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Descrizione fisica	1 online resource (xxxi, 591 pages) : illustrations (some color)
Collana	Isotopes in organic chemistry
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. A Brief History of Process Intensification; 2. Process Intensification - An Overview; 3. The Mechanisms Involved in Process Intensification; 4. Compact and Micro-heat Exchangers; 5. Reactors; 6. Intensification of Separation Processes; 7. Intensified Mixing; 8. Application Areas - Petrochemicals and Fine Chemicals; 9. Application Areas - Offshore Processing; 10. Application Areas - Miscellaneous Process Industries; 11. Application Areas - the Built Environment, Electronics, and the Home; 12. Specifying, Manufacturing and Operating PI Plant; Appendix 1 - Abbreviations Used; Appendix 2 - Nomenclature; Appendix 3 - Equipment Suppliers; Appendix 4 - R&D Organisations, Consultants and Miscellaneous Groups Active in PI; Appendix 5 - A Selection of Other Useful Contact Points, Including Networks and Websites; Index.
Sommario/riassunto	Process Intensification: Engineering for Efficiency, Sustainability and Flexibility is the first book to provide a practical working guide to understanding process intensification (PI) and developing successful PI solutions and applications in chemical process, civil, environmental, energy, pharmaceutical, biological, and biochemical systems. Process intensification is a chemical and process design approach that leads to substantially smaller, cleaner, safer, and more energy efficient process technology. It improves process flexibility, product quality, speed to market and inherent safety, with a reduced environmental footprint. This book represents a valuable resource for engineers working with

leading-edge process technologies, and those involved research and development of chemical, process, environmental, pharmaceutical, and bioscience systems.