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Nota di contenuto	Metallofoldamers: Supramolecular Architectures from Helicates to Biomimetics; Contents; List of Contributors; Foreword; Preface; 1 Metalloproteins and Metallopeptides - Natural Metallofoldamers; 1.1 Introduction; 1.2 Metalloproteins; 1.2.1 Metalloproteins are Nature's "Metallofoldamers!"; 1.2.2 Metal-Triggered Conformational Change of Proteins; 1.2.3 Conformational Change of Metalloproteins Caused by Ligand Binding; 1.2.4 Protein Misfolding: Causes and Implications - Cu, Zn-Superoxide Dismutase; 1.3 Metallopeptides; 1.3.1 Antibiotic Metallopeptides 1.3.2 Metallopeptides in Neurodegenerative Diseases1.3.3 Other Metallopeptides; 1.4 Conclusion and Perspectives; Acknowledgements; References; 2 Introduction to Unnatural Foldamers; 2.1 General Definition of Foldamers; 2.2 Biotic Foldamers; 2.2.1 Homogeneous Foldamers; 2.2.2 -Peptides; 2.2.3 -Peptides; 2.2.4 Hybrid Foldamers; 2.2.5 Aliphatic Urea Foldamers; 2.2.6 Foldamers of -Aminoxy Acids; 2.2.7 Foldamers Containing Amido Groups; 2.3 Abiotic Foldamers; 2.4 Organization Induced by External Agents; 2.4.1 Organization Induced

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Sommario/riassunto	Metallofoldamers are oligomers that fold into three-dimensional structures in a controlled manner upon coordination with metal ions. Molecules in this class have shown an impressive ability to form single- handed helical structures and other three-dimensional architectures. Several metallofoldamers have been applied as sensors due to their selective folding when binding to a specific metal ion, while others show promise for applications as responsive materials on the basis of their ability to fold and unfold upon changes in the oxidation state of the coordinated metal ion, and as novel catal