1. Record Nr. UNIPARTHENOPE000021628

Autore	Born, Max <1882-1970>
Titolo	Principles of optics : electromagnetic theory of propagation, interference and diffraction of light / by Max Born and Emil Wolf ; with contributions by A. B. Bhatia ... [et al.]
Pubbl/distr/stampa	Oxford [etc.] : Pergamon, 1965
Titolo uniforme	Principles of optics
Edizione	[3rd rev. ed]
Descrizione fisica	XXVIII, 808 p., [16] c. di tav. : ill. ; 25 cm
Altri autori (Persone)	Wolf, Emil
Disciplina	535
Collocazione	G 535/4
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNISOBSOBE00040043

Titolo	2: De la Révolution à la Grande Guerre / volume dirigé par Alain Corbin...[et al.]
Pubbl/distr/stampa	Paris : Éd. du Seuil, 2005
Descrizione fisica	442 p. ; 26 cm
Lingua di pubblicazione	Francese
Formato	Materiale a stampa
Livello bibliografico	Monografia

3. Record Nr. UNINA9911020137203321

Titolo	Membrane technology in the chemical industry / / edited by Suzana Pereira Nunes and Klaus-Vktor Peinemann
Pubbl/distr/stampa	Weinheim, : Wiley-VCH, 2006
ISBN	9786610722860 9781280722868 128072286X 9783527608782 3527608788 9783527608591 3527608591
Edizione	[2nd Rev. and extended ed.]
Descrizione fisica	1 online resource (356 p.)
Altri autori (Persone)	NunesS. P (Suzana Pereira) PeinemannK. V (Klaus-Viktor)
Disciplina	660.28424
Soggetti	Membrane filters Membrane separation
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
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Nota di contenuto	Membrane Technology; Contents; Preface; List of Contributors; Part I

Membrane Materials and Membrane Preparation; 1 Introduction; 2 Membrane Market; 3 Membrane Preparation; 3.1 Phase Inversion; 4 Presently Available Membranes for Liquid Separation; 4.1 Membranes for Reverse Osmosis; 4.2 Membranes for Nanofiltration; 4.2.1 Solvent-resistant Membranes for Nanofiltration; 4.2.2 NF Membranes Stable in Extreme pH Conditions; 4.3 Membranes for Ultrafiltration; 4.3.1 Polysulfone and Polyethersulfone; 4.3.2 Poly(vinylidene fluoride); 4.3.3 Polyetherimide; 4.3.4 Polyacrylonitrile; 4.3.5 Cellulose
4.3.6 Solvent-resistant Membranes for Ultrafiltration4.4 Membranes for Microfiltration; 4.4.1 Polypropylene and Polyethylene; 4.4.2 Poly (tetrafluorethylene); 4.4.3 Polycarbonate and Poly(ethylene terephthalate); 5 Surface Modification of Membranes; 5.1 Chemical Oxidation; 5.2 Plasma Treatment; 5.3 Classical Organic Reactions; 5.4 Polymer Grafting; 6 Membranes for Fuel Cells; 6.1 Perfluorinated Membranes; 6.2 Nonfluorinated Membranes; 6.3 Polymer Membranes for High Temperatures; 6.4 Organic-Inorganic Membranes for Fuel Cells; 7 Gas Separation with Membranes; 7.1 Introduction
7.2 Materials and Transport Mechanisms7.2.1 Organic Polymers; 7.2.2 Background; 7.2.3 Polymers for Commercial Gas-separation Membranes; 7.2.4 Ultrahigh Free Volume Polymers; 7.2.5 Inorganic Materials for Gas-separation Membranes; 7.2.6 Carbon Membranes; 7.2.7 Perovskite-type Oxide Membranes for Air Separation; 7.2.8 Mixed-matrix Membranes; 7.3 Basic Process Design; Acknowledgments; References; Part II Current Application and Perspectives; 1 The Separation of Organic Vapors from Gas Streams by Means of Membranes; Summary; 1.1 Introduction; 1.2 Historical Background
1.3 Membranes for Organic Vapor Separation1.3.1 Principles; 1.3.2 Selectivity; 1.3.3 Temperature and Pressure; 1.3.4 Membrane Modules; 1.4 Applications; 1.4.1 Design Criteria; 1.4.2 Off-gas and Process Gas Treatment; 1.4.2.1 Gasoline Vapor Recovery; 1.4.2.2 Polyolefin Production Processes; 1.5 Applications at the Threshold of Commercialization; 1.5.1 Emission Control at Petrol Stations; 1.5.2 Natural Gas Treatment; 1.5.3 Hydrogen/Hydrocarbon Separation; 1.6 Conclusions and Outlook; References; 2 Gas-separation Membrane Applications; 2.1 Introduction; 2.2 Membrane Application Development
2.2.1 Membrane Selection2.2.2 Membrane Form; 2.2.3 Membrane Module Geometry; 2.2.4 Compatible Sealing Materials; 2.2.5 Module Manufacture; 2.2.6 Pilot or Field Demonstration; 2.2.7 Process Design; 2.2.8 Membrane System; 2.2.9 Beta Site; 2.2.10 Cost/Performance; 2.3 Commercial Gas-separation Membrane Applications; 2.3.1 Hydrogen Separations; 2.3.2 Helium Separations; 2.3.3 Nitrogen Generation; 2.3.4 Acid Gas-Separations; 2.3.5 Gas Dehydration; 2.4 Developing Membrane Applications; 2.4.1 Oxygen and Oxygen-enriched Air; 2.4.2 Nitrogen Rejection from Natural Gas; 2.4.3 Nitrogen-enriched Air (NEA) References

Sommario/riassunto

Membrane Technology - a clean and energy saving alternative to traditional/conventional processes.Developed from a useful laboratory technique to a commercial separation technology, today it has widespread and rapidly expanding use in the chemical industry. It has established applications in areas such as hydrogen separation and recovery of organic vapors from process gas streams, and selective transport of organic solvents, and it is opening new perspectives for catalytic conversion in membrane reactors. Membrane technology provides a unique solution for industrial waste treatment and