

Ashok Mulchandani

List of Publications by Year in descending order

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357
papers

20,494
citations

8732

75
h-index

18075

120
g-index

361
all docs

361
docs citations

361
times ranked

19342
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanowire-Based Electrochemical Biosensors. <i>Electroanalysis</i> , 2006, 18, 533-550.	1.5	439
2	Microbial biosensors. <i>Analytica Chimica Acta</i> , 2006, 568, 200-210.	2.6	403
3	Bioaffinity Sensing Using Biologically Functionalized Conducting-Polymer Nanowire. <i>Journal of the American Chemical Society</i> , 2005, 127, 496-497.	6.6	385
4	Reversible Conversion of Conducting Polymer Films from Superhydrophobic to Superhydrophilic. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 6009-6012.	7.2	368
5	Electrochemical Impedance Spectroscopy (EIS): Principles, Construction, and Biosensing Applications. <i>Sensors</i> , 2021, 21, 6578.	2.1	360
6	MoS ₂ -Based Optoelectronic Gas Sensor with Sub-parts-per-billion Limit of NO ₂ Gas Detection. <i>ACS Nano</i> , 2019, 13, 3196-3205.	7.3	349
7	Biosensors for direct determination of organophosphate pesticides. <i>Biosensors and Bioelectronics</i> , 2001, 16, 225-230.	5.3	348
8	Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase. <i>Nature Biotechnology</i> , 1997, 15, 984-987.	9.4	298
9	Engineering Plant-Microbe Symbiosis for Rhizoremediation of Heavy Metals. <i>Applied and Environmental Microbiology</i> , 2006, 72, 1129-1134.	1.4	261
10	Determination of organophosphate pesticides at a carbon nanotube/organophosphorus hydrolase electrochemical biosensor. <i>Analytica Chimica Acta</i> , 2005, 530, 185-189.	2.6	251
11	Individually Addressable Conducting Polymer Nanowires Array. <i>Nano Letters</i> , 2004, 4, 1237-1239.	4.5	227
12	Graphene Nanomesh As Highly Sensitive Chemiresistor Gas Sensor. <i>Analytical Chemistry</i> , 2012, 84, 8171-8178.	3.2	226
13	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. <i>Electroanalysis</i> , 2005, 17, 54-58.	1.5	220
14	Thermal conductivity of graphene with defects induced by electron beam irradiation. <i>Nanoscale</i> , 2016, 8, 14608-14616.	2.8	187
15	Enhanced bioaccumulation of heavy metals by bacterial cells displaying synthetic phytochelatins. <i>Biotechnology and Bioengineering</i> , 2000, 70, 518-524.	1.7	185
16	Biosensor for Direct Determination of Organophosphate Nerve Agents Using Recombinant <i>Escherichia coli</i> with Surface-Expressed Organophosphorus Hydrolase. 1. Potentiometric Microbial Electrode. <i>Analytical Chemistry</i> , 1998, 70, 4140-4145.	3.2	181
17	Enhanced Arsenic Accumulation in Engineered Bacterial Cells Expressing <i>ArsR</i> . <i>Applied and Environmental Microbiology</i> , 2004, 70, 4582-4587.	1.4	181
18	Polyaniline nanowires-gold nanoparticles hybrid network based chemiresistive hydrogen sulfide sensor. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	181

