

1. Record Nr.	UNINA9910220016603321
Autore	Enrico Drioli (Ed.)
Titolo	Membrane Distillation
Pubbl/distr/stampa	MDPI - Multidisciplinary Digital Publishing Institute, 2017
ISBN	3-03842-460-9
Descrizione fisica	1 electronic resource (VI, 126 p.)
Disciplina	660.28424
Soggetti	Membrane distillation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	<p>Membrane distillation (MD) is a relatively new thermal membrane process which is attracting significant interest as a potential low cost and energy saving alternative to conventional separation processes such as distillation and reverse osmosis (RO). Its main advantages are the possibility to exploit waste grade heat and low grade heat for operation, and the production of high-purity distillate which is almost independent of feed concentration. Other benefits include the theoretically complete rejection of non-volatile solutes, the relative operating pressure and membrane-fouling problem. On the contrary, wetting and temperature polarization are its main drawbacks. The Special Issue covers developments at various forefronts of MD, including membrane preparation, fouling and scaling issues, process improvements and applications.</p>