Record Nr. UNINA9910830388203321 Interactions Between Macro- and Microorganisms in Marine Sediments Titolo [Place of publication not identified], : American Geophysical Union, Pubbl/distr/stampa 2005 **ISBN** 1-118-66544-9 Descrizione fisica 1 online resource (viii, 390 pages): illustrations Collana Coastal and estuarine studies;; 60 577.77 Disciplina Soggetti Marine sediments - Microbiology Biogeochemical cycles 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 Published by the American Geophysical Union as part of the Coastal and Estuarine Studies, Volume 60. Interactions between macroorganisms (benthic fauna and macrophytes) and the biogeochemistry and microbiology of aquatic sediments have proved essential for the functioning of most benthic marine ecosystems. While our knowledge of the biogeochemical consequences of macrobiological activity has grown considerably during the last two decades, the feedback mechanisms and physicochemical forces controlling the abundance and diversity of benthic animals and plants still elude definitive analysis. In order to clarify the state of the science and provide a framework for future research, we present in this volume a synthesis of latest developments in research on interactions between animals, plants, and microorganisms in marine sedimentary environments (including intertidal areas, continental shelves, deep-sea sediments, and cold seeps). Of particular importance are the new experimental (field studies, laboratory experiments) and theoretical (modeling) approaches, which we also discuss.