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Affinity Capture using Active Site Binding Probes; Affinity Capture of Recombinant Fusion Proteins; Covalent Fusion Tag Technology; Scavenging of Contaminants or Unwanted Components; 3.4. Catalysis and Chemical Modification
Immobilized Proteases for Proteomic AnalysisImmobilized Reactors in Bioengineering; 3.5. Therapeutics and in vivo Diagnostics; Bioconjugates for Cancer Therapy; Antibody Targeting for Biotherapeutics; Polymeric Scaffolds and Nanoparticles for Biotherapeutic Conjugates; Antibody-Directed Enzyme Prodrug Therapy; Radiolabeled Bioconjugates for Cancer; Boron Neutron Capture Therapy; Photodynamic Therapy; Diagnostic Bioconjugates for In Vivo Imaging; Bioconjugates for Radio Imaging; Bioconjugates for High-Contrast Imaging; NIR Fluorescent Conjugates for In Vivo Imaging 3.6. Vaccines and Immune ModulationCancer Vaccines; Immunogen Conjugates in the Production of Antibodies; 4. Summary; 2. Functional Targets for Bioconjugation; 1. Modification of Amino Acids, Peptides, and Proteins; 1.1. Protein Structure and Reactivity; Amino Acids; Nucleophilic Reactions and the pI of Amino Acid Side Chains; Secondary, Tertiary, and Quaternary Structure; Prosthetic Groups, Cofactors, and Post-Translational Modifications; Protecting the Native Conformation and Activity of Proteins; Oxidation of Amino Acids in Proteins and Peptides
Solvent Accessibility of Functional Targets in Proteins

Sommario/riassunto

Bioconjugate Techniques, 3rd Edition, is the essential guide to the modification and cross linking of biomolecules for use in research, diagnostics, and therapeutics. It provides highly detailed information on the chemistry, reagent systems, and practical applications for creating labeled or conjugate molecules. It also describes dozens of reactions, with details on hundreds of commercially available reagents and the use of these reagents for modifying or crosslinking peptides and proteins, sugars and polysaccharides, nucleic acids and oligonucleotides, lipids, and synthetic polymers.<b