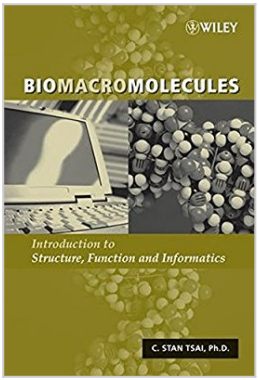


# Biomacromolecules: Introduction to Structure, Function and Informatics

*By C. Stan Tsai*



**Biomacromolecules: Introduction to Structure, Function and Informatics** By C. Stan Tsai

This book provides an integrated treatment of the structure and function of nucleic acids, proteins, and glycans, including thorough coverage of relevant computational biochemistry.

The text begins with an introduction to the biomacromolecules, followed by discussion of methods of isolation and purification, physiochemical and biochemical properties, and structural characteristics. The next section of the book deals with sequence analysis, analysis of conformation using spectroscopy, chemical synthesis, and computational approaches. The following chapters discuss biomolecular interactions, enzyme action, gene transmission, signal transduction, and biomacromolecular informatics. The author concludes with presenting the latest findings in genomics, proteomics, glycomics, and biomacromolecular evolution.

This text is an invaluable resource for research professionals wishing to move into genomics, proteomics, and glycomics research. It is also useful for students in biochemistry, molecular biology, bioengineering, biotechnology, and bioinformatics.

# Biomacromolecules: Introduction to Structure, Function and Informatics

*By C. Stan Tsai*

**Biomacromolecules: Introduction to Structure, Function and Informatics** By C. Stan Tsai

This book provides an integrated treatment of the structure and function of nucleic acids, proteins, and glycans, including thorough coverage of relevant computational biochemistry.

The text begins with an introduction to the biomacromolecules, followed by discussion of methods of isolation and purification, physiochemical and biochemical properties, and structural characteristics. The next section of the book deals with sequence analysis, analysis of conformation using spectroscopy, chemical synthesis, and computational approaches. The following chapters discuss biomolecular interactions, enzyme action, gene transmission, signal transduction, and biomacromolecular informatics. The author concludes with presenting the latest findings in genomics, proteomics, glycomics, and biomacromolecular evolution.

This text is an invaluable resource for research professionals wishing to move into genomics, proteomics, and glycomics research. It is also useful for students in biochemistry, molecular biology, bioengineering, biotechnology, and bioinformatics.

**Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai Bibliography**

- Sales Rank: #5052147 in Books
- Published on: 2006-11-10
- Original language: English
- Number of items: 1
- Dimensions: 10.50" h x 1.82" w x 7.40" l, 3.12 pounds
- Binding: Hardcover
- 768 pages

## Editorial Review

Review
"[The book] covers, in 18 chapters, most of what one would ever want to know about macromolecules' structure and functions." (*Biotechnology Journal*, June 2008)

From the Back Cover
The structure and function of biomacromolecules elucidated by the latest advances in informatics

This text provides an integrated presentation of the structure and function of nucleic acids, proteins, and glycans, including the latest findings from the fields of genomics, proteomics, and glycomics. It serves as a bridge between introductory biochemistry textbooks and advanced treatises on individual classes of biomacromolecules. The integrated treatment of biomacromolecules enables the reader to gain a better understanding and appreciation of both the similarities and differences among the three classes of biomacromolecules examined in the text.

The content and structure of the text reflects the author's almost forty years' experience in researching, teaching, and publishing on the topic of biomacromolecules. Following three chapters that set a solid foundation of fundamentals, the text covers:

- Biomacromolecular structure of nucleic acids, proteins, and polysaccharides
- Studies of biomacromolecular structures, including spectroscopic analysis ofconformation, chemical synthesis, and computation and modeling
- Functions of biomacromolecules, including their interactions, catalyses, and metabolisms
- Informatics, including genomics, proteomics, and glycomics
- Biomacromolecular evolution

Content follows the organization of an introductory biochemistry textbook, enabling instructors and students to easily integrate the text into a course. Each chapter includes a list of print and online references that serves as a gateway to further study.

This text is designed for students who are moving beyond an introductory level in biochemistry towards the advanced fields of study in genomics, proteomics, or glycomics. Advanced mathematical and computational skills are not needed.

About the Author
**C. STAN TSAI**, PhD, served for more than twenty years as a professor of chemistry and biochemistry at Carleton University, Canada. He is the author of An Introduction to Computational Biochemistry, also from Wiley.

## Users Review

**From reader reviews:**

**Randall Yang:**

Have you spare time to get a day? What do you do when you have considerably more or little spare time? That's why, you can choose the suitable activity intended for spend your time. Any person spent their own spare time to take a wander, shopping, or went to typically the Mall. How about open or even read a book titled Biomacromolecules: Introduction to Structure, Function and Informatics? Maybe it is to get best activity for you. You already know beside you can spend your time with your favorite's book, you can smarter than before. Do you agree with it has the opinion or you have other opinion?

**Cameron Keller:**

Here thing why this particular Biomacromolecules: Introduction to Structure, Function and Informatics are different and reputable to be yours. First of all studying a book is good but it really depends in the content of the usb ports which is the content is as delightful as food or not. Biomacromolecules: Introduction to Structure, Function and Informatics giving you information deeper since different ways, you can find any guide out there but there is no guide that similar with Biomacromolecules: Introduction to Structure, Function and Informatics. It gives you thrill reading through journey, its open up your own eyes about the thing that happened in the world which is possibly can be happened around you. You can easily bring everywhere like in park, café, or even in your technique home by train. Should you be having difficulties in bringing the imprinted book maybe the form of Biomacromolecules: Introduction to Structure, Function and Informatics in e-book can be your substitute.

**Beverly McKeever:**

This Biomacromolecules: Introduction to Structure, Function and Informatics is great book for you because the content and that is full of information for you who also always deal with world and get to make decision every minute. This kind of book reveal it info accurately using great plan word or we can claim no rambling sentences inside it. So if you are read the item hurriedly you can have whole data in it. Doesn't mean it only provides you with straight forward sentences but difficult core information with attractive delivering sentences. Having Biomacromolecules: Introduction to Structure, Function and Informatics in your hand like having the world in your arm, info in it is not ridiculous just one. We can say that no reserve that offer you world in ten or fifteen minute right but this book already do that. So , it is good reading book. Heya Mr. and Mrs. busy do you still doubt that?

**Frank Keating:**

This Biomacromolecules: Introduction to Structure, Function and Informatics is fresh way for you who has intense curiosity to look for some information as it relief your hunger of information. Getting deeper you on it getting knowledge more you know or else you who still having little digest in reading this Biomacromolecules: Introduction to Structure, Function and Informatics can be the light food for you personally because the information inside this specific book is easy to get by anyone. These books create itself in the form and that is reachable by anyone, yeah I mean in the e-book application form. People who think that in guide form make them feel sleepy even dizzy this guide is the answer. So there is absolutely no in reading a book especially this one. You can find what you are looking for. It should be here for you. So , don't miss that! Just read this e-book sort for your better life and also knowledge.

# Read Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai for online ebook

Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai books to read online.

## Online Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai ebook PDF download

### Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai Doc

**Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai Mobipocket**

**Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai EPub**

**FU84LDPG32J: Biomacromolecules: Introduction to Structure, Function and Informatics By C. Stan Tsai**