

1. Record Nr.	UNINA9910800190703321
Titolo	Metalloproteins : theory, calculations, and experiments / / edited by Art E. Cho, Korea University, Korea, William A. Goddard III, California Institute of Technology, Pasadena, USA
Pubbl/distr/stampa	Boca Raton, Florida : , : CRC Press, , [2015] ©2015
ISBN	0-429-13273-5 1-138-89438-9 1-4987-5992-0
Descrizione fisica	1 online resource (284 p.)
Disciplina	572/.6
Soggetti	Metalloproteins
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Front Cover; Contents; Preface; Editors; Contributors; Chapter 1: Advanced Electron Paramagnetic Resonance Studies of the Oxygen-Evolving Complex; Chapter 2: Radical SAM Enzymes and Their Roles in Complex Cluster Assembly; Chapter 3: Density Functional Theory-Based Treatments of Metal-Binding Sites in Metalloenzymes : Challenges and Opportunities; Chapter 4: Catalysis of Methane Oxidation by the Tricopper Cluster in the Particulate Methane Monooxygenase and Biomimetic Tricopper Complexes; Chapter 5: Oxygen-Evolving Complex of Photosystem II : Insights from Computation and Synthetic Models Chapter 6: Electrifying MetalloenzymesChapter 7: Iron Uptake Mechanism in Ferritin from Helicobacter pylori; Chapter 8: Multiple-Step Electron Flow in Proteins; Chapter 9: Modeling of Ligand Binding to Metalloproteins; Back Cover
Sommario/riassunto	Numerous essential biological functions involve metalloproteins; therefore, understanding metalloproteins and how to manipulate them is significant in the biological and medical fields. An examination of current research, Metalloproteins: Theory, Calculations, and Experiments explores the interplay between theory and experiment,

detailing the role of theoretical modeling in the field and explaining how it aids experiments. The text also presents the current state of computational protein modeling, enabling researchers to adopt computation as an integral component of their studies. This book add
