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Nota di contenuto	Front matter -- Preface / Drioli, Enrico / Cassano, Alfredo -- Contents -- Author index -- 1. Membrane applications in agro-industry / Cuperus, F. Petrus / Franken, A.C.M. -- 2. Process intensification in integrated membrane processes / Lutze, Philip / Gani, Rafiqul -- 3. Integrated membrane operations in fruit juice processing / Cassano, Alfredo / Conidi, Carmela / Drioli, Enrico -- 4. Integrated membrane operations in citrus processing / Cassano, Alfredo / Jiao, Bining -- 5. Integrated membrane and conventional processes applied to milk processing / Mucchetti, Germano -- 6. Integrated membrane operations in whey processing / Gésan-Guiziou, Geneviève -- 7. Integrated membrane processes in winemaking / Rayess, Youssef El / Mietton-Peuchot, Martine -- 8. Membrane operations in the sugar and brewing industry / Lipnizki, Frank / Ruby-Figueroa, René -- 9. Processing of stevioside using membrane-based separation processes / Mondal, Sourav / De, Sirshendu -- 10. Production of value-added soy protein products by membrane-based operations / Mondor, Martin -- 11. Concentration of polyphenols by integrated membrane operations /

Tsibranska, Iren / Tylkowski, Bartosz -- 12. Valorization of food processing streams for obtaining extracts enriched in biologically active compounds / Brazinha, Carla / Crespo, Joao G. -- 13. Biocatalytic membrane reactors for the production of nutraceuticals / Giorno, Lidietta / Mazzei, Rosalinda / Piacentini, Emma -- 14. Membrane emulsification in integrated processes for innovative food / Charcosset, Catherine -- 15. Electrodialysis in integrated processes for food applications / Roux-de Balmann, Hélène -- Index

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Sommario/riassunto

This comprehensive reference work describes in an instructive manner the combination of different membrane operations such as enzyme membrane reactors (EMR's), microfiltration (MF), ultrafiltration (UF), reverse osmosis (RO), nanofiltration (NF) and osmotic distillation (OD) is studied in order to identify their synergistic effects on the optimization of processes in agro-food productions (fruit juices, wines, milk and vegetable beverages) and wastewater treatments within the process intensification strategy. The introduction to integrated membrane operations is followed by applications in the several industries of the food sector, such as valorization of food processing streams, biocatalytic membrane reactors, and membrane emulsification.

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