

1. Record Nr.	UNINA9910781094003321
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
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.
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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,
