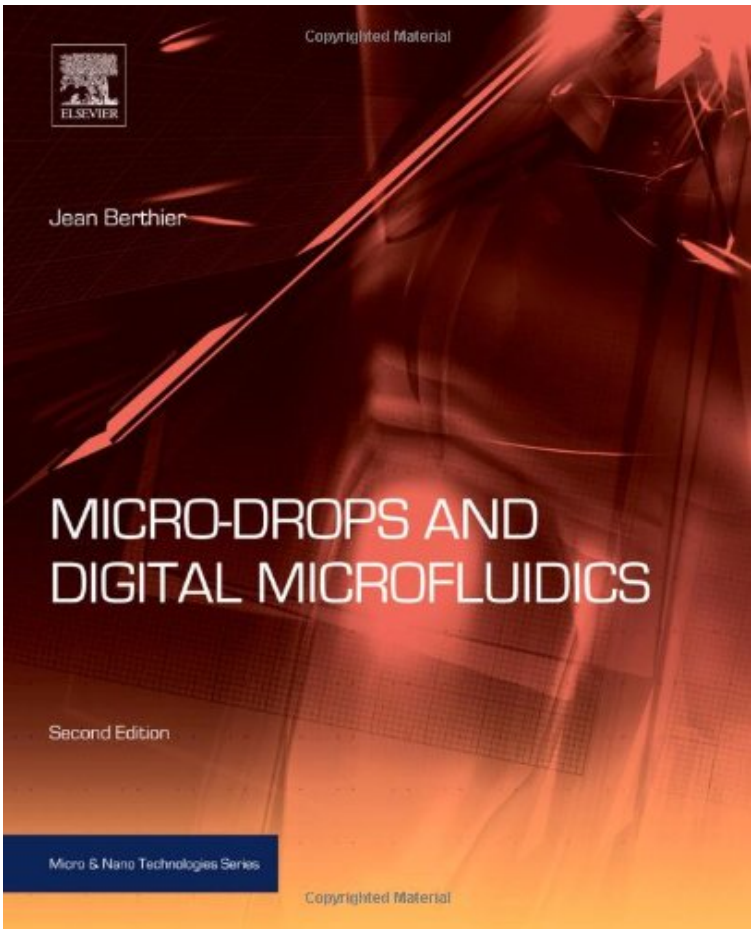
Micro-Drops and Digital Microfluidics, Second Edition (Micro and Nano Technologies)

Jean Berthier
*ePub | *DOC | audiobook | ebooks | Download PDF*



#3549263 in Books William Andrew 2013-01-02Original language:EnglishPDF # 1 9.50 x 1.30 x 7.40l, .0 #File Name: 1455725501560 pages | File size: 36.Mb

Jean Berthier : Micro-Drops and Digital Microfluidics, Second Edition (Micro and Nano Technologies) before purchasing it in order to gage whether or not it would be worth my time, and all praised Micro-Drops and Digital Microfluidics, Second Edition (Micro and Nano Technologies):

0 of 0 people found the following review helpful. GreatBy yyGreat Book. For people who interested in Superhydrophobicity area.

In this 2nd edition of Micro-Drops and Digital Microfluidics, Jean Berthier explores the fundamentals and applications of digital microfluidics, enabling engineers and scientists to design this important enabling technology into devices and harness the considerable potential of digital microfluidics in testing and data collection. This book describes the most recent developments in digital microfluidics, with a specific focus on the computational, theoretical and

experimental study of microdrops. Unique in its emphasis on digital microfluidics and with diverse applications ranging from drug delivery to point-of-care diagnostic chips, organic synthesis to microreactors, Micro-Drops and Digital Microfluidics meets the needs of audiences across the fields of bioengineering and biotechnology, and electrical and chemical engineering.Authoritative reporting on the latest changes in microfluidic science, where microscopic liquid volumes are handled as ""microdrops"" and separately from ""nanodrops."A methodical examination of how liquid microdrops behave in the complex geometries of modern miniaturized systems and interact with different morphological (micro-fabricated, textured) solid substratesA thorough explanation of how capillary forces act on liquid interfaces in contact with micro-fabricated surfacesAnalysis of how droplets can be manipulated, handled, or transported using electric fields (electrowetting), acoustic actuation (surface acoustic waves), or by a carrier liquid (microflow)A fresh perspective on the future of microfluidics