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Nota di contenuto	Front Cover; Contents; List of Figures; List of Tables; Preface to the First Edition; Preface to the Second Edition; Acknowledgments; Editor; Contributors; Chapter 1 - Introduction; Chapter 2 - Fundamentals; Chapter 3 - Oxygen Production; Chapter 4 - Noncryogenic Oxygen Production; Chapter 5 - Potential Hybrid Methods for Oxygen Production; Chapter 6 - Safety Overview; Chapter 7 - Cleaning for Oxygen Systems; Chapter 8 - Fuels; Chapter 9 - Fluid Flow; Chapter 10 - Heat Transfer; Chapter 11 - Noise; Chapter 12 - Flame Impingement; Chapter 13 - Pollutant Emissions Chapter 14 - CFD Modeling of Oxygen-Enhanced CombustionChapter 15 - Soot Formation in Oxygen-Enhanced Combustion; Chapter 16 - Laser Diagnostics for Oxygen-Enhanced Combustion; Chapter 17 - Equipment Design; Chapter 18 - Burner Design; Chapter 19 - Oxyfuel and Oxygen-Enhanced Burner Testing; Chapter 20 - Flameless Oxyfuel Combustion and Its Applications; Chapter 21 - Iron Production; Chapter 22 - Ferrous Metals; Chapter 23 - Nonferrous Metals; Chapter 24 - Glass; Chapter 25 - Oxygen Combustion in Cement Production; Chapter 26 - Thermal Oxidation Chapter 27 - Coal-Fired Oxy-Fuel Technology for Carbon Capture and StorageChapter 28 - Oxy-Fuel Fluidized Bed Combustion; Chapter 29 - Oxygen Enrichment in Sulfur Recovery; Chapter 30 - Diesel Engines; Appendix; Back Cover

## Sommario/riassunto

Combustion technology has traditionally been dominated by air/fuel combustion. However, two developments have increased the significance of oxygen-enhanced combustion-new technologies that produce oxygen less expensively and the increased importance of environmental regulations. Advantages of oxygen-enhanced combustion include less pollutant emissions as well as increased energy efficiency and productivity. Oxygen-Enhanced Combustion, Second Edition compiles information about using oxygen to enhance industrial heating and melting processes. It integrates fundamental principles, applications, a

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