1. Record Nr. UNINA9910784859703321

Autore	Nicolaescu Liviu I
Titolo	Lectures on the geometry of manifolds / / by Liviu I. Nicolaescu
Pubbl/distr/stampa	New Jersey, : World Scientific, c2007
ISBN	1-281-91150-X 9786611911508 981-277-029-1
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (606 p.)
Disciplina	516.3/62
Soggetti	Geometry, Differential Manifolds (Mathematics)
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 (p. 579-582) and index.
Nota di contenuto	1. Introduction -- 2. Natural constructions on manifolds -- 3. Calculus on manifolds -- 4. Riemannian geometry -- 5. Elements of the calculus of variations -- 6. The fundamental group and covering spaces -- 7. Cohomology -- 8. Characteristic classes -- 9. Classical integral geometry -- 10. Elliptic equations on manifolds -- 11. Dirac operators.
Sommario/riassunto	"The goal of this book is to introduce the reader to some of the most frequently used techniques in modern global geometry. Suited to the beginning graduate student willing to specialize in this very challenging field, the necessary prerequisite is a good knowledge of several variables calculus, linear algebra and point-set topology. The book's guiding philosophy is, in the words of Newton, that “in learning the sciences examples are of more use than precepts”. We support all the new concepts by examples and, whenever possible, we tried to present several facets of the same issue. While we present most of the local aspects of classical differential geometry, the book has a “global and analytical bias”. We develop many algebraic-topological techniques in the special context of smooth manifolds such as Poincaré duality, Thom isomorphism, intersection theory, characteristic classes and the Gauss–Bonnet theorem. We devoted quite a substantial part of the book to describing the analytic techniques which have played an increasingly important role during the past decades. Thus, the last part of the book

discusses elliptic equations, including elliptic Lpand Hölder estimates, Fredholm theory, spectral theory, Hodge theory, and applications of these. The last chapter is an in-depth investigation of a very special, but fundamental class of elliptic operators, namely, the Dirac type operators. The second edition has many new examples and exercises, and an entirely new chapter on classical integral geometry where we describe some mathematical gems which, undeservedly, seem to have disappeared from the contemporary mathematical limelight."

2. Record Nr. UNISANNIOUBO3079854

Titolo	Knowledge creation and management : new challenges for managers / editors in chief Kazuo Ichijo, Ikujiro Nonaka
Pubbl/distr/stampa	New York, : Oxford University Press, 2007
ISBN	0195159624 9780195159622
Descrizione fisica	XII, 323 p. ; 24 cm.
Disciplina	658.4038
Soggetti	Aziende - Sistemi informativi
Collocazione	MASTER 658.4038 KNOCAM
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

3.

Record Nr.	UNINA9910865289603321
Autore	Fornes Jose Antonio
Titolo	Quantum Processes in Biology / / by José Antonio Fornés
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031580789 9783031580772
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (220 pages)
Collana	Springer Series in Biophysics, , 1868-2561 ; ; 26
Disciplina	570,285 570,113
Soggetti	Bioinformatics Molecular biology Biophysics Biomolecules Quantum theory Computational and Systems Biology Molecular Biology Molecular Biophysics Quantum Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	The Classical Smoluchowski Equation -- 2.The Quantum Smoluchowski Equation -- 3.Dynamics of Protons in DNA -- 4.The Interaction with the Environment -- 5.Classical and Quantum Mechanochemical Coupling -- 6.Photosynthesis and the quantum mechanochemical model -- 7.Entanglement, Coherence and Decoherence -- 8.Excitons -- 9.Long wavelength quantum energy exchange and its possible role in cellular recognition and communication -- A.Appendix.
Sommario/riassunto	In recent years, extensive research on stochastic processes such as neuron networks, molecular motors, dynamics models, anomalous diffusion, and disordered media has led to the development of various methods for applying the Classical and Quantum Smoluchowski Equation to these phenomena. This book focuses on presenting the solution to the Fokker-Planck equation using the Crank-Nicholson

formalism. This method is particularly effective for handling systems with numerous interactions, requiring vector and matrix-oriented approaches suitable for implementation in Matlab. Among the topics treated in the book are: Dynamics of protons in DNA, Photosynthesis and the quantum mechanochemical model, Entanglement, coherence and decoherence, Excitons in the Fenna-Mathews-Olson complex, and Energy exchange between cells. The author has made an incredible work in facilitating the understanding of these complex topics. This book includes a brief and clear explanation of the Quantum theory and also includes code to build useful software to use in research environments. This volume is particularly helpful for graduate students in physics and biology interested in understanding biological processes with the use of quantum physics tools.