Site-directed antibody immobilization techniques for immun

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#	Paper	IF	Citations
237	Designing polymer-based immunosensing platforms for cancer biomarker detection. **2013**,		
236	Fundamentals and Applications of Impedimetric and Redox Capacitive Biosensors. **2014**, S7,		34
235	Amino-functionalization of carbon nanotubes by using a factorial design: human cardiac troponin T immunosensing application. **2014**, 2014, 929786		20
234	Retroreflective imaging systems for enhanced optical biosensing. **2014**,		1
233	Retroreflective imaging system for optical labeling and detection of microorganisms. **2014**, 53, 3647-55		3
232	Useful oriented immobilization of antibodies on chimeric magnetic particles: direct correlation of biomacromolecule orientation with biological activity by AFM studies. **2014**, 30, 15022-30		11
231	A QCM-D Study of Reduced Antibody Fragments Immobilized on Planar Gold and Gold Nanoparticle Modified Sensor Surfaces. **2014**, 605, 340-343		4
230	Protein Microarrays with Novel Microfluidic Methods: Current Advances. **2014**, 3, 180-202		14
229	In situ study of ligandReceptor interaction by total internal reflection ellipsometry. **2014**, 571, 744-748		23
228	Digital multimeter-based immunosensing strategy for sensitive monitoring of biomarker by coupling an external capacitor with an enzymatic catalysis. *Biosensors and Bioelectronics*, **2014**, 55, 255-8	11.8	11
227	Fluorescent-free detection on nanobiochips based on wavelength-dependent single plasmonic nanoparticles by differential interference contrast microscopy. *Biosensors and Bioelectronics*, **2014**, 60, 45-51	11.8	10
226	Antibody fragment immobilization on planar gold and gold nanoparticle modified quartz crystal microbalance with dissipation sensor surfaces for immunosensor applications. *Analytical Methods*, **2014**, 6, 2134-2140	3.2	21
225	Immunosensor based on electrodeposition of gold-nanoparticles and ionic liquid composite for detection of Salmonella pullorum. **2014**, 106, 110-118		31
224	Detection of H3N2 canine influenza virus using a Quartz Crystal Microbalance. **2014**, 208, 16-20		9
223	Antibody nanosensors: a detailed review. **2014**, 4, 43725-43745		59
222	Capture and detection of DNA hybrids on paper via the anchoring of antibodies with fusions of carbohydrate binding modules and ZZ-domains. *Analytical Chemistry*, **2014**, 86, 4340-7	7.8	55
221	Bionanoconjugation for proteomics applications - An overview. **2014**, 32, 952-70		15

220	CD133 antibody conjugation to decellularized human heart valves intended for circulating cell capture. **2015**, 10, 055001		6
219	Sensors and Bioselective Reagents. **2015**,		0
218	An Optimized Bioassay for Mucin1 Detection in Serum Samples. **2015**, 27, 1594-1601		23
217	Enhanced detection of single-cell-secreted proteins using a fluorescent immunoassay on the protein-G-terminated glass substrate. **2015**, 10, 7197-205		5
216	Comparison of anti-HER2 antibody immobilization using three different techniques on aluminum-aluminum nitride-aluminum thin films produced by radiofrequency sputtering. **2015**, 67		
215	Detection of Intermolecular Interactions Based on Surface Plasmon Resonance Registration. **2015**, 80, 1820-32		11
214	Implications for the biofunctionalization of drug-eluting devices at the example of a site-selective antibody modification for drug eluting stents. **2015**, 16,		1
213	Site-specific fab fragment biotinylation at the conserved nucleotide binding site for enhanced Ebola detection. **2015**, 112, 1327-34		9
212	Radionanomedicine: widened perspectives of molecular theragnosis. **2015**, 11, 795-810		46
211	Gold nanoparticle-antibody conjugates for specific extraction and subsequent analysis by liquid chromatography-tandem mass spectrometry of malondialdehyde-modified low density lipoprotein as biomarker for cardiovascular risk. **2015**, 857, 53-63		33
210	Oligonucleotide aptamers: emerging affinity probes for bioanalytical mass spectrometry and biomarker discovery. *Analytical Methods*, **2015**, 7, 7416-7430	3.2	8
209	Electrochemical immunosensor for detection of epidermal growth factor reaching lower detection limit: toward oxidized glutathione as a more efficient blocking reagent for the antibody functionalized silver nanoparticles and antigen interaction. *Analytical Chemistry*, **2015**, 87, 8047-51	7.8	39
