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> Changes Membrane Properties and Triggers Bioluminescence in Pyrocystis noctiluca as an Approach for New Biosensor Concepts --Addressing Ciguatera Risk Using Biosensors for the Detection of Gambierdiscus and Ciguatoxins -- Antibody, Aptamer and Affimer-Based Affinity Tools for Marine Toxin Biosensing -- Environmental DNA as a Tool for Single Species Detection -- Paper-Based Devices for Virus Detection in Water -- Electrochemical MIP Sensors for Environmental

Analysis -- Whole-Cell Biosensors and Phagocytosis with Cryo-

Conserved Cells in Coastal Areas and in Orbit (ISS) Under Microgravity -- Marine Whole-Cell Biosensing for "Real-Time" Determination of the Ballast Water Treatment Efficiency -- Sensors for Monitoring Faecal Indicator Bacteria in Bathing Waters -- Electrochemical (Bio)sensors for Toxins Control in the Marine Environment.

Sommario/riassunto

This book is devoted to the exploration of innovative sensing technologies for marine applications. The book focuses on various novel biosensor designs from nano-biosensors to molecularly imprinted polymers offering a broad perspective for marine biosensors development to deployment challenges. The book aims to target researchers in the area of marine monitoring, sensor developments and deployment of devices in the marine environment.