

1. Record Nr.	UNINA9910554238903321
Autore	Worch Eckhard <1951->
Titolo	Adsorption technology in water treatment : fundamentals, processes, and modeling / / Eckhard Worch
Pubbl/distr/stampa	Berlin, Germany ; ; Boston, Massachusetts : , : De Gruyter, , [2021] ©2021
ISBN	1-5231-4779-2 3-11-071550-3
Edizione	[Second edition.]
Descrizione fisica	1 online resource (XIII, 363 p.)
Disciplina	628.164
Soggetti	Water - Purification - Adsorption
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface to the second edition -- Preface to the first edition -- Contents -- 1 Introduction -- 2 Adsorbents and adsorbent characterization -- 3 Adsorption equilibrium I: General aspects and single-solute adsorption -- 4 Adsorption equilibrium II: Multisolute adsorption -- 5 Adsorption Kinetics -- 6 Adsorption dynamics in fixed-bed adsorbers -- 7 Fixed-bed adsorber design -- 8 Desorption and reactivation -- 9 Geosorption processes in water treatment -- 10 Appendix -- Nomenclature -- References -- Index
Sommario/riassunto	This book treats the theoretical fundamentals of adsorption technology for water treatment from a practical perspective. It presents all the basics needed for experimental adsorption studies as well as for process modeling and adsorber design. According to the increasing importance of micropollutants in the water cycle, particular attention is paid to their competitive adsorption in the presence of background organic matter. The current edition considers recent developments in adsorption theory and practice.