208	LASIC: Light Activated Site-Specific Conjugation of Native IgGs. **2015**, 26, 1456-60		39
207	Immobilization of immunoglobulin-G-binding domain of Protein A on a gold surface modified with biotin ligase. **2015**, 484, 113-21		16
206	Engineered self-assembling monolayers for label free detection of influenza nucleoprotein. **2015**, 17, 9951		12
205	Nanostructured and spiky gold in biomolecule detection: improving binding efficiencies and enhancing optical signals. **2015**, 5, 16461-16475		12
204	Lignin as immobilization matrix for HIV p17 peptide used in immunosensing. *Biosensors and Bioelectronics*, **2015**, 71, 420-426	11.8	15
203	Surface plasmon resonance-based immunoassay for human C-reactive protein. **2015**, 140, 4445-52		37

202	A novel assay for detecting canine parvovirus using a quartz crystal microbalance biosensor. **2015**, 219, 23-27		10
201	Development of a reusable protein G based SPR immunosensor for direct human growth hormone detection in real samples. *Analytical Methods*, **2015**, 7, 9875-9884	3.2	28
200	Oriented immobilization of antibody through carbodiimide reaction and controlling electric field. **2015**, 19, 3035-3043		9
199	Practical detection for simultaneous analysis of multiple antigens with Staphylococcal protein A as an intermediate. *Analytical Methods*, **2015**, 7, 9018-9025	3.2	2
198	Oriented Immobilization of Fab Fragments by Site-Specific Biotinylation at the Conserved Nucleotide Binding Site for Enhanced Antigen Detection. **2015**, 31, 9728-36		24
197	Key steps towards the oriented immobilization of antibodies using boronic acids. **2015**, 140, 6467-72		37
196	Fc-Binding Ligands of Immunoglobulin G: An Overview of High Affinity Proteins and Peptides. **2016**, 9,		108
195	Opto-Microfluidic Immunosensors: From Colorimetric to Plasmonic. **2016**, 7,		13
194	Surface functionalization allowing repetitive use of optical sensors for real-time detection of antibody-bacteria interaction. **2016**, 9, 730-7		6
193	Development of an immunosensor using oriented immobilized anti-OmpW for sensitive detection of Vibrio cholerae by surface plasmon resonance. *Biosensors and Bioelectronics*, **2016**, 86, 484-488	11.8	30
192	Adding Functions to Biomaterial Surfaces through Protein Incorporation. **2016**, 28, 5485-508		49
191	Comparison of antibody immobilization strategies in detection of Vibrio cholerae by surface plasmon resonance. **2016**, 11, 041006		11
190	Site-directed introduction of disulfide groups on antibodies for highly sensitive immunosensors. **2016**, 408, 5337-46		12
189	Biosensor-Based Technologies for the Detection of Pathogens and Toxins. **2016**, 74, 93-120		13
188	Detecting Alzheimer's disease biomarkers: From antibodies to new bio-mimetic receptors and their application to established and emerging bioanalytical platforms - A critical review. **2016**, 940, 21-37		36
187	Developing enhanced magnetoimmunosensors based on low-cost screen-printed electrode devices. **2016**, 35, 53-85		15
186	Antibody purification via affinity membrane chromatography method utilizing nucleotide binding site targeting with a small molecule. **2016**, 141, 6571-6582		3
185	Development and Biosensor Applications of Novel Functional Electrodes. **2016**, 136, 1585-1590		1

184	An integrated, peptide-based approach to site-specific protein immobilization for detection of biomolecular interactions. **2016**, 141, 5321-8		5
183	Antibody-based magneto-elastic biosensors: potential devices for detection of pathogens and associated toxins. **2016**, 100, 6149-6163		21
182	Advancing the global proteome survey platform by using an oriented single chain antibody fragment immobilization approach. **2016**, 33, 503-13		1
181	Considerations in producing preferentially reduced half-antibody fragments. **2016**, 429, 50-6		25
180	Impedance Biosensor Incorporating a Carboxylate-Terminated Bidentate Thiol for Antibody Immobilization. **2016**, 163, B125-B130		13
179	Electrochemical coding strategies using metallic nanoprobes for biosensing applications. **2016**, 79, 9-22		22
178	Antibody-targeted biodegradable nanoparticles for cancer therapy. **2016**, 11, 63-79		64
