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Point Charge Model2.3 Magneto-Structural Correlations for Some Typical Symmetries; 2.4 Impact of Lanthanide Complexes in Quantum Computing; 2.4.1 Quantum Computing Paradigms and Design Criteria; 2.4.2 Combining Physical Qubit Implementations with Lanthanide Complexes; 2.4.3 Molecular Spin Qubits; 2.5 Conclusions; Acknowledgements; References; Chapter 3 Polynuclear Lanthanide Single Molecule Magnets; 3.1 Introduction; 3.2 Synthetic Strategies; 3.2.1 Dy3 Triangles and Their Derivatives; 3.2.1.1 Seminal Dy3 Triangle 3.2.1.2 Other Triangular Dy3 Systems3.2.1.3 The Coupling of Dy3 Triangles; 3.2.2 Linear Polynuclear Lanthanide Complexes Showing Robust SMM Behaviour; 3.2.2.1 Linear Dy3 SMMs; 3.2.2.2 Linear Dy4 SMMs; 3.2.3 Planar Dy4 SMMs; 3.2.4 Dyn SMMs Having Multiple n-O (n>4) Bridges; 3.2.4.1 The Dy4 Grids Fixed by 4-O Atom; 3.2.4.2 The Dy4 Tetrahedron Fixed by 4-O Atom; 3.2.4.3 The Dy5 Pyramid Fixed by 5-O Atom; 3.2.5 Hydrazone-Based Lanthanide SMMs; 3.2.5.1 The Assembly of Dy6 Triangular Prism with Dy2 Units; 3.2.5.2 A Dy3 Molecular Cluster Pair (Dy6)
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Sommario/riassunto

The first reference on this rapidly growing topic provides an essential up-to-date guide to current and emerging trends.
 A group of international experts has been carefully selected by the editors to cover all the central aspects, with a focus on molecular species while also including industrial applications.
 The resulting unique overview is a must-have for researchers, both in academia and industry, who are entering or already working in the field.

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