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| Descrizione fisica | 1 online resource (711 p.) : ill |
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| Soggetti | Food industry and trade - Technological innovations Food processing plants |
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| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | 1 - Physical properties of food materials -- 2 - Fluid flow -- 3 - Heat and mass transfer, basic principles -- 4 - Reaction kinetics -- 5 - Elements of process control -- 6 - Size reduction -- 7 - Mixing -- 8 - Filtration and expression -- 9 - Centrifugation -- 10 - Membrane processes -- 11 - Extraction -- 12 - Adsorption and ion exchange -- 13 - Distillation -- 14 - Crystallization and dissolution -- 15 - Extrusion -- 16 - Spoilage and preservation of foods -- 17 - Thermal processing -- 18 - Thermal processes, methods, and equipment -- 19 - Refrigeration - Chilling and freezing -- 20 - Refrigeration - Equipment and methods -- 21 - Evaporation -- 22 - Dehydration -- 23 - Freeze drying (lyophilization) and freeze concentration -- 24 - Frying, baking, and roasting -- 25 - Chemical preservation -- 26 - Ionizing irradiation and other nonthermal preservation processes -- 27 - Food packaging -- 28 - Cleaning, disinfection, and sanitation -- 29 - Elements of food plant design -- Appendix -- Index. |
| Sommario/riassunto | Food Process Engineering and Technology, third edition combines scientific depth with practical usefulness, creating a tool for graduate students and practicing food engineers, technologists and researchers looking for the latest information on transformation and preservation processes and process control and plant hygiene topics. This fully updated edition provides recent research and developments in the area, |

features sections on elements of food plant design, an introductory section on the elements of classical fluid mechanics, a section on non-thermal processes, and recent technologies, such as freeze concentration, osmotic dehydration, and active packaging that are discussed in detail.
