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Nota di contenuto	Affinity Chromatography: A Historical -- Protein Purification by Aminosquarylium Cyanine-Affinity Chromatography -- One Step Purification of Phosphinothricin Acetyltransferase using Reactive Dye Affinity Chromatography -- Antibody Purification from Human Plasma by Metal-Chelated Affinity Membranes -- Specific Recognition of Supercoiled Plasmid DNA by Affinity Chromatography using a Synthetic Aromatic Ligand -- Cell Affinity Separations on Microfluidic Devices -- Aptamer-modified :Magnetic Beads in Affinity Separation of Proteins -- The Strep-tag System for One-step Purification and High Affinity Detection or Capturing of Proteins -- Robotic High-throughput Purification of Affinity-tagged Recombinant Proteins -- Macroporous Silica Particles Derivatized for Enhanced Lectin Affinity Enrichment of Glycoproteins -- Immobilized Magnetic Beads based Multi-Target Affinity Selection Coupled with HPLC-MS for Screening Active Compounds from Traditional Chinese Medicine and Natural Products -- Mixed-bed Affinity Chromatography: Principles And Methods -- Preparation and characterization of fluorophenylboronic acid-functionalized Affinity Monolithic Columns for the Selective Enrichment of Cis-diol-containing Biomolecules -- Introduction to Macroporous Cryogels -- Cryogels with Affinity Ligands as Tools in Protein Purification -- Direct Capture of His6-tagged Proteins Using

Megaporous Cryogels Developed for Metal-ion Affinity Chromatography -- Ni(II) Chelated IDA Functionalized Poly(HEMA-GMA) Cryogels for Urease Adsorption -- A Novel Chromatographic Media: Histidine Containing Composite Cryogels for HIgG Separation from Human Serum -- Molecularly Imprinted Cryogels for Human Serum Albumin Depletion -- Interpenetrating Polymer Network Composite Cryogels with Tailored Porous Morphology and Sorption Properties -- Analysis of Drug-Protein Interactions by High-Performance Affinity Chromatography: Interactions of Sulfonylurea Drugs with Normal and Glycated Human Serum Albumin -- Accurateprotein-peptide Titration Experiments by Nuclear Magnetic Resonance using Low-volume Samples -- Characterization of the Binding Strengths between Boronic Acids and Cis-Diol-containing Biomolecules by Affinity Capillary Electrophoresis -- Determination of the Kinetic Rate Constant of Cyclodextrin Supramolecular Systems by High Performance Affinity Chromatography -- Molecular Modeling of the Affinity Chromatography of Monoclonal Antibodies.

Sommario/riassunto

The aim of this edition is to introduce the beginner to the basics of affinity chromatography and provide practical knowledge for the development of affinity separation protocols. Affinity Chromatography: Methods and Protocols, Third Edition guides readers through new state of the art protocols, molecular modelling, and the study of ligand-target interactions. Written in the successful Methods in Molecular Biology series format, chapters include introductions to their respective topics, lists of the necessary materials and reagents, step-by-step, readily reproducible protocols, and notes on troubleshooting and avoiding known pitfalls. Authoritative and easily accessible, Affinity Chromatography: Methods and Protocols, Third Edition is designed as a useful resource for those interested in the rapid and quantitative isolation of biomolecules with high purity.