1. Record Nr. UNINA9910133538603321 Autore Fontecave Marc Titolo Chemistry of biological processes [[electronic resoure]]:: an introduction / / Marc Fontecave, translator Liz Libbrecht Pubbl/distr/stampa Collège de France, 2014 Paris:,: Collège de France,, 2014 **ISBN** 9782722602748 (ebook) Descrizione fisica 1 online resource (26 pages): illustrations Collana Lecons inaugurales du College de France Soggetti **Biology** Health & Biological Sciences Biology - General Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di bibliografia Includes bibliographical references. Sommario/riassunto Life depends on the ability of living organisms to effectively harness the chemical potential of their environment, namely the sun, for energy, and a certain number of molecules which exist on the Earth's surface, such as water, oxygen, carbon dioxide, nitrogen, etc. These molecules need to be activated if benefit is to be derived from them, which requires profound electronic modifications that only metal ions can provide. Truly extraordinary metalloenzymes with highly subtle mechanisms are responsible for this activation. Bioinorganic chemistry straddles the disciplines of chemistry and biology and is in full

without metals.

expansion today. This discipline was born of the recent realisation that life is not solely organic but also "mineral", and that no life can exist