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19	Sensitive Detection of H ₂ S Using Gold Nanoparticle Decorated Single-Walled Carbon Nanotubes. <i>Analytical Chemistry</i> , 2010, 82, 250-257.	3.2	180
20	Biosensor for direct determination of organophosphate nerve agents. 1. Potentiometric enzyme electrode. <i>Biosensors and Bioelectronics</i> , 1999, 14, 77-85.	5.3	178
21	Bacterial Cell Surface Display of Organophosphorus Hydrolase for Selective Screening of Improved Hydrolysis of Organophosphate Nerve Agents. <i>Applied and Environmental Microbiology</i> , 2002, 68, 2026-2030.	1.4	175
22	Amperometric Thick-Film Strip Electrodes for Monitoring Organophosphate Nerve Agents Based on Immobilized Organophosphorus Hydrolase. <i>Analytical Chemistry</i> , 1999, 71, 2246-2249.	3.2	172
23	Carbon nanomaterial-based electrochemical biosensors for label-free sensing of environmental pollutants. <i>Chemosphere</i> , 2016, 143, 85-98.	4.2	170
24	Phylogenetic Diversity and Metabolic Potential of Activated Sludge Microbial Communities in Full-Scale Wastewater Treatment Plants. <i>Environmental Science & Technology</i> , 2011, 45, 7408-7415.	4.6	166
25	Single Conducting Polymer Nanowire Chemiresistive Label-Free Immunosensor for Cancer Biomarker. <i>Analytical Chemistry</i> , 2009, 81, 2168-2175.	3.2	165
26	Single Polypyrrole Nanowire Ammonia Gas Sensor. <i>Electroanalysis</i> , 2007, 19, 2125-2130.	1.5	163
27	Bioremediation: environmental clean-up through pathway engineering. <i>Current Opinion in Biotechnology</i> , 2008, 19, 437-444.	3.3	159
28	Single-Walled Carbon Nanotube-Based Chemiresistive Affinity Biosensors for Small Molecules: Ultrasensitive Glucose Detection. <i>Journal of the American Chemical Society</i> , 2010, 132, 5024-5026.	6.6	149
29	Single-Channel Microchip for Fast Screening and Detailed Identification of Nitroaromatic Explosives or Organophosphate Nerve Agents. <i>Analytical Chemistry</i> , 2002, 74, 1187-1191.	3.2	148
30	Amperometric microbial biosensor for p-nitrophenol using <i>Moraxella</i> sp.-modified carbon paste electrode. <i>Biosensors and Bioelectronics</i> , 2005, 21, 523-527.	5.3	147
31	Molecular Beacons: A Real-Time Polymerase Chain Reaction Assay for Detecting Salmonella. <i>Analytical Biochemistry</i> , 2000, 280, 166-172.	1.1	146
32	V-Type Nerve Agent Detection Using a Carbon Nanotube-Based Amperometric Enzyme Electrode. <i>Analytical Chemistry</i> , 2006, 78, 331-336.	3.2	146
33	Capillary Electrophoresis Microchips for Separation and Detection of Organophosphate Nerve Agents. <i>Analytical Chemistry</i> , 2001, 73, 1804-1808.	3.2	144
34	Conducting polymer nanowires for chemiresistive and FET-based bio/chemical sensors. <i>Journal of Materials Chemistry</i> , 2010, 20, 3131.	6.7	138
35	Simultaneous degradation of organophosphorus pesticides and p-nitrophenol by a genetically engineered <i>Moraxella</i> sp. with surface-expressed organophosphorus hydrolase. <i>Biotechnology and Bioengineering</i> , 2001, 76, 318-324.	1.7	137
36	Use of Real-Time Polymerase Chain Reaction and Molecular Beacons for the Detection of <i>Escherichia coli</i> O157:H7. <i>Analytical Biochemistry</i> , 2001, 289, 281-288.	1.1	131