177	Immobilization strategy for enhancing sensitivity of immunosensors: L-Asparagine-AuNPs as a promising alternative of EDC-NHS activated citrate-AuNPs for antibody immobilization. *Biosensors and Bioelectronics*, **2016**, 78, 396-403	11.8	40
176	The robust bio-immobilization based on pulsed plasma polymerization of cyclopropylamine and glutaraldehyde coupling chemistry. *Applied Surface Science*, **2016**, 360, 28-36	6.7	22
175	The adhesion of normal human dermal fibroblasts to the cyclopropylamine plasma polymers studied by holographic microscopy. **2016**, 295, 70-77		29
174	Oriented immobilization of proteins on solid supports for use in biosensors and biochips: a review. **2016**, 183, 1-19		162
173	Sorption of his-tagged Protein G and Protein G onto chitosan/divalent metal ion sorbent used for detection of microcystin-LR. **2017**, 24, 15-24		16
172	Toward inline multiplex biodetection of metals, bacteria, and toxins in water networks: the COMBITOX project. **2017**, 24, 1-3		302
171	Highly robust and optimized conjugation of antibodies to nanoparticles using quantitatively validated protocols. **2017**, 9, 2548-2555		24
170	Surface Plasmon Resonance Investigations of Bioselective Element Based on the Recombinant Protein A for Immunoglobulin Detection. **2017**, 12, 112		8
169	Development of biohybrid immuno-selective membranes for target antigen recognition. *Biosensors and Bioelectronics*, **2017**, 92, 54-60	11.8	5
168	Immunosensor assembled on polymeric nanostructures for clinical diagnosis of C-reactive protein. **2017**, 133, 572-576		14
167	Influence of antibody immobilization strategies on the analytical performance of a magneto-elastic immunosensor for Staphylococcus aureus detection. **2017**, 76, 1232-1239		11

166	On/off-switchable LSPR nano-immunoassay for troponin-T. *Scientific Reports*, **2017**, 7, 44027	4.9	29
165	Site-specific antibody modification and immobilization on a microfluidic chip to promote the capture of circulating tumor cells and microemboli. **2017**, 53, 4152-4155		15
164	Orientation and characterization of immobilized antibodies for improved immunoassays (Review). **2017**, 12, 02D301		177
163	Three-Dimensional Ordered Antibody Arrays Through Self-Assembly of Antibody–Polymer Conjugates. **2017**, 129, 1293-1297		0
162	Three-Dimensional Ordered Antibody Arrays Through Self-Assembly of Antibody-Polymer Conjugates. **2017**, 56, 1273-1277		21
161	Chemical modification of antibodies enables the formation of stable antibody-gold nanoparticle conjugates for biosensing. **2017**, 142, 4456-4467		25
160	Synthesis, Assembly, and Applications of Hybrid Nanostructures for Biosensing. **2017**, 117, 12942-13038		191
159	Immunology-based Biosensors. **2017**, 251-268		
158	Strategies to develop endogenous stem cell-recruiting bioactive materials for tissue repair and regeneration. **2017**, 120, 50-70		87
157	Nominal effective immunoreaction volume of magnetic beads at single bead level. **2017**, 18, 845-853		3
156	Biosensors and their applications in detection of organophosphorus pesticides in the environment. **2017**, 91, 109-130		97
155	Translocation Pathway-Dependent Assembly of Streptavidin- and Antibody-Binding Filamentous Virus-Like Particles. *Small*, **2017**, 13, 1601693	11	2
154	An ultrasensitive amperometric immunosensor for zearalenones based on oriented antibody immobilization on a glassy carbon electrode modified with MWCNTs and AuPt nanoparticles. **2017**, 184, 147-153		59
153	Scaffolds for oriented and close-packed immobilization of immunoglobulins. *Biosensors and Bioelectronics*, **2017**, 89, 810-821	11.8	23
152	Site-selective orientated immobilization of antibodies and conjugates for immunodiagnostics development. **2017**, 116, 95-111		87
151	Introduction. **2017**, 1-30		6
150	Structure of the receptor layer in electrochemical immunosensors. Modern trends and prospects of development. **2017**, 66, 1797-1811		3
149	Oriented antibody immobilization on self-assembled monolayers applied as impedance biosensors. **2017**, 924, 012015		9

148	Disease-Related Detection with Electrochemical Biosensors: A Review. *Sensors*, **2017**, 17,	3.8	73
147	Interfacial nano-mixing in a miniaturised platform enables signal enhancement and in situ detection of cancer biomarkers. **2018**, 10, 10884-10890		15
