《计算生物学及基因信息学COMPUTA》

图书基本信息

书名：《计算生物学及基因信息学COMPUTATIONAL BIOLOGY AND GENOME INFORMATICS》

13位ISBN编号：9789812382573

10位ISBN编号：9812382577

出版时间：2003-12

出版社：World Scientific Pub Co Inc

作者：Wang, Paul P. 编

页数：257

版权说明：本站所提供下载的PDF图书仅提供预览和简介以及在线试读，请支持正版图书。

更多资源请访问：www.tushu111.com

《计算生物学及基因信息学COMPUTA》

内容概要

This book contains articles written by experts on a wide range of topics that are associated with the analysis and management of biological information at the molecular level. It contains chapters on RNA and protein structure analysis, DNA computing, sequence mapping, genome comparison, gene expression data mining, metabolic network modeling, and phyloinformatics. The important work of some representative researchers in bioinformatics is brought together for the first time in one volume. The topic is treated in depth and is related to, where applicable, other emerging technologies such as data mining and visualization. The goal of the book is to introduce readers to the principle techniques of bioinformatics in the hope that they will build on them to make new discoveries of their own. Contents: Exploring RNA Intermediate Conformations with the Massively Parallel Genetic Algorithm; Introduction to Self-Assembling DNA Nanostructures for Computation and Nanofabrication; Mapping Sequence to Rice FPC; Graph Theoretic Sequence Clustering Algorithms and their Applications to Genome Comparison; The Protein Information Resource for Functional Genomics and Proteomics; High-Grade Ore for Data Mining in 3D Structures; Protein Classification: A Geometric Hashing Approach; Interrelated Clustering: An Approach for Gene Expression Data Analysis; Creating Metabolic Network Models Using Text Mining and Expert Knowledge; Phyloinformatics and Tree Networks. Readership: Molecular biologists who rely on computers and mathematical scientists with interests in biology.

《计算生物学及基因信息学COMPUTA》

书籍目录

PrefaceChapter 1 Exploring RNA Intermediate Conformations with the Massively Parallel Genetic Algorithm Bruce A. Shapiro, David Bengali, Wojciech Kasprzak and Jin Chu WuChapter 2 Introduction to Self-Assembling DNA Nanostructures for Computation and Nanofabrication Thomas H. LaBeanChapter 3 Mapping Sequence to Rice FPC Carol Soderlund, Fred Engler, James Hatfield, Steven Blundy, Mingsheng Chen, Yeisoo Yu and Rod WingChapter 4 Graph Theoretic Sequence Clustering Algorithms and Their Applications to Genome Comparison Sun KimChapter 5 The Protein Information Resource for Functional Genomics and Proteomics Cathy H. WuChapter 6 High-Grade Ore for Data Mining in 3d Structures Jane S. Richardson and David C. RichardsonChapter 7 Protein Classification: A Geometric Hashing Approach Xiong Wang and Jason T. L. WangChapter 8 Interrelated Clustering: An Approach for Gene Expression Data Analysis Chun Tang, Li Zhang, Aidong Zhang and Murali RamanathanChapter 9 Creating Metabolic Network Models Using Text Mining and Expert Knowledge J.A. Dickerson, D. Berleant, Z. Cox, W. Qi, D. Ashlock, E.S. Wurtele and A. W. FulmerChapter 10 Phyloinformatics and Tree Networks William H. PielIndex

《计算生物学及基因信息学COMPUTA》

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:www.tushu111.com