1. Record Nr. UNINA9910463003503321 **Titolo** Membrane technology and environmental applications [[electronic resource] /] / sponsored by Membrane Technology Task Committee of the Environmental Council, Environmental and Water Resources Institute (EWRI) of the American Society of Civil Engineers; edited by Tian C. Zhang ... [et al.] Reston, VA,: American Society of Civil Engineers, c2012 Pubbl/distr/stampa **ISBN** 0-7844-7689-6 Descrizione fisica 1 online resource (755 p.) Altri autori (Persone) ZhangTian C Disciplina 660/.28424 Soggetti Membrane separation Water - Purification - Membrane filtration Gas separation membranes Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ""Cover""; ""Contents""; ""Preface""; ""Contributing Authors""; ""Chapter 1 The Values of Membrane Science and Technology: Introduction and Overview""; ""1.1 Key Progresses in Membrane Science and Technology""; ""1.2 Overview of Applications of Membrane Technologies""; ""1.3 Key Drivers, Restraints, and Research Needs""; ""1.4 Book Overview""; ""1.5 Summary""; ""1.6 References""; ""Chapter 2 Delineation of Membrane Processes""; ""2.1 Different Membrane Processes""; ""2.2 Membrane Materials, Modules, and Systems""; ""2.3 Membrane Fouling""; ""2.4 Membrane Cleaning"" ""2.5 Different Membrane Processes"""2.6 Microfiltration Hybrid Systems""; ""2.7 Conclusion""; ""2.8 References""; ""Chapter 3 Fundamentals of Membrane Processes""; ""3.1 Introduction""; ""3.2 Membrane Materials and Properties""; ""3.3 Separation Mechanisms for Different Membrane Processes""; ""3.4 Modeling/Simulation in Membrane Processes""; ""3.5 Future Perspectives""; ""3.6 Summary""; ""3.7 References""; ""Chapter 4 Membrane Fouling in MBRs: Mechanisms and Control""; ""4.1 Introduction""; ""4.2 Types of Membrane Fouling"";

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