

Contents

Electroporation in Biological Cell and Tissue: An Overview	1
Maša Kandušer and Damijan Miklavčič	
Pulsed-Electric-Fields-Induced Effects in Plant Tissues: Fundamental Aspects and Perspectives of Applications	39
Eugène Vorobiev and Nikolai Lebovka	
Moderate Electrothermal Treatments of Cellular Tissues	83
Suzanne Kulshrestha, Sanjay Sarang, Laleh Loghavi, and Sudhir Sastry	
DC Electrical Field Effects on Plant Tissues and Gels	95
Amos Nussinovitch and Ronit Zvitov	
Electro-Osmotic Dewatering (EOD) of Bio-Materials	121
Arun S. Mujumdar and Hiroshi Yoshida	
Electrofiltration of Biomaterials	155
R. Hofmann, T. K��ppler, and C. Posten	
Food Industry Applications for Pulsed Electric Fields	181
Henry Jaeger, Ana Balasa, and Dietrich Knorr	
Application of High-Voltage Electrical Discharges for the Aqueous Extraction from Oilseeds and Other Plants	217
C��cile Gr��my-Gros, Jean-Louis Lanoisell��, and Eug��ne Vorobiev	
Industrial-Scale Treatment of Biological Tissues with Pulsed Electric Fields	237
H. Bluhm and M. Sack	
Index	271