146	Electrochemical immunoassay for the carcinoembryonic antigen based on the use of a glassy carbon electrode modified with an octahedral CuO-gold nanocomposite and staphylococcal protein for signal amplification. **2018**, 185, 266		14
145	Biomimetic Surface Engineering of Biomaterials by Using Recombinant Mussel Adhesive Proteins. **2018**, 5, 1800068		21
144	Quartz-crystal Microbalance Measurements of CD19 Antibody Immobilization on Gold Surface and Capturing B Lymphoblast Cells: Effect of Surface Functionalization. **2018**, 30, 834-841		7
143	Fluorescent Nanoprobes with Oriented Modified Antibodies to Improve Lateral Flow Immunoassay of Cardiac Troponin I. *Analytical Chemistry*, **2018**, 90, 6502-6508	7.8	69
142	A rapid magnetic particle-based enzyme immunoassay for human cytomegalovirus glycoprotein B quantification. *Journal of Pharmaceutical and Biomedical Analysis*, **2018**, 156, 372-378	3.5	6
141	Direct Measurement of a Biomarker's Native Optimal Frequency with Physical Adsorption Based Immobilization. **2018**, 3, 823-831		3
140	Comparative study on antibody immobilization strategies for efficient circulating tumor cell capture. **2018**, 13, 021001		1
139	CMOS Circuits for Biological Sensing and Processing. **2018**,		0
138	Implantable Microsystems for Personalised Anticancer Therapy. **2018**, 259-286		8
137	Magnetic solids in electrochemical analysis. **2018**, 98, 104-113		34
136	Orientation and density control of proteins on solid matters by outer membrane coating: Analytical and diagnostic applications. *Journal of Pharmaceutical and Biomedical Analysis*, **2018**, 147, 174-184	3.5	6
135	4. Nanofilms as Sensitive Layers of Chemical and Biochemical Sensors. **2018**, 107-130		
134	Facilitating Earlier Diagnosis of Cardiovascular Disease through Point-of-Care Biosensors: A Review. **2018**, 46, 53-82		7
133	Electrochemical Immunosensors for Disease Detection and Diagnosis. **2018**, 25, 4119-4137		13
132	Versatile nano-platform for tailored immuno-magnetic carriers. **2018**, 410, 7575-7589		4
131	Radiolabeling Method: Core/Surface Labeling, Chemical and Physical Labeling. **2018**, 209-227		2

130	Sensitivity Enhancement of Förster Resonance Energy Transfer Immunoassays by Multiple Antibody Conjugation on Quantum Dots. **2018**, 29, 2082-2089		22
129	Amine functional magnetic nanoparticles via waterborne thiol-ene suspension photopolymerization for antibody immobilization. **2018**, 170, 122-128		7
128	Single-wall carbon nanotube based electrochemical immunoassay for leukemia detection. **2018**, 557, 111-119		17
127	Temperature-regulated protein adsorption on a PNIPAm layer. **2018**, 14, 6521-6529		7
126	An impedimetric bioaffinity sensing chip integrated with the long-range DC-biased AC electrokinetic centripetal vortex produced in a high conductivity solution. **2018**, 12, 044102		1
125	Current Conjugation Methods for Immunosensors. *Nanomaterials*, **2018**, 8,	5.4	38
124	Ready-to-use protein G-conjugated gold nanorods for biosensing and biomedical applications. **2018**, 16, 5		15
123	Interfacial Biosensing: Direct Biosensing of Biomolecules at the Bare Metal Interface. **2018**, 269-277		3
122	Immuno-impedimetric Biosensor for Onsite Monitoring of Ascospores and Forecasting of Sclerotinia Stem Rot of Canola. *Scientific Reports*, **2018**, 8, 12396	4.9	11
121	Improved Ordering in Low Molecular Weight Protein-Polymer Conjugates Through Oligomerization of the Protein Block. **2018**, 19, 3814-3824		11
120	Homogeneous Entropy Catalytic-Driven DNA Hydrogel as Strong Signal Blocker for Highly Sensitive Electrochemical Detection of Platelet-Derived Growth Factor. *Analytical Chemistry*, **2018**, 90, 8241-8247	7.8	31
119	Construction of well-ordered electrochemiluminescence sensing interface using peptide-based specific antibody immobilizer and N-(aminobutyl)-N-(ethylisoluminol) functionalized ferritin as signal indicator for procalcitonin analysis. *Biosensors and Bioelectronics*, **2019**, 142, 111562	11.8	15
118	Application of antihelix antibodies in protein structure determination. **2019**, 116, 17786-17791		9
117	Dual-quenching electrochemiluminescence resonance energy transfer system from Ru-InS to MoO-Au based on protect of protein bioactivity for procalcitonin detection. *Biosensors and Bioelectronics*, **2019**, 142, 111524	11.8	14
