
Contents

Preface	v
Contributors	ix
1 Surfactant-Based Methods for Prevention of Protein Adsorption in Capillary Electrophoresis Charles A. Lucy, Nicole E. Baryla, and Ken K.-C. Yeung.....	1
2 Capillary Coating for Protein Separation Based on Si-O and Si-C Covalent Bond Formation for Capillary Electrophoresis With Laser-Induced Fluorescence Detection Hossein Ahmadzadeh, Norman J. Dovichi, and Sergey Krylov	15
3 On-Column Labeling Reaction for Analysis of Protein Contents of a Single Cell Using Capillary Electrophoresis With Laser-Induced Fluorescence Detection Hossein Ahmadzadeh and Sergey Krylov	29
4 Covalent and Noncovalent Labeling Schemes for Near-Infrared Dyes in Capillary Electrophoresis Protein Applications John Sowell, Jozef Salon, Lucjan Strekowski, and Gabor Patonay	39
5 Capillary Electrophoresis in the Analysis and Monitoring of Biotechnological Processes Vadim Klyushnichenko	77
6 Capillary Electrophoresis of Proteins in a Quality Control Environment David L. Good, Stacey Cummins-Bitz, Raeann M. Fields, and Brian K. Nunnally.....	121
7 Analysis of Neutral N-Linked Oligosaccharides From Antibodies Using Free-Solution Capillary Electrophoresis in Bare Fused-Silica Capillaries Jeffrey S. Patrick, Brenda P. Rener, Gregory S. Clanton, and Avinash L. Lagu	137
8 Affinity Capillary Electrophoresis to Examine Receptor–Ligand Interactions Maryam Azad, John Kaddis, Valerie Villareal, Lili Hernandez, Catherine Silverio, and Frank A. Gomez	153

9	Screening Major Binding Sites on Human Serum Albumin by Affinity Capillary Electrophoresis Hee Seung Kim, John Austin, and David S. Hage	169
10	Using Charge Ladders and Capillary Electrophoresis to Measure the Charge, Size, and Electrostatic Interactions of Proteins Upma Sharma and Jeffrey D. Carbeck	189
11	Frontal Analysis Continuous Capillary Electrophoresis for Protein–Polyelectrolyte Binding Studies Emek Seyrek, Toshiaki Hattori, and Paul L. Dubin	217
12	Analysis of Proteins by CE, CIEF, and Microfluidic Devices With Whole-Column-Imaging Detection Jiaqi Wu, Xing-Zheng Wu, Tiemin Huang, and Janusz Pawliszyn	229
13	Capillary Electrophoresis–Electrospray Ionization Mass Spectrometry of Amino Acids, Peptides, and Proteins Mehdi Moini	253
14	Capillary Isoelectric Focusing–Mass Spectrometry of Proteins and Protein Complexes Suzana Martinović, Ljiljana Paša-Tolić, and Richard D. Smith	291
15	Integrated System for Rapid Proteomics Analyses Using Microfluidic Devices Coupled to Nanoelectrospray Mass Spectrometry Jianjun Li, Tammy-Lynn Tremblay, Jed Harrison, and Pierre Thibault	305
	Index	325



<http://www.springer.com/978-1-58829-017-5>

Capillary Electrophoresis of Proteins and Peptides

Strege, M.A.; Lagu, A.L. (Eds.)

2004, XI, 332 p., Hardcover

ISBN: 978-1-58829-017-5

A product of Humana Press