

1. Record Nr.	UNINA9911034944203321
Autore	Palomo Jose M
Titolo	Artificial Metalloenzymes // edited by Jose M. Palomo
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-032-04810-9
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (302 pages)
Collana	Topics in Organometallic Chemistry, , 1616-8534 ; ; 76
Disciplina	620.5
Soggetti	Nanotechnology Nanobiotechnology Biochemistry Organometallic chemistry Materials Chemistry Nanoengineering Biological Chemistry Organometallic Chemistry Materials Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Molecular Dynamics studies in the Pursuit of Excellent Artificial Metalloenzymes -- Enzyme-Polymer Hybrids for Chemoenzymatic Catalysis -- Metal Nanoparticles Biohybrids as Efficient Antimicrobial and Antiviral Agents -- Enzyme-Like Activity Artificial Metalloenzymes -- Noncanonical amino acids in the design of artificial metalloenzymes -- Catalysis in Protein Cages -- Lignin- and Cellulose-Based Materials as Potential Platforms for Enzyme Immobilization -- Insights into the Development of Artificial Metalloenzymes.
Sommario/riassunto	The book will be focused on the new advances in the design, preparation and application of different hybrid catalysts such as artificial metalloenzymes. The different chapters will cover different important aspect such as computational tools, preparation of artificial enzymes by using noncanonical aminoacids, nanobiocatalysts, protein-cages, enzyme-polymer conjugates, enzyme-metal nanoparticles

hybrids as enzyme mimics, or hybrid systems with applications as antimicrobial agents.
