - Conformation Protein folding Proteins - Chemistry
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Nota di bibliografia	Includes bibliographical references (p. 347) and index.
Nota di contenuto	Front Cover; Protein Physics: A Course of Lectures; Copyright Page; CONTENTS; Preface; Foreword; Acknowledgments; Part I: INTRODUCTION; Lecture 1; Part II: ELEMENTARY INTERACTIONS IN AND AROUND PROTEINS; Lecture 2; Lecture 3; Lecture 4; Lecture 5; Lecture 6; Part III: SECONDARY STRUCTURES OF POLYPEPTIDE CHAINS; Lecture 7; Lecture 8; Lecture 9; Lecture 10; Part IV: PROTEIN STRUCTURES; Lecture 11; Lecture 12; Lecture 13; Lecture 14; Lecture 15; Lecture 16; Part V: COOPERATIVE TRANSITIONS IN PROTEIN MOLECULES; Lecture 17; Lecture 18; Lecture 19; Lecture 20; Lecture 21 Part VI: PREDICTION AND DESIGN OF PROTEIN STRUCTURE Lecture 22; Lecture 23; Part VII: PHYSICAL BACKGROUND OF PROTEIN FUNCTIONS; Lecture 24; Lecture 25; Afterword; Recommended reading; Index
Sommario/riassunto	Protein Physics is a lively presentation of the most general problems of protein structure, folding and function from the physics and chemistry perspective, based on lectures given by the authors. It deals with fibrous, membrane and, most of all, with the best studied water-soluble globular proteins, in both their native and denatured states.

The major aspects of protein physics are covered systematically, physico-chemical properties of polypeptide chains; their secondary structures; tertiary structures of proteins and their classification; conformational transitions in protein molecules and t
