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Sommario/riassunto

"This book aims to give the reader the theoretical and numerical tools to understand, explain, calculate and predict the often non intuitive, observed behaviour of droplets in microsystems. After a chapter dedicated to the general theory of wetting, the book successively. Presents the theory of 3D liquid interfaces, gives the formulas for volume and surface of sessile and pancake droplets, analyses the behaviour of sessile droplets, analyses the behaviour of droplets between tapered plates and in wedges, presents the behaviour of droplets in microchannels investigates the effect of capillarity with the analysis of capillary rise, treats the onset of spontaneous capillary flow in open microfluidic systems, analyses the interaction between droplets, like engulfment, presents the theory and application of electrowetting"--