1. Record Nr.	UNINA9910767574403321
Titolo	Algorithms in Bioinformatics : First International Workshop, WABI 2001, Aarhus, Denmark, August 28-31, 2001, Proceedings / / edited by Olivier Gascuel, Bernard M.E. Moret
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2001
ISBN	3-540-44696-6
Edizione	[1st ed. 2001.]
Descrizione fisica	1 online resource (X, 314 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2149
Disciplina	570/.285
Soggetti	Computer programming Life sciences Data structures (Computer science) Algorithms Computers Programming Techniques Life Sciences, general Data Structures and Information Theory Algorithm Analysis and Problem Complexity Data Structures Computation by Abstract Devices
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	An Improved Model for Statistical Alignment -- Improving Profile-Profile Alignments via Log Average Scoring -- False Positives in Genomic Map Assembly and Sequence Validation -- Boosting EM for Radiation Hybrid and Genetic Mapping -- Placing Probes along the Genome Using Pairwise Distance Data -- Comparing a Hidden Markov Model and a Stochastic Context-Free Grammar -- Assessing the Statistical Significance of Overrepresented Oligonucleotides -- Pattern Matching and Pattern Discovery Algorithms for Protein Topologies -- Computing Linking Numbers of a Filtration -- Side Chain-Positioning as an Integer Programming Problem -- A Chemical-Distance-Based Test for Positive Darwinian Selection -- Finding a Maximum Compatible

	Tree for a Bounded Number of Trees with Bounded Degree Is Solvable in Polynomial Time -- Experiments in Computing Sequences of Reversals -- Exact-IEBP: A New Technique for Estimating Evolutionary Distances between Whole Genomes -- Finding an Optimal Inversion Median: Experimental Results -- Analytic Solutions for Three-Taxon MLMC Trees with Variable Rates Across Sites -- The Performance of Phylogenetic Methods on Trees of Bounded Diameter -- (1+?)-Approximation of Sorting by Reversals and Transpositions -- On the Practical Solution of the Reversal Median Problem -- Algorithms for Finding Gene Clusters -- Determination of Binding Amino Acids Based on Random Peptide Array Screening Data -- A Simple Hyper-Geometric Approach for Discovering Putative Transcription Factor Binding Sites -- Comparing Assemblies Using Fragments and Mate-Pairs.
Sommario/riassunto	This book constitutes the refereed proceedings of the First International Workshop on Algorithms in Bioinformatics, WABI 2001, held in Aarhus, Denmark, in August 2001.The 23 revised full papers presented were carefully reviewed and selected from more than 50 submissions. Among the issues addressed are exact and approximate algorithms for genomics, sequence analysis, gene and signal recognition, alignment, molecular evolution, structure determination or prediction, gene expression and gene networks, proteomics, functional genomics, and drug design; methodological topics from algorithmics; high-performance approaches to hard computational problems in bioinformatics.