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Sommario/riassunto

Based on courses taught by the authors, this advanced textbook discusses opportunities for achieving larger-scale reactions in a technically controllable, sustainable, cost-effective and safe manner. Adopting a practical approach, it describes how miniaturized devices are used successfully for process intensification, focusing on the engineering aspects of microstructured devices, such as their design and characterization for homogeneous and multiphase reactions. It addresses the conditions under which microstructured devices are beneficial, how they should be designed, and how such devices c