



# **Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science)**

*Shizhi Qian, Ye Ai*

Download now

[Click here](#) if your download doesn't start automatically

# Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science)

Shizhi Qian, Ye Ai

**Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science)** Shizhi Qian, Ye Ai

Numerous applications of micro-/nanofluidics are related to particle transport in micro-/nanoscale channels, and electrokinetics has proved to be one of the most promising tools to manipulate particles in micro-/nanofluidics. Therefore, a comprehensive understanding of electrokinetic particle transport in micro-/nanoscale channels is crucial to the development of micro-/nanofluidic devices.

**Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis** provides a fundamental understanding of electrokinetic particle transport in micro-/nanofluidics involving electrophoresis, dielectrophoresis, electroosmosis, and induced-charge electroosmosis. The book emphasizes the direct numerical simulation of electrokinetic particle transport phenomena, plus several supportive experimental studies. Using the commercial finite element package *COMSOL Multiphysics*<sup>®</sup>, it guides researchers on how to predict the particle transport subjected to electric fields in micro-/nanoscale channels.

Researchers in the micro-/nanofluidics community, who may have limited experience in writing their own codes for numerical simulations, can extend the numerical models and codes presented in this book to their own research and guide the development of real micro-/nanofluidics devices.

*Corresponding COMSOL<sup>®</sup> script files are provided with the book and can be downloaded from the author's website.*

 [Download Electrokinetic Particle Transport in Micro-/Nanofl ...pdf](#)

 [Read Online Electrokinetic Particle Transport in Micro-/Nano ...pdf](#)

## **Download and Read Free Online Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) Shizhi Qian, Ye Ai**

---

### **From reader reviews:**

#### **Donna Clark:**

The book Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) can give more knowledge and information about everything you want. Why must we leave a good thing like a book Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science)? Wide variety you have a different opinion about guide. But one aim this book can give many facts for us. It is absolutely correct. Right now, try to closer using your book. Knowledge or info that you take for that, it is possible to give for each other; it is possible to share all of these. Book Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) has simple shape however, you know: it has great and massive function for you. You can seem the enormous world by wide open and read a book. So it is very wonderful.

#### **Peter Zimmerman:**

Information is provisions for people to get better life, information currently can get by anyone with everywhere. The information can be a knowledge or any news even restricted. What people must be consider when those information which is in the former life are challenging to be find than now could be taking seriously which one is suitable to believe or which one typically the resource are convinced. If you find the unstable resource then you understand it as your main information you will have huge disadvantage for you. All those possibilities will not happen in you if you take Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) as your daily resource information.

#### **Margaret Cardwell:**

Do you like reading a reserve? Confuse to looking for your best book? Or your book was rare? Why so many issue for the book? But virtually any people feel that they enjoy regarding reading. Some people likes studying, not only science book and also novel and Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) or perhaps others sources were given understanding for you. After you know how the truly amazing a book, you feel wish to read more and more. Science e-book was created for teacher as well as students especially. Those publications are helping them to put their knowledge. In other case, beside science e-book, any other book likes Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) to make your spare time much more colorful. Many types of book like this one.

#### **Anna Humphrey:**

What is your hobby? Have you heard this question when you got scholars? We believe that that issue was given by teacher for their students. Many kinds of hobby, All people has different hobby. And you also know that little person such as reading or as reading become their hobby. You need to understand that reading is

very important in addition to book as to be the matter. Book is important thing to increase you knowledge, except your teacher or lecturer. You see good news or update regarding something by book. A substantial number of sorts of books that can you go onto be your object. One of them is niagra Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science).

**Download and Read Online Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) Shizhi Qian, Ye Ai #5W7I6GAZFDR**

## **Read Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai for online ebook**

Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai books to read online.

## **Online Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai ebook PDF download**

**Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai Doc**

**Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai Mobipocket**

**Electrokinetic Particle Transport in Micro-/Nanofluidics: Direct Numerical Simulation Analysis: 153 (Surfactant Science) by Shizhi Qian, Ye Ai EPub**