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Titolo	Application of Low Cost Ceramic Membranes in Wastewater Treatment : Issues on Reusability of Treated Water // edited by Sibdas Bandyopadhyay
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Descrizione fisica	1 online resource (XIII, 414 p. 109 illus., 69 illus. in color.)
Collana	Materials Horizons: From Nature to Nanomaterials, , 2524-5392
Disciplina	620.14
Soggetti	Ceramic materials Biophysics Membranes (Biology) Refuse and refuse disposal Ceramics Membrane Biophysics Waste Management/Waste Technology
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Membrane technology for wastewater management: Global scenario and sustainable solutions -- Biosorption assisted cross flow microfiltration process for wastewater treatment using clay alumina based ceramic membranes -- Separation of toxic metal contaminants using low cost UF membranes -- Application of low cost ceramic membranes in wastewater treatment : Issues on reusability of treated water -- Textile and Dyes Wastewater treatment using low cost UF membranes -- Reuse and renovation of tannery effluent using clay-alumina membrane -- Treatment of heavy metals contaminated effluents from electroplating industry using zeolite based membranes and titania smectitenanocomposites UF membranes -- Oily wastewater treatment using ceramic microfiltration membranes -- Application of low cost ceramic MF and UF membrane for cuttlefish effluent treatment -- Pharmaceutical wastewater treatment utilizing nanoparticle coated UF membranes over clay alumina support.
Sommario/riassunto	This book reviews the status of developing tailor-made low-cost

membranes and membrane-based separation processes for applications in wastewater treatment. It also presents an overview of industry-specific case studies upholding the waste-to-resource strategy for utilization of low-cost ceramic membranes in industrial wastewater treatment. This book highlights methods, results, and examples demonstrating that low-cost ceramic membranes possess similar features and advantages comparable to the commercially available ceramic membranes, thereby minimizing the prohibitive cost of their usage in wastewater treatment. Thus, the readers who are looking for more economical alternatives for wastewater treatment can be introduced with the cheaper membrane materials. It also discusses the selection and method of application of such membranes in the treatment processes. This book can serve as a valuable reference for researchers and professionals interested in wastewater treatment and allied fields.

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