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37	Measurements of Chemical Warfare Agent Degradation Products Using an Electrophoresis Microchip with Contactless Conductivity Detector. <i>Analytical Chemistry</i> , 2002, 74, 6121-6125.	3.2	131
38	Amperometric microbial biosensor for direct determination of organophosphate pesticides using recombinant microorganism with surface expressed organophosphorus hydrolase. <i>Biosensors and Bioelectronics</i> , 2001, 16, 433-437.	5.3	130
39	Biosensor for Direct Determination of Organophosphate Nerve Agents Using Recombinant <i>Escherichia coli</i> with Surface-Expressed Organophosphorus Hydrolase. 2. <i>Fiber-Optic Microbial Biosensor</i> . <i>Analytical Chemistry</i> , 1998, 70, 5042-5046.	3.2	129
40	Carbon nanotubes and graphene nano field-effect transistor-based biosensors. <i>TrAC - Trends in Analytical Chemistry</i> , 2016, 79, 222-232.	5.8	128
41	Genetic Engineering of <i>Escherichia coli</i> for Enhanced Uptake and Bioaccumulation of Mercury. <i>Applied and Environmental Microbiology</i> , 2001, 67, 5335-5338.	1.4	127
42	Microbial Synthesis of CdS Nanocrystals in Genetically Engineered <i>E. coli</i> . <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5186-5189.	7.2	125
43	Porphyrin-Functionalized Single-Walled Carbon Nanotube Chemiresistive Sensor Arrays for VOCs. <i>Journal of Physical Chemistry C</i> , 2012, 116, 3845-3850.	1.5	125
44	Carbon nanotubes-based chemiresistive biosensors for detection of microorganisms. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1437-1441.	5.3	123
45	Enhanced Mercury Biosorption by Bacterial Cells with Surface-Displayed MerR. <i>Applied and Environmental Microbiology</i> , 2003, 69, 3176-3180.	1.4	122
46	Removal of Estrogenic Pollutants from Contaminated Water Using Molecularly Imprinted Polymers. <i>Environmental Science & Technology</i> , 2005, 39, 8958-8962.	4.6	121
47	Novel synthetic phytochelatin-based capacitive biosensor for heavy metal ion detection. <i>Biosensors and Bioelectronics</i> , 2003, 18, 547-553.	5.3	120
48	Flow Injection Amperometric Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Environmental Science & Technology</i> , 2001, 35, 2562-2565.	4.6	111
49	Biofunctionalized Nanostructured Zirconia for Biomedical Application: A Smart Approach for Oral Cancer Detection. <i>Advanced Science</i> , 2015, 2, 1500048.	5.6	111
50	Fiber-Optic Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Biotechnology Progress</i> , 1999, 15, 130-134.	1.3	109
51	Cell Surface Display of Organophosphorus Hydrolase Using Ice Nucleation Protein. <i>Biotechnology Progress</i> , 2001, 17, 76-80.	1.3	109
52	Altering the Substrate Specificity of Organophosphorus Hydrolase for Enhanced Hydrolysis of Chlorpyrifos. <i>Applied and Environmental Microbiology</i> , 2004, 70, 4681-4685.	1.4	106
53	Tunable Biopolymers for Heavy Metal Removal. <i>Macromolecules</i> , 2001, 34, 2257-2261.	2.2	105
54	Bacteria Metabolically Engineered for Enhanced Phytochelatin Production and Cadmium Accumulation. <i>Applied and Environmental Microbiology</i> , 2007, 73, 6317-6320.	1.4	104