116	Optimization of Microparticle Reagents to Collect and Detect Antibody. **2019**, 35, 11717-11724		3
115	Antibody-functionalised gold nanoparticles-based impedimetric immunosensor: detection methods for better sensitivity. **2019**, 14, 629-633		3
114	Highly-branched CuO as well-ordered co-reaction accelerator for amplifying electrochemiluminescence response of gold nanoclusters and procalcitonin analysis based on protein bioactivity maintenance. *Biosensors and Bioelectronics*, **2019**, 144, 111676	11.8	12
113	Photoclick chemistry to create dextran-based nucleic acid microarrays. **2019**, 411, 6745-6754		1

112	A new role for Notch in the control of polarity and asymmetric cell division of developing T cells. **2019**, 133,		9
111	Bioactivity-Protected Electrochemiluminescence Biosensor Using Gold Nanoclusters as the Low-Potential Luminophor and CuS Snowflake as Co-reaction Accelerator for Procalcitonin Analysis. **2019**, 4, 1909-1916		40
110	Current trends in the development of conducting polymers-based biosensors. **2019**, 118, 264-276		72
109	Ferritin-Based Electrochemiluminescence Nanosurface Energy Transfer System for Procalcitonin Detection Using HWRGWVC Heptapeptide for Site-Oriented Antibody Immobilization. *Analytical Chemistry*, **2019**, 91, 7145-7152	7.8	52
108	Preactivation Crosslinking—An Efficient Method for the Oriented Immobilization of Antibodies. **2019**, 2, 35		7
107	Fabrication of a polypropylene immunoassay platform by photografting reaction. **2019**, 102, 492-501		1
106	Comparative Assessment of Affinity-Based Techniques for Oriented Antibody Immobilization towards Immunosensor Performance Optimization. **2019**, 2019, 1-10		5
105	Site-specific immobilization of lysozyme upon affinity chromatography resin by forecasting lysine activity and controlling pH and epoxy group density. **2019**, 1592, 192-196		3
104	Development of an electrochemical impedimetric immunosensor for Corticotropin Releasing Hormone (CRH) using half-antibody fragments as elements of biorecognition. *Biosensors and Bioelectronics*, **2019**, 131, 171-177	11.8	14
103	An impedimetric biosensor for E. coli O157:H7 based on the use of self-assembled gold nanoparticles and protein G. **2019**, 186, 169		37
102	Biosensor surface functionalization by a simple photochemical immobilization of antibodies: experimental characterization by mass spectrometry and surface enhanced Raman spectroscopy. **2019**, 144, 6871-6880		22
101	Site-Specific and Covalent Immobilization of His-Tagged Proteins via Surface Vinyl Sulfone-Imidazole Coupling. **2019**, 35, 16466-16475		15
100	Multiplex body fluid identification using surface plasmon resonance imaging with principal component analysis. *Sensors and Actuators B: Chemical*, **2019**, 283, 355-362	8.5	9
99	Fast analysis of ketamine using a colorimetric immunosorbent assay on a paper-based analytical device. *Sensors and Actuators B: Chemical*, **2019**, 282, 251-258	8.5	29
98	An overview of biomolecules, immobilization methods and support materials of biosensors. **2019**, 39, 377-386		33
97	Sowing seeds for the future: The need for on-site plant diagnostics. **2020**, 39, 107358		17
96	Regenerable myoglobin biosensor based on protein G immobilized on interdigitated electrodes. **2020**, 59, SCCA05		3
95	A Novel Surface Modification and Immobilization Method of Anti-CD25 Antibody on Nonwoven Fabric Filter Removing Regulatory T Cells Selectively. **2020**, 5, 772-780		3

94	Construction of Immunomagnetic Particles with High Stability in Stringent Conditions by Site-Directed Immobilization of Multivalent Nanobodies onto Bacterial Magnetic Particles for the Environmental Detection of Tetrabromobisphenol-A. *Analytical Chemistry*, **2020**, 92, 1114-1121	7.8	14
93	Reduced nonspecific protein adsorption by application of diethyldithiocarbamate in receptor layer of diphtheria toxoid electrochemical immunosensor. **2020**, 132, 107415		6
92	Electrochemical Immunosensing Platform for the Determination of the 20S Proteasome Using an Aminophenylboronic/Poly-indole-6-carboxylic Acid-Modified Electrode.. **2020**, 3, 4941-4948		4
91	Toward a nanopaper-based and solid phase immunoassay using FRET for the rapid detection of bacteria. *Scientific Reports*, **2020**, 10, 14367	4.9	5
