

## Table of Contents

- List of Contributors p. vii
- 1 Intersections between micro/nano technologies and biological sciences Chih-Ming Ho p. 1
- 2 Micro/nanofluidic processes Patrick Tabeling and Yi-Kuen Lee p. 33
- 3 Numerical simulation of microflows and nanoflows Narayan R. Aluru and George Em Karniadakis p. 53
- 4 Pressure-driven microfluidics Scott Miserendino and Yu-Chong Tai p. 121
- 5 Electrokinetics of particles and fluids Hywel Morgan and Nicolas G. Green and Tao Sun p. 196
- 6 EWOD droplet microfluidic devices using printed circuit board fabrication Chang-Jin 'CJ' Kim and Jian Gong p. 232
- 7 Micro particle velocimetry Carl D. Meinhart and Steven T. Wereley p. 266
- 8 Near-field optical and plasmonic imaging Yuan Wang and Xiang Zhang p. 298
- 9 Optoelectronic tweezers Eric P. Y. Chiou and Ming C. Wu p. 317
- 10 Nanobiosensors Tza-Huei Wang and Kelvin Liu and Hsin-Chih Yeh and Christopher M. Puleo p. 346
- 11 Surface molecular property control Robin L. Garrell and Heather D. Maynard p. 395
- Index p. 437