

1. Record Nr.	UNINA9910144575203321
Titolo	Grid computing for bioinformatics and computational biology [[electronic resource] /] / edited by El-Ghazali Talbi, Albert Y. Zomaya
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2008
ISBN	1-281-20383-1 9786611203832 0-470-19163-5 0-470-19162-7
Descrizione fisica	1 online resource (411 p.)
Collana	Wiley series on bioinformatics
Altri autori (Persone)	TalbiEl-Ghazali <1965-> ZomayaAlbert Y
Disciplina	570.285
Soggetti	Bioinformatics Computational biology Computational grids (Computer systems)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	GRID COMPUTING FOR BIOINFORMATICS AND COMPUTATIONAL BIOLOGY; CONTENTS; Preface; Acknowledgments; Contributors; 1. Open Computing Grid for Molecular Sciences; 2. Designing High-Performance Concurrent Strategies for Biological Sequence Alignment Problems on Networked Computing Platforms; 3. Optimized Cluster-Enabled HMMER Searches; 4. Expanding the Reach of Grid Computing: Combining Globus- and BOINC-Based Systems; 5. Hierarchical Grid Computing for High-Performance Bioinformatics; 6. Multiple Sequence Alignment and Phylogenetic Inference 7. Data Syndication Techniques for Bioinformatics Applications8. Molecular Docking Using Grid Computing; 9. Deployment of Grid Life Sciences Applications; 10. Grid-Based Interactive Decision Support in Biomedicine; 11. Database-Driven Grid Computing and Distributed Web Applications: A Comparison; 12. A Semantic Mediation Architecture for a Clinical Data Grid; 13. Bioinformatics Applications in Grid Computing Environments; 14. Recent Advances in Solving the Protein Threading Problem; 15. DNA Fragment Assembly Using Grid Systems

16. Seeing Is Knowing: Visualization of Parameter-Parameter Dependencies in Biomedical Network ModelsIndex

Sommario/riassunto

The only single, up-to-date source for Grid issues in bioinformatics and biologyBioinformatics is fast emerging as an important discipline for academic research and industrial applications, creating a need for the use of Grid computing techniques for large-scale distributed applications. This book successfully presents Grid algorithms and their real-world applications, provides details on modern and ongoing research, and explores software frameworks that integrate bioinformatics and computational biology.Additional coverage includes:
*Bio-ontology and data mining