90	Core-Shell Magnetic Nanoparticles for Highly Sensitive Magnetoelastic Immunosensor. *Nanomaterials*, **2020**, 10,	5.4	4
89	Antibody CD133 Biofunctionalization of Ammonium Acryloyldimethyltaurate and Vinylpyrrolidone Co-Polymer-Based Coating of the Vascular Implants. **2020**, 13,		0
88	Progress and Insights in the Application of MXenes as New 2D Nano-Materials Suitable for Biosensors and Biofuel Cell Design. **2020**, 21,		33
87	Stepwise Preparation of a Polymer Comprising Protein Building Blocks on a Solid Support for Immunosensing Platform. *Analytical Sciences*, **2020**, 36, 213-219	1.7	2
86	Amperometric Biosensor for Brucella Testing through Molecular Orientation Technology in Combination with Signal Amplification Technology. **2020**, 7, 2672-2679		3
85	Bifunctional peptide-biomineralized gold nanoclusters as electrochemiluminescence probe for optimizing sensing interface. *Sensors and Actuators B: Chemical*, **2020**, 318, 128278	8.5	9
84	Immunoassay of interferon gamma by quartz crystal microbalance biosensor. **2020**, 218, 121167		9
83	The application of antibody-aptamer hybrid biosensors in clinical diagnostics and environmental analysis. *Analytical Methods*, **2020**, 12, 3183-3199	3.2	9
82	Functional Molecular Interfaces for Impedance-Based Diagnostics. **2020**, 13, 183-200		10
81	Nanoparticle-based biosensors for detection of extracellular vesicles in liquid biopsies. **2020**, 8, 6710-6738		15
80	Intramolecular Coreaction Accelerated Electrochemiluminescence of Polypeptide-Biomineralized Gold Nanoclusters for Targeted Detection of Biomarkers. *Analytical Chemistry*, **2020**, 92, 9179-9187	7.8	12
79	A Label-Free Immunosensor Based on Graphene Oxide/FeO/Prussian Blue Nanocomposites for the Electrochemical Determination of HBsAg. *Biosensors*, **2020**, 10,	5.9	12
78	Perspectives, Tendencies, and Guidelines in Affinity-Based Strategies for the Recovery and Purification of PEGylated Proteins. **2020**, 2020, 1-12		2
77	Dual sensitivity enhancement in gold nanoparticle-based lateral flow immunoassay for visual detection of carcinoembryonic antigen. **2020**, 1, 161-172		6

76	Lateral flow assays towards point-of-care cancer detection: A review of current progress and future trends. **2020**, 125, 115842		79
75	Coiled-Coil Domains for Self-Assembly and Sensitivity Enhancement of Protein–Polymer Conjugate Biosensors. **2020**, 2, 1114-1123		5
74	Multiwell Plate Impedance Analysis of a Nanowell Array Sensor for Label-Free Detection of Cytokines in Mouse Serum. **2020**, 4, 1-4		3
73	Guided mode resonance sensor for the parallel detection of multiple protein biomarkers in human urine with high sensitivity. *Biosensors and Bioelectronics*, **2020**, 153, 112047	11.8	14
72	Site-Directed Antibody Immobilization by Resorc[4]arene-Based Immunosensors. **2020**, 26, 8400-8406		4
71	Multiplex label-free biosensor for detection of autoantibodies in human serum: Tool for new kinetics-based diagnostics of autoimmune diseases. *Biosensors and Bioelectronics*, **2020**, 159, 112187	11.8	19
70	Electrochemical immunosensor towards invasion-associated protein p60: An alternative strategy for Listeria monocytogenes screening in food. **2020**, 216, 120976		10
69	Magnetic-Based Enrichment of Rare Cells from High Concentrated Blood Samples. **2020**, 12,		8
68	Electrochemical label free sensing of human IgG - Protein A interaction. **2021**, 339, 127881		2
67	Broad-spectrum electrochemical immunosensor based on one-step electrodeposition of AuNP-Abs and Prussian blue nanocomposite for organophosphorus pesticide detection. **2021**, 44, 585-594		6
66	Nanostructured functional peptide films and their application in C-reactive protein immunosensors. **2021**, 138, 107692		2
65	Controlling orientation, conformation, and biorecognition of proteins on silane monolayers, conjugate polymers, and thermo-responsive polymer brushes: investigations using TOF-SIMS and principal component analysis. **2021**, 299, 385-405		8
64	Advances in Molecularly Imprinted Polymers Based Affinity Sensors (Review). **2021**, 13,		54
63	Attachment and Detection of Biofouling Yeast Cells Using Biofunctionalized Resonant Sensor Modality. **2021**, 21, 5995-6002		1
62	Metal Nanoparticle and Quantum Dot Tags for Signal Amplification in Electrochemical Immunosensors for Biomarker Detection. **2021**, 9, 85		5
