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Nota di contenuto	Analytical methods for microplastics in environments: current advances and challenges -- Identification and characterization methods for microplastics basing on spatial imaging in micro-/nanoscales -- Microplastics in urban environments: sources, pathways and distribution -- Microplastics in agricultural soils -- The distribution and characteristics of microplastics in coastal beaches and mangrove

wetlands.-Microplastics in inland small waterbodies -- Microplastics in the sediments: From rivers to lakes investigated in the biggest freshwater lake (Poyang Lake) basin and Yangtze River in China -- Sources of microplastic in the environment -- Interaction of microplastics and organic pollutants: quantification, environmental fates and ecological consequences -- Interaction of microplastics and heavy metals: toxicity, mechanisms and environmental implications -- Microplastics and their effects on soil function as a life-supporting system -- Occurrence and ecotoxicological effects of microplastics on aquatic and terrestrial ecosystems -- Microplastics in soil ecosystem: insight on its fate and impacts on soil quality -- The toxicity of (nano) microplastics on C. elegans and its mechanisms -- Uptake of microplastics and their effects on plants -- Biofilms of microplastics -- Tissue accumulation of microplastics and toxic effects: Widespread health risks of microplastics exposure -- Microplastics in food: health risks -- Microplastics in aquaculture systems and their transfer in the food chain -- Biodegradation of plastics in Tenebrio genus (mealworms) -- Plastics of the future? The impact of biodegradable polymers on the environment -- Countermeasures on plastic and microplastic garbage management.

Sommario/riassunto

This book focuses on microplastics as emerging persistent contaminants in terrestrial environments. Scientists from around the globe review recent advances in multi-disciplinary research on micro (nano)plastics, including analytical methods; the sources, fate and distribution of microplastics; ecological risks; toxicity and health risks; and control and countermeasures for microplastics in terrestrial environments. Offering a comprehensive overview of microplastics in terrestrial environments, the book is a valuable resource for environmental researchers, ecologists and toxicologists, as well as for policymakers and non-experts.