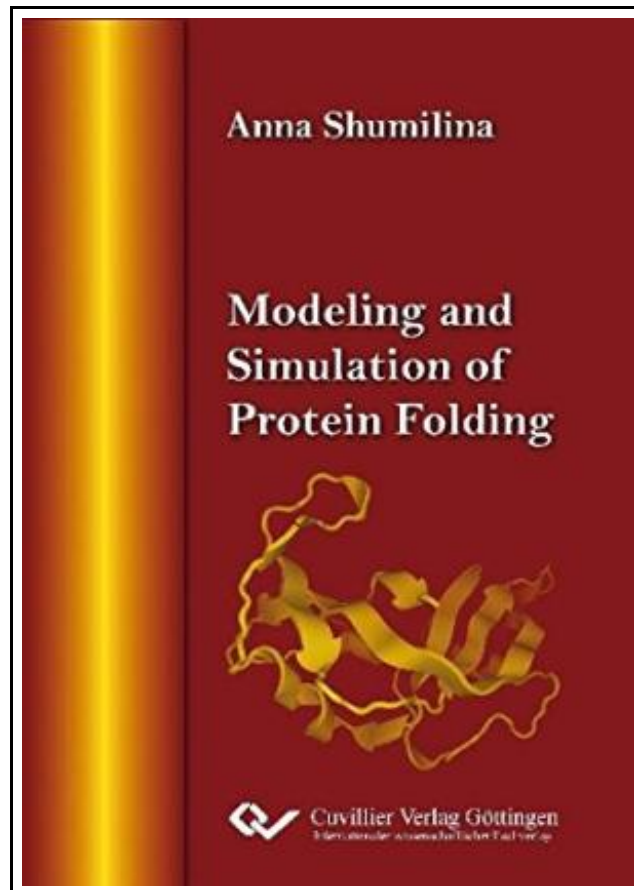# Modeling and Simulation of Protein Folding

Filesize: 8.96 MB

Reviews

This published publication is excellent. This really is for all who statte there had not been a well worth studying. I am very happy to inform you that this is the very best ebook i have read through within my very own daily life and could be he greatest pdf for possibly.
(Mrs. Maybelle Gleason DDS)

MODELING AND SIMULATION OF PROTEIN FOLDING

To read **Modeling and Simulation of Protein Folding** eBook, make sure you access the web link under and save the file or have accessibility to additional information that are in conjuction with MODELING AND SIMULATION OF PROTEIN FOLDING book.

Cuvillier Verlag Okt 2015, 2015. Taschenbuch. Book Condition: Neu. 211x149x17 mm. Neuware - The book describes a new mathematical model for intracellular protein folding and the implementation of this model in the form of a novel simulation software. Besides, the related biological, chemical, and physical background, important for understanding and rationalization of the proposed model, is outlined, and a short overview of the best-known methods for protein structure prediction and molecular modeling is given.The first chapter provides a general introduction to the problem, characterizes the chemical structure of proteins, and summarizes amino acid properties, including chirality and ionization behavior. After that, the principles of quantum mechanics and their consequences for the molecular structure are described. The discussion goes over to covalent and hydrogen bonding, as well as to electrostatic and van der Waals interactions. Further, some known facts about the three-dimensional structure of proteins and typical conformations of amino acids are outlined, followed by a quick glance at the hydrophobic effect and the interaction of charged groups with the solvent. Later on the focus is shifted to biological aspects, starting with chaperons and assisted protein folding, mentioning prions, which put into question the popular hypothesis about the global energy minimum of any native structure, and continuing with details of protein synthesis in the cell, which constituted the basis for the proposed model. The chapter finishes with a short description of experimental methods for protein structure prediction and with some information about databases for storage of known protein structures.The second chapter starts with a short overview of the knowledge-based protein structure prediction and ab initio protein folding approaches, then continues with empirical molecular mechanics force fields, typically used for molecular modeling. After that, it describes computation of atomic partial charges with a focus on the procedure of J. Gasteiger and M....

Read Modeling and Simulation of Protein Folding Online

Download PDF Modeling and Simulation of Protein Folding

See Also

[PDF] Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]

Access the web link listed below to read "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]" PDF document.

Download eBook »

[PDF] Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]

Access the web link listed below to read "Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]" PDF document.

Download eBook »

[PDF] Programming in D

Access the web link listed below to read "Programming in D" PDF document.

Download eBook »

[PDF] Psychologisches Testverfahren

Access the web link listed below to read "Psychologisches Testverfahren" PDF document.

Download eBook »

[PDF] I Am Reading: Nurturing Young Children s Meaning Making and Joyful Engagement with Any Book

Access the web link listed below to read "I Am Reading: Nurturing Young Children s Meaning Making and Joyful Engagement with Any Book" PDF document.

Download eBook »

[PDF] The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program

Access the web link listed below to read "The Preschool Inclusion Toolbox: How to Build and Lead a High-Quality Program" PDF document.

Download eBook »