

Wan-Li Xing Jing Cheng (Eds.)

Biochips

Technology and Applications

With 50 Figures



Springer

Contents

Oligonucleotide Array Technologies for Gene Expression Profiling	1
<i>Dorris D., Liu C.-C., Ramakrishnan R., Shippy R., Singh-Gasson S., Lublinsky A., Toutna E., Domanus M., Allegri L., Fei H., and Mazumder A.</i>	
Medical Therapy: The Next Frontier of Biochip and Biomedical Nanotechnology	11
<i>Ferrari M., Friend D., Hansford D., Kulkarni S. S., Martin F.</i>	
Photobonding of Biomolecules for Biochip Manufacturing	35
<i>Gao H., Juvet M., Karlen Y., Menotti E. and Sigrist H.</i>	
Opportunities and Obstacles to the Routine Implementation of Microchips . . .	45
<i>Kricka L. J. and Wilding P.</i>	
DNA Microarray Analysis of Gene Expression Profiles in Hepatocellular Carcinoma	51
<i>Li Y., Dai J. L., Xie Y., Mao Y. M., Qiu M. Y., Cao X. Q., Fu W., Ying K., Xu H. and Huang S. D.</i>	
DNA Hybridization Detection by Electrochemical Impedance Spectroscopy and Photoelectrochemistry	61
<i>Li Q.-W., Luo G.-A., Feng J., Cai D. W. and Ouyang Q.</i>	
Data Mining: An Integrated Approach for Drug Discovery	71
<i>Shi L M. and Tong W. D.</i>	
Protein Array Detection with Nanoparticle Fluorescent Probes by Laser Confocal Scanning Fluorescence Detection	91
<i>Sun B.-Q., Yi G.-Sh., Xing W.-L, Chen D.-P., Zhou Y.-X., Cheng J.</i>	
Trends in Microfluidic Devices for Analytical Chemistry	101
<i>Zhang C. X. and ManzA.</i>	