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Titolo	Data Analysis in Molecular Biology and Evolution [[electronic resource] /] / by Xuhua Xia
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Edizione	[1st ed. 2000.]
Descrizione fisica	1 online resource (297 p.)
Disciplina	572.8/0285
Soggetti	Animal anatomy Computer science Evolutionary biology Data structures (Computer science) Biochemistry Animal Anatomy / Morphology / Histology Computer Science, general Evolutionary Biology Data Structures Biochemistry, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Installation of DAMBE and a Quick Start -- File Conversion -- Processing GenBank Files -- Accessing GenBank or Other Networked Computers -- Pair-wise and Multiple Sequence Alignment -- Factors Affecting Nucleotide and Di-Nucleotide Frequencies -- Case Study 1 -- Factors Affecting Codon Frequencies and Codon Usage Bias -- Case Study 2 -- Case Study 3 -- Evolution of Amino Acid Usage -- Pattern of Nucleotide Substitutions -- Preamble to the Pattern of Codon Substitution -- Factors Affecting Codon Substitutions -- Case Study 4 -- Substitution Pattern in Amino Acid Sequences -- A Statistical Digression -- Theoretical Background of Genetic Distances -- Molecular Phylogenetics: Concepts and Practice -- Testing the

Molecular Clock Hypothesis -- Testing Phylogenetic Hypotheses --  
Fitting Probability Distributions To Substitutions Over Sites.

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Sommario/riassunto

Data Analysis in Molecular Biology and Evolution introduces biologists to DAMBE, a proprietary, user-friendly computer program for molecular data analysis. The unique combination of this book and software will allow biologists not only to understand the rationale behind a variety of computational tools in molecular biology and evolution, but also to gain instant access to these tools for use in their laboratories. Data Analysis in Molecular Biology and Evolution serves as an excellent resource for advanced level undergraduates or graduates as well as for professionals working in the field.

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