61	Bioaffinity-based surface-immobilization of antibodies to capture endothelial colony-forming cells.		
60	Single-step label-free nanowell immunoassay accurately quantifies serum stress hormones within minutes. **2021**, 7,		3
59	Surface Plasmon Resonance Assay for Label-Free and Selective Detection of HIV-1 p24 Protein. *Biosensors*, **2021**, 11,	5.9	5

58	Development of a functional impedimetric immunosensor for accurate detection of thyroid-stimulating hormone. **2021**, 45, 819-834		1
57	Oriented Antibody Covalent Immobilization for Label-Free Impedimetric Detection of C-Reactive Protein Direct and Sandwich Immunoassays. **2021**, 9, 587142		1
56	Electrochemical Nanobiosensors as Point-of-care Testing Solution to Cytokines Measurement Limitations.		2
55	Facile Encapsulation of Iridium(III) Complexes in Apoferritin Nanocages as Promising Electrochemiluminescence Nanodots for Immunoassays. *Analytical Chemistry*, **2021**, 93, 11329-11336	7.8	1
54	Peptide-Based Electrochemiluminescence Biosensors Using Silver Nanoclusters as Signal Probes and Pd-CuO Hybrid Nanoconcaves as Coreactant Promoters for Immunoassays. *Analytical Chemistry* , **2021**, 93, 13045-13053	7.8	4
53	Directional immobilization of antibody onto magnetic nanoparticles by Fc-binding protein-assisted photo-conjugation for high sensitivity detection of antigen. **2021**, 1184, 339054		0
52	Detection limit enhancement of fiber optic localized surface plasmon resonance biosensor by increased scattering efficiency and reduced background signal. **2021**, 629, 127439		
51	Facile engineered polymeric microdevice via co-coupling of phenylboronic acid and Protein A for oriented antibody immobilization enables substantial signal enhancement for an enhanced fluorescence immunoassay. *Sensors and Actuators B: Chemical*, **2021**, 346, 130444	8.5	2
50	Antibody-Targeted Nanoparticles for Cancer Treatment. **2020**, 35-65		2
49	Measuring protein biomarker concentrations using antibody tagged magnetic nanoparticles. **2020**, 6,		6
48	Hybrid Tamm-surface plasmon polariton mode for highly sensitive detection of protein interactions. **2020**, 28, 29033-29043		16
47	Advancing the immunoaffinity platform AFFIRM to targeted measurements of proteins in serum in the pg/ml range. **2018**, 13, e0189116		4
46	Conducting Polymers in the Design of Biosensors and Biofuel Cells. **2020**, 13,		82
45	Adjunction of Avidin to a Cysteamine Self-Assembled Monolayer for Impedimetric Immunosensor. **2016**, 07, 1-12		9
44	Recombinant Staphylococcal protein A with cysteine residue for preparation of affinity chromatography stationary phase and immunosensor applications. *Biopolymers and Cell*, **2015**, 31, 115-122		5
43	SPR investigations of the formation of intermediate layer of the immunosensor bioselective element based on the recombinant Staphylococcal protein A. *Biopolymers and Cell*, **2015**, 31, 301-308	0.3	2
42	Unraveling structure and performance of protein A ligands at liquid–solid interfaces: a multi-techniques analysis. **2021**,		
41	Enhancing AntibodiesSBinding Capacity through Oriented Functionalization of Plasmonic Surfaces. *Nanomaterials*, **2021**, 11,	5.4	0

40	Study on interactions of human IgG with immobilized anti-IgG or recombinant Staphylococcal protein A using surface plasmon resonance spectrometry. *Biopolymers and Cell*, **2016**, 32, 54-60	0.3	1
39	CHAPTER 12:Immunosensors Using Screen-printed Electrodes. **2019**, 267-302		
38	CHAPTER 2:Structure, Function, Orientation, Characterization and Immobilization of Antibodies for Immunosensor Development. **2019**, 21-41		
37	A new role for Notch in the control of polarity and asymmetric cell division of developing T cells.		1
36	Study on efficiency of oriented immobilization of antibodies on the SPR sensor surface using Staphylococcal protein A or its recombinant analogue. *Biopolymers and Cell*, **2020**, 36, 271-278	0.3	1
35	Retention of Activity by Antibodies Immobilized on Gold Nanoparticles of Different Sizes: Fluorometric Method of Determination and Comparative Evaluation. *Nanomaterials*, **2021**, 11,	5.4	0
34	Novel platform based on polystyrene electrospun nanofibrous mats doped with PAMAM dendritic polymer for enhanced immunosensing. *Applied Surface Science*, **2022**, 579, 152221	6.7	0
33	Antibody Immobilization Techniques in Mass Sensitive Immunosensor: Enhanced Sensitivity through Limited Mass Load. *Current Analytical Chemistry*, **2022**, 18, 529-545	1.7	1
