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5.3 Major results of the investigation5.4 Concluding remarks; Chapter 6. Impinging Stream Drying; 6.1 Introduction; 6.2 Earlier research and development; 6.3 Circulative impinging stream drying; 6.4 Concluding remarks; Chapter 7. Impinging Stream Absorption; 7.1 Adaptability of impinging streams for gas-liquid reaction systems; 7.2 Earlier investigations; 7.3 Wet desulfurization of flue gas (I) General considerations; 7.4 Wet desulfurization of flue gas (II) Investigations in Israel; 7.5 Wet desulfurization of flue gas (III) Investigations in China 7.6 Design of a device for large gas flow ratesChapter 8. Impinging Streams Combustion and Grinding; 8.1 Models for particles and droplets combustion; 8.2 Intensification of combustion processes due to impinging streams; 8.3 Impinging stream combustors; 8.4 Impinging stream grinding; Part II: Liquid-Continuous Impinging Streams; Chapter 9. Differences Between Properties of Continuous Phases and Classification of Impinging Streams; 9.1 Progress of investigation on liquid-continuous impinging streams
9.2 Differences between properties of continuous phases and their influences on the performance of impinging streams

Sommario/riassunto

The original idea of IS is to send two solid-gas streams to impinge against each other at high velocity, enhancing transfer between phases. IS is classified into two kinds: Gas-continuous impinging streams (GIS) and Liquid-continuous ones (LIS). Impinging Streams describes fundamentals, major properties and application of IS, as a category of novel technologies in chemical engineering. Because of the universality of transfer phenomena, it is receiving widespread attention. This book represents the first book in this area for over 10 years and covers achievements and technologies.<br