

Sustainable Membrane Technology for Energy, Water, and Environment - 352 pages - Ahmad Fauzi Ismail, Takeshi Matsuura - Wiley, 2012 - 2012 - 9781118190173

A collection of twenty-seven groundbreaking papers on important ideas about the development of membrane science and technology, *Sustainable Membrane Technology for Energy, Water, and Environment* brings together contributions from leading international experts in one comprehensive volume. Divided into six chapters that cover new membrane materials and membrane development; membrane applications for gas and vapor separation; membrane applications in water treatment; environmental applications of membranes; energy applications of membranes; and other industrial membrane applications, the book looks at the current and emerging applications for membrane science and technology in detail. *Chemical Engineering, Books. Advanced Membrane Science and Technology for Sustainable Energy and Environmental Applications. Back to search results. COVID-19 Update: We are currently shipping orders daily.* Part four covers membranes for alternative energy applications and energy storage, such as membrane technology for redox and lithium batteries, fuel cells and hydrogen production. Finally, part five discusses membranes utilisation in industrial and environmental applications, including microfiltration, ultrafiltration, and forward osmosis, as well as water, wastewater and nuclear power applications. Special Issue "Membrane Technology: Sustainable and Revolutionary Solutions for Energy, Water, and Environment". Print Special Issue Flyer. Special Issue Editors. Water, wastewater, and air decontamination are topics of great interest today, due to the adverse effects on the environment, human health and economy. Problems of insufficient clean portable water, the presence of different priorities and emerging contaminants, and the need for separation and recovery valuable trace materials are other factors that add up to the importance of developing advanced separation and treatment technologies.