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Soggetti	Biophysics Nanochemistry Bioorganic chemistry Magnetism Magnetic materials Nanoscience Nanostructures Biological and Medical Physics, Biophysics Bioorganic Chemistry Magnetism, Magnetic Materials Nanoscale Science and Technology
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Spin Exchange and Electron Transfer -- Spin Exchange Processes Involving Excited Triplet States -- Spin Electron Dipolar and Contact Interactions -- Spin-Selective Processes of Electron and Nuclear Spins -- Experimental Methods of Investigation of Electron Spin Interactions Based on ESR Phenomena — Continuous Wave EPR Measurements -- Experimental Methods of Investigation of Electron Spin Interactions Based on ESR Phenomena: Pulse ESR Measurements -- Miscellaneous Methods of Investigation of Electron Spin Interactions Based on Optical and Other Techniques -- Electron Spin Effects in Chosen Chemical and Physical Processes -- Magnetic and Electromagnetic Fields Effects on Chemical and Biological Processes -- Electron Spin Interactions in

Investigation of Structure and Spin State of Organic and Metallo organic Compounds -- Electron Transfer in Biological Systems. Light Energy Conversion -- Spin Labeling Methods. .

Sommario/riassunto

This book presents the versatile and pivotal role of electron spin interactions in nature. It provides the background, methodologies and tools for basic areas related to spin interactions, such as spin chemistry and biology, electron transfer, light energy conversion, photochemistry, radical reactions, magneto-chemistry and magneto-biology. The book also includes an overview of designing advanced magnetic materials, optical and spintronic devices and photo catalysts. This monograph appeals to scientists and graduate students working in the areas related to spin interactions physics, biophysics, chemistry and chemical engineering.