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Nota di contenuto	Frontmatter -- Preface -- Contents -- 1 Variability and trends of global sea ice cover and sea level: effects on physicochemical parameters -- 2 New techniques in environment monitoring -- 3 Responses of marine animals to ocean acidification -- 4 Alexandrium spp.: genetic and ecological factors influencing saxitoxin production and proliferation -- 5 Potential effects of climate change on cyanobacterial toxin production -- 6 Harmful marine algal blooms and climate change: progress on a formidable predictive challenge -- 7 Global warming, climate patterns and toxic cyanobacteria -- 8 Human impact in Mediterranean coastal ecosystems and climate change: emerging toxins -- 9 Gambierdiscus, the cause of ciguatera fish poisoning: an increased human health threat influenced by climate change -- 10 Ciguatera poisoning: an increasing burden for Pacific island communities in light of climate change? -- 11 Control and management of harmful algal blooms -- 12 Multifaceted climatic change and nutrient effects on harmful algae require multifaceted models -- 13 Global climate change profile and its possible effects on the reproductive cycle, sex expression and sex change of shellfish as marine toxin vectors -- 14 Effects on world food production and security -- 15 From science to policy: dynamic adaptation of legal regulations on aquatic biotoxins -- Index

Sommario/riassunto	The increasingly widespread production of toxins by marine and freshwater microalgae raises serious concerns regarding seafood and drinking water safety. This book compiles studies on the influence of climate change on the spreading of toxin-producing species in aquatic systems. The chemistry and biology of toxin production is revised and an outlook on control and prevention of the toxins' impact on human and animal health is given.