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Nota di contenuto	Chapter 1 A Brief History of Process Intensification; Chapter 2 Process Intensification - An Overview; Chapter 3 The Mechanisms involved in Process Intensification; Chapter 4 Compact and Micro-Heat Exchangers; Chapter 5 Reactors; Chapter 6 Intensification of Separation Processes; Chapter 7 Intensified Mixing; Chapter 8 Application Areas - Petrochemicals and Fine Chemicals; Chapter 9 Application Areas - Offshore Processing; Chapter 10 Application Areas - Miscellaneous Process Industries; Chapter 11 Application Areas - The Built Environment, Electronics and the Home; Chapter 12 Specifying, Manufacturing and Operating PI Plant; Appendices; Index.
Sommario/riassunto	Process intensification (PI) is a chemical and process design approach that leads to substantially smaller, cleaner, safer and more energy-efficient process technology. A hot topic across the chemical and process industries, this is the first book to provide a practical working guide to understanding and developing successful PI solutions that deliver savings and efficiencies. It will appeal to engineers working with leading-edge process technologies and those involved research and development of chemical, process, environmental, pharmaceutical, and

bioscience systems. Shows chemical and process engineers how to apply process intensification to their system, process or operation; A hard-working reference and user guide to the technology AND application of PI, covering fundamentals, industry applications, supplemented by a development and implementation guide; Leading author team, including Professor Colin Ramshaw, developer of the HiGee high-gravity distillation process at ICI, widely credited as the instigator of PI principles.