32	Recent advances in immunosensors for healthcare. **2022**, 335-368		
31	Design of immunosensors for rapid and sensitive detection of biomarkers. **2022**, 303-333		1
30	Conducting polymers□versatile tools in analytical systems for the determination of biomarkers and biologically active compounds. **2022**, 407-434		
29	Electrochemically Deposited Molecularly Imprinted Polymer-Based Sensors.. *Sensors*, **2022**, 22,	3.8	8
28	Nanomaterials-Based Immunosensors in Food Analysis. **2022**, 259-318		
27	Antibody immobilization for immunosensing.. *Analytical Sciences*, **2022**, 38, 1-2	1.7	
26	Dumbbell Plate-Shaped AIEgen-Based Luminescent MOF with High Quantum Yield as Self-Enhanced ECL Tags: Mechanism Insights and Biosensing Application.. *Small*, **2022**, e2106567	11	4
25	An electronic biosensor based on semiconducting tetrazine polymer immobilizing matrix coated on rGO for carcinoembryonic antigen.. *Scientific Reports*, **2022**, 12, 3006	4.9	0
24	Electrochemical molecularly imprinted polymer based sensors for pharmaceutical and biomedical applications (review).. *Journal of Pharmaceutical and Biomedical Analysis*, **2022**, 215, 114739	3.5	2
23	Development of molecularly imprinted polymer based phase boundaries for sensors design (review). *Advances in Colloid and Interface Science*, **2022**, 102693	14.3	4

22	A perspective on ToF-SIMS analysis of biosensor interfaces: Controlling and optimizing multi-molecular composition, immobilization through bioprinting, molecular orientation. *Applied Surface Science*, **2022**, 594, 153439	6.7	0
21	A novel lateral flow immunoassay strip based on Label-free magnetic Fe3O4@UiO-66-NH2 nanocomposite for rapid detection of Listeria monocytogenes. *Analytical Methods*,	3.2	0
20	High-Efficiency CdSe Quantum Dots/Fe3O4@MoS2/S2O82□Electrochemiluminescence System Based on a Microfluidic Analysis Platform for the Sensitive Detection of Neuron-Specific Enolase. *Analytical Chemistry*,	7.8	0
19	A Polypyrrole/Nanoclay Hybrid Film for Ultra-Sensitive Cardiac Troponin T Electrochemical Immunosensor. *Biosensors*, **2022**, 12, 545	5.9	0
18	Versatile Au nanoclusters/Au-MnO2 nanoflowers electrochemiluminescence energy transfer platform coupled with rolling circle amplification for dual-targets biosensing of PSA and Let-7a. *Sensors and Actuators B: Chemical*, **2022**, 369, 132397	8.5	1
17	Highly Efficient PTCA/Co3O4/CuO/S2O82□Ternary Electrochemiluminescence System Combined with a Portable Chip for Bioanalysis. **2022**, 7, 2273-2280		0
16	Bioaffinity-based surface immobilization of antibodies to capture endothelial colony-forming cells. **2022**, 17, e0269316		0
15	A Study on the Electrodeposited Gold Nanoparticle (AuNP)-Film as a Nanoplatform for a Label-Free Electrochemical Strongyloidiasis Immunosensor.		2
14	Molecularly Imprinted Polymer-Coated Inorganic Nanoparticles: Fabrication and Biomedical Applications. **2022**, 13, 1464		1
13	Advanced Lab-on-Fiber Optrodes Assisted by Oriented Antibody Immobilization Strategy. **2022**, 12, 1040		0
12	Cathodic electrochemiluminescence of Ru(bpy)32+ based on porous partially reduced graphene oxide for detecting carcinoembryonic antigen. **2023**, 928, 117055		0
11	De novo design of high-affinity protein binders to bioactive helical peptides.		0
10	Two Biosensors for the Determination of VEGF-R2 in Plasma by Array SPRi. **2023**, 28, 155		0
9	Structural tailoring of semiconducting tetrazine polymers based immobilizing matrix for superior electronic biosensing of carcinoembryonic antigen.		0
8	Autodisplay of streptococcal protein G for construction of an orientation-controlled immunoaffinity layer.		0
7	Recent Progress in Electrochemical Nano-Biosensors for Detection of Pesticides and Mycotoxins in Foods. **2023**, 13, 140		0
6	Ultrasensitive Electrochemiluminescence Biosensor with Silver Nanoclusters as a Novel Signal Probe and □Fe2O3□Pt as an Efficient Co-reaction Accelerator for Procalcitonin Immunoassay.		0
5	Site-specific labeling of antibodies with quantum dots could promote to retain the antigen binding capacity of antibodies. **2023**, 413, 135655		0

4	Resorc[4]arene-Modified Gold-Decorated Magnetic Nanoparticles for Immunosensor Development. **2023**, 34, 529-537	1
3	Electrochemical Immunosensor for Diagnosis of COVID-19. **2023**, 63-89	0
2	Nanoparticle Targeting with Antibodies in the Central Nervous System. **2023**, 4,	0
1	Interaction Study of Anti- E. coli Immobilization on 1DZnO at Nanoscale for Optical Biosensing Application.	0