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Sommario/riassunto

Providing a clear and systematic description of droplets and spray dynamic models, this book maximises reader insight into the underlying physics of the processes involved, outlines the development of new physical and mathematical models, and broadens understanding of interactions between the complex physical processes which take place in sprays. Complementing approaches based on the direct application of computational fluid dynamics (CFD), Droplets and Sprays treats both theoretical and practical aspects of internal combustion engine process such as the direct injection of liquid fuel, subcritical heating and evaporation. Includes case studies that illustrate the approaches relevance to automotive applications, it is also anticipated that the described models can find use in other areas such as in medicine and environmental science.