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Nota di contenuto	Chapter 1: Carbonate species and pH -- Chapter 2: Dissolved Organic matter -- Chapter 3: Trace metals -- Chapter 4: Radionuclides as ocean tracers -- Chapter 5: Persistent organic contaminants -- Chapter 6: Emergent organic contaminants -- Chapter 7: Nanoparticles in the marine environment -- Chapter 8: Microplastics and Nanoplastics -- Chapter 9: Remote sensing: Satellite and RPAS (Remotely Piloted Aircraft System) -- Chapter 10: In-Situ sensing: Ocean glider -- Chapter 11: Marine chemical (meta-)data management.
Sommario/riassunto	This textbook offers a comprehensive and authoritative introduction to the latest analytical methods, tools and techniques used in the marine environment, bringing together the two fields of chemical

oceanography and analytical chemistry. Divided into 11 chapters, the book starts with an overview of the main parameters of the marine carbon system, and it covers different sampling strategies used by the marine scientific community, and the different chemical analyses to measure trace metals, radionuclides and organic matter in the marine environment. Particular attention is given to the identification and quantification of marine persistent organic pollutants, emerging organic contaminants and microplastics. Readers will also find accessible explanations and real life examples of the application of remote sensing and in-situ sensing technologies to monitor the marine environment. The textbook finishes with a chapter on data treatment that outlines the relevant statistical approaches, uncertainty estimation and quality assurance of marine chemical measurements. This textbook provides both students and professionals alike with a transdisciplinary and comprehensive foundation for the chemical analysis of our oceans and seas.