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Sommario/riassunto	Provides a comprehensive introduction to ion exchange for beginners and in-depth coverage of the latest advances for those already in the field. As environmental and energy related regulations have grown, ion exchange has assumed a dominant role in offering solutions to many concurrent problems both in the developed and the developing world. Written by an internationally acknowledged leader in ion exchange research and innovation, Ion Exchange in Environmental Processes is both a comprehensive introduction to the science behind ion exchange and an expert assessment of the latest ion exchange technologies. Its purpose is to provide a valuable reference and learning tool for virtually

anyone working in ion exchange or interested in becoming involved in that incredibly fertile field. Written for beginners as well as those already working in the field, Dr SenGupta provides stepwise coverage, advancing from ion exchange fundamentals to trace ion exchange through the emerging area of hybrid ion exchange nanotechnology (or polymeric/inorganic ion exchangers). Other topics covered include ion exchange kinetics, sorption and desorption of metals and ligands, solid-phase and gas-phase ion exchange, and more. Connects state-of-the-art innovations in such a way as to help researchers and process scientists get a clear picture of how ion exchange fundamentals can lead to new applications; Covers the design of selective or smart ion exchangers for targeted applications - an area of increasing importance - including solid and gas phase ion exchange processes; Provides in-depth discussion on intraparticle diffusion controlled kinetics for selective ion exchange; Features a chapter devoted to exciting developments in the areas of hybrid ion exchange nanotechnology or polymeric/inorganic ion exchangers. Written for those just entering the field of ion exchange as well as those involved in developing the "next big thing" in ion exchange systems, Ion Exchange in Environmental Processes is a valuable resource for students, process engineers, and chemists working in an array of industries, including mining, microelectronics, pharmaceuticals, energy, and wastewater treatment, to name just a few.
