1. Record Nr.	UNINA9910456495103321
Titolo	Quantum bio-informatics II [[electronic resource]] : from quantum information to bio-informatics : Tokyo University of Science, Japan, 12-16 March 2008 / / editors, L. Accardi, W. Freudenberg, M. Ohya
Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2009
ISBN	1-282-44250-3
	9786612442506
	981-4273-75-9
Descrizione fisica	1 online resource (357 p.)
Collana	QP-PQ, quantum probability and white noise analysis ; ; v. 24
Altri autori (Persone)	AccardiL <1947-> (Luigi)
	FreudenbergWolfgang
	OhyaMasanori <1947->
Disciplina	572.80285
Soggetti	Bioinformatics
	Quantum theory
	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Based on the second international conference of quantum bio-informatics held at the QBI Center of Tokyo University of Sciences."--Pref.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface; The Problem of Quantum-Like Representation in Economy Cognitive Science, and Genetics L. Accardi, A. Khrennikov and M. Ohya; Chaotic Behavior Observed in Linea Dynamics M. Asano, T. Yamamoto and Y. Togawa; Complete m-Level Quantum Teleportation Based on Kossakowski-Ohya Scheme M. Asano, M. Ohya and Y. Tanaka; Towards Quantum Cybernetics: Optimal Feedback Control in Quantum Bio Informatics V. P. Belavkin; Quantum Entanglement and Circulant States D. Chruscinski; The Compound Fock Space and Its Application in Brain Models K.-H. Fichtner and W. Freudenberg
	Characterisation of Beam Splitters L. Fichtner and M. GablerApplication of Entropic Chaos Degree to a Combined Quantum Baker's Map K. Inoue, M. Ohya and I. V. Volovich; On Quantum Algorithm for Multiple Alignment of Amino Acid Sequences S. Iriyama and M. Ohya; Quantum-Like Models for Decision Making in Psychology and Cognitive Science A.

Khrennikov; On Completely Positive Non-Markovian Evolution of a d-Level System A. Kossakowski and R. Rebolledo; Measures of Entanglement - A Hilbert Space Approach W. A. Majewski; Some Characterizations of PPT States and Their Relation T. Matsuoka
On the Dynamics of Entanglement and Characterization of Entangling Properties of Quantum Evolutions M. Michalski Perspective from Micro-Macro Duality - Towards Non-Perturbative Renormalization Scheme I. Ojima; A Simple Symmetric Algorithm Using a Likeness with Introns Behavior in RNA Sequences M. Regoli; Some Aspects of Quadratic Generalized White Noise Functionals Si Si and T. Hida; Analysis of Several Social Mobility Data Using Measure of Departure from Symmetry K. Tahata, K. Yamamoto, N. Miyamoto and S. Tomizawa; Time in Physics and Life Science 1. V. Volovich
Note on Entropies in Quantum Processes N. Watanabe Basics of Molecular Simulation and Its Application to Biomolecules T. Ando and 1. Yamato; Theory of Proton-Induced Superionic Conduction in Hydrogen-Bonded Systems H. Kamimura; Massive Collection of Full-Length Complementary DNA Clones and Microarray Analyses: Keys to Rice Transcriptome Analysis S. Kikuchi; Changes of Influenza A(H5) Viruses by Means of Entropic Chaos Degree K. Sato and M. Ohya; Basics of Genome Sequence Analysis in Bioinformatics - Its Fundamental Ideas and Problems T. Suzuki and S. Miyazaki
A Basic Introduction to Gene Expression Studies Using Microarray Expression Data Analysis D. Wanke and J. KilianIntegrating Biological Perspectives: A Quantum Leap for Microarray Expression Analysis D. Wanke, J. Kilian, U. Bloss, E. Mangels en, J. Supper, K. Harter and K. W. Berendzen

Sommario/riassunto	The purpose of this proceedings volume is to look for interdisciplinary bridges in mathematics, physics, information and life sciences, in particular, research for new paradigms for information and life sciences on the basis of quantum theory. The main areas in this volume are all related to one of the following subjects: (1) mathematical foundation of quantum mechanics, (2) quantum information, (3) quantum algorithm and computation, (4) quantum communication, (5) white noise analysis and quantum dynamics, (6) chaos dynamics and adaptive dynamics, (7) experimental studies of quantum computer,