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Nota di contenuto	Introduction to magnetism -- Organic molecules, radicals, and spin states -- Theoretical methodologies -- Molecular orbital description of magnetic organic systems -- Qualitative methods for predicting molecular spin states -- Quantum chemical calculations: structural trends -- Strongly coupled magnetic molecules -- Photomagnetic effects -- Transition metal complexes -- Computational studies of inorganic clusters and solid -- Systems -- A look ahead.
Sommario/riassunto	Organic materials with extraordinary magnetic properties promise a wide range of light, flexible, and inexpensive alternatives to familiar metal-based magnets. Individual organic molecules with high magnetic moments will be the foundation for design and fabrication of these materials. This book provides a systematic understanding of the structure and properties of organic magnetic molecules. After a summary of the phenomenon of magnetism at the molecular level, it presents a survey of the challenges to theoretical description and evaluation of the magnetic character of open-shell molecules, an