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Sommario/riassunto

Catechols are widely found in nature taking part in a variety of biological functions, ranging from the aqueous adhesion of marine organisms to the storage of transition metal ions. Catechol-based natural and biomimetic molecules have thus been the focus of intense research aimed at mimicking and translating this nature-inspired chemistry into new functional materials and systems with tailored properties. The aim of this book is to present a concise survey of the state-of-the-art of basic and applied research on bioinspired catechol systems. It collects several cutting-edge contributions from leading laboratories with a unifying theme of biomimetic principles and approaches. It is hoped that both practitioners and newcomers to the field will be fascinated by the unique potential of biomimetics to pursue new research and innovative solutions in biomedicine and technology.
