DESCRIPTION

The first book offering a global overview of fundamental microfluidics and the wide range of possible applications, for example, in chemistry, biology, and biomedical science.

As such, it summarizes recent progress in microfluidics, including its origin and development, the theoretical fundamentals, and fabrication techniques for microfluidic devices. The book also comprehensively covers the fluid mechanics, physics and chemistry as well as applications in such different fields as detection and synthesis of inorganic and organic materials.

A useful reference for non-specialists and a basic guideline for research scientists and technicians already active in this field or intending to work in microfluidics.

ABOUT THE AUTHOR

Yujun Song is a professor in School of Mathematics and Physics at USTB in Beijing, China, focusing on synthesis, interface structure control and application of metal-based nanohybrids using microfluidic process and template-assisted growth process. Having obtained his PhD degrees in Materials Science and Engineering from Beijing University of Chemical Technology, he spent 5 years at Louisiana State University in microfluidics and bio-nanotechnology, 2 years working at Old Dominion University in surface plasmon resonance and biotechnology, 7 years working at Beihang University in microfluidic synthesis and template-
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