1. Record Nr. UNINA9910483422203321

Autore	Zehr Jonathan P.
Titolo	Marine Nitrogen Fixation / / by Jonathan P. Zehr, Douglas G. Capone
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-67746-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (191 pages)
Collana	Earth and Environmental Science Series
Disciplina	589.704133
Soggetti	Water Hydrology Biogeography Microbiology Freshwater ecology Marine ecology Biogeosciences Freshwater and Marine Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Nitrogen Fixation in the Marine Environment -- Chapter2: Fundamentals of N2 Fixation -- Chapter3: History of Research on Marine N2 Fixation -- Chapter4: Microorganisms and Habitats -- Chapter5: Measurements of Organism Abundances and Activities -- Chapter6: Factors Controlling N2 Fixation -- Chapter7: Biogeography of N2 Fixation in the Surface Ocean -- Chapter8: N2 Fixation in Ocean Basins -- Chapter9: Marine N2 Fixation, Global Change and the Future -- Chapter10: Summary and Conclusions.
Sommario/riassunto	This book aims to serve as a centralized reference document for students and researchers interested in aspects of marine nitrogen fixation. Although nitrogen is a critical element in both terrestrial and aquatic productivity, and nitrogen fixation is a key process that balances losses due to denitrification in both environments, most resources on the subject focuses on the biochemistry and microbiology of such processes and the organisms involved in the terrestrial environment on symbiosis in terrestrial systems, or on largely

ecological aspects in the marine environment. This book is intended to provide an overview of N2 fixation research for marine researchers, while providing a reference on marine research for researchers in other fields, including terrestrial N2 fixation. This book bridges this knowledge gap for both specialists and non-experts, and provides an in-depth overview of the important aspects of nitrogen fixation as it relates to the marine environment. This resource will be useful for researchers in the specialized field, but also useful for scientists in other disciplines who are interested in the topic. It would provide a possible text for upper division classes or graduate seminars.