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55	Versatile microbial surface-display for environmental remediation and biofuels production. Trends in Microbiology, 2008, 16, 181-188.	3.5	104
56	Hexavalent chromium removal mechanism using conducting polymers. Journal of Hazardous Materials, 2013, 252-253, 99-106.	6.5	102
57	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. Biotechnology and Bioengineering, 2000, 69, 591-596.	1.7	100
58	Electronic Detection of MicroRNA at Attomolar Level with High Specificity. Analytical Chemistry, 2013, 85, 8061-8064.	3.2	98
59	Remote Biosensor for In-Situ Monitoring of Organophosphate Nerve Agents. Electroanalysis, 1999, 11, 866-869.	1.5	97
60	Engineering of improved microbes and enzymes for bioremediation. Current Opinion in Biotechnology, 1999, 10, 137-141.	3.3	96
61	Nano Aptasensor for Protective Antigen Toxin of Anthrax. Analytical Chemistry, 2010, 82, 2042-2047.	3.2	95
62	Organophosphorus hydrolase multilayer modified microcantilevers for organophosphorus detection. Biosensors and Bioelectronics, 2007, 22, 2636-2642.	5.3	94
63	Label-free, chemiresistor immunosensor for stress biomarker cortisol in saliva. Biosensors and Bioelectronics, 2011, 26, 4382-4386.	5.3	94
64	Microbial inhibition kinetics revisited. Enzyme and Microbial Technology, 1989, 11, 66-73.	1.6	92
65	Highly Sensitive and Selective Amperometric Microbial Biosensor for Direct Determination of p-Nitrophenyl-Substituted Organophosphate Nerve Agents. Environmental Science & Technology, 2005, 39, 8853-8857.	4.6	90
66	Efficient reduction of CO ₂ by the molybdenum-containing formate dehydrogenase from <i>Cupriavidus necator</i> (<i>Ralstonia eutropha</i>). Journal of Biological Chemistry, 2017, 292, 16872-16879.	1.6	88
67	Coimmobilization of Urease and Glutamate Dehydrogenase in Electrochemically Prepared Polypyrrole - Polyvinyl Sulfonate Films. Applied Biochemistry and Biotechnology, 2001, 96, 249-258.	1.4	85
68	Aqueous sol-gel encapsulation of genetically engineered <i>Moraxella</i> spp. cells for the detection of organophosphates. Biosensors and Bioelectronics, 2005, 20, 1433-1437.	5.3	85
69	Detoxification of organophosphate nerve agents by immobilized <i>Escherichia coli</i> with surface-expressed organophosphorus hydrolase. Biotechnology and Bioengineering, 1999, 63, 216-223.	1.7	84
70	The use of live biocatalysts for pesticide detoxification. Trends in Biotechnology, 1998, 16, 71-76.	4.9	83
71	A heparin-functionalized carbon nanotube-based affinity biosensor for dengue virus. Biosensors and Bioelectronics, 2017, 91, 811-816.	5.3	82
72	Size-controlled electrochemical synthesis and properties of SnO ₂ nanotubes. Nanotechnology, 2009, 20, 185602.	1.3	79

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73	Amperometric Detection of Peroxides with Poly(anilinomethylferrocene)-Modified Enzyme Electrodes. <i>Analytical Chemistry</i> , 1995, 67, 94-100.	3.2	77
74	Field-Effect Transistors Based on Single Nanowires of Conducting Polymers. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5218-5221.	1.5	77
75	A dual amperometric/potentiometric FIA-based biosensor for the distinctive detection of organophosphorus pesticides. <i>Sensors and Actuators B: Chemical</i> , 2003, 95, 291-296.	4.0	76
76	Carbon nanotubes-based chemiresistive immunosensor for small molecules: Detection of nitroaromatic explosives. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1297-1301.	5.3	76
77	Nonenzymatic Glucose Sensor Based on Platinum Nanoflowers Decorated Multiwalled Carbon Nanotubesâ€Graphene Hybrid Electrode. <i>Electroanalysis</i> , 2014, 26, 103-108.	1.5	76
78	Simple and label-free electrochemical impedance Amelogenin gene hybridization biosensing based on reduced graphene oxide. <i>Biosensors and Bioelectronics</i> , 2014, 58, 145-152.	5.3	76
79	Recent biosensing developments in environmental security. <i>Journal of Environmental Monitoring</i> , 2008, 10, 703.	2.1	75
80	Carbon Nanotubesâ€Modified Screenâ€Printed Electrodes for Chemical Sensors and Biosensors. <i>Analytical Letters</i> , 2004, 37, 3185-3204.	1.0	74
81	Cell surface display of synthetic phytochelatins using ice nucleation protein for enhanced heavy metal bioaccumulation. <i>Journal of Inorganic Biochemistry</i> , 2002, 88, 223-227.	1.5	73
82	Fabrication of Antibody Arrays Using Thermally Responsive Elastin Fusion Proteins. <i>Journal of the American Chemical Society</i> , 2006, 128, 676-677.	6.6	73
83	Electrodeposition of maghemite ($\hat{\text{I}}^3\text{-Fe}_2\text{O}_3$) nanoparticles. <i>Chemical Engineering Journal</i> , 2008, 139, 208-212.	6.6	73
84	Flow injection amperometric detection of OP nerve agents based on an organophosphorusâ€hydrolase biosensor detector. <i>Biosensors and Bioelectronics</i> , 2003, 18, 255-260.	5.3	72
85	A Temperature Responsive Biopolymer for Mercury Remediation. <i>Environmental Science & Technology</i> , 2003, 37, 4457-4462.	4.6	72
86	Electrochemical Synthesis of Perfluorinated Ion Doped Conducting Polyaniline Films Consisting of Helical Fibers and their Reversible Switching between Superhydrophobicity and Superhydrophilicity. <i>Macromolecular Rapid Communications</i> , 2008, 29, 832-838.	2.0	72
87	Highly Selective and Rapid Arsenic Removal by Metabolically Engineered <i>Escherichia coli</i> Cells Expressing <i>Fucus vesiculosus</i> Metallothionein. <i>Applied and Environmental Microbiology</i> , 2008, 74, 2924-2927.	1.4	72
88	Molecular beaconâ€quantum dotâ€Au nanoparticle hybrid nanoprobe for visualizing virus replication in living cells. <i>Chemical Communications</i> , 2010, 46, 3914.	2.2	72
89	Conducting polymer nanowires-based label-free biosensors. <i>Current Opinion in Biotechnology</i> , 2011, 22, 502-508.	3.3	71
90	Organophosphorus Hydrolase-Based Assay for Organophosphate Pesticides. <i>Biotechnology Progress</i> , 1999, 15, 517-521.	1.3	70

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91	Microbial biosensor for direct determination of nitrophenyl-substituted organophosphate nerve agents using genetically engineered <i>Moraxella</i> sp.. <i>Analytica Chimica Acta</i> , 2006, 568, 217-221.	2.6	70
92	Oxygen requirement in pullulan fermentation. <i>Applied Microbiology and Biotechnology</i> , 1988, 28, 361-366.	1.7	67
93	Principles and Applications of Biosensors for Bioprocess Monitoring and Control. <i>Critical Reviews in Biotechnology</i> , 1995, 15, 105-124.	5.1	67
94	Graphene hybrids: synthesis strategies and applications in sensors and sensitized solar cells. <i>Frontiers in Chemistry</i> , 2015, 3, 38.	1.8	67
95	Thermally triggered purification and immobilization of elastin-OPH fusions. <i>Biotechnology and Bioengineering</i> , 2003, 81, 74-79.	1.7	66
96	Conducting polymer coated single-walled carbon nanotube gas sensors for the detection of volatile organic compounds. <i>Talanta</i> , 2014, 123, 109-114.	2.9	65
97	An electrochemically reduced graphene oxide chemiresistive sensor for sensitive detection of Hg ²⁺ ion in water samples. <i>Journal of Hazardous Materials</i> , 2016, 320, 226-233.	6.5	65
98	Visualizing the dynamics of viral replication in living cells via Tat peptide delivery of nuclease-resistant molecular beacons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 17522-17525.	3.3	64
99	Mediator-free microfluidics biosensor based on titania-zirconia nanocomposite for urea detection. <i>RSC Advances</i> , 2013, 3, 228-235.	1.7	64
100	Magnetically Assembled Multisegmented Nanowires and Their Applications. <i>Electroanalysis</i> , 2009, 21, 61-67.	1.5	62
101	A simple colorimetric DNA detection by target-induced hybridization chain reaction for isothermal signal amplification. <i>Analytical Biochemistry</i> , 2014, 457, 19-23.	1.1	62
102	Surface Display of Organophosphorus Hydrolase on <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Progress</i> , 2006, 22, 939-943.	1.3	61
103	Electrochemically Functionalized Seamless Three-Dimensional Graphene-Carbon Nanotube Hybrid for Direct Electron Transfer of Glucose Oxidase and Bioelectrocatalysis. <i>Langmuir</i> , 2015, 31, 13054-13061.	1.6	61
104	Batch kinetics of microbial polysaccharide biosynthesis. <i>Biotechnology and Bioengineering</i> , 1988, 32, 639-646.	1.7	60
105	Biomolecules-carbon nanotubes doped conducting polymer nanocomposites and their sensor application. <i>Talanta</i> , 2007, 74, 370-375.	2.9	60
106	Specific Adhesion to Cellulose and Hydrolysis of Organophosphate Nerve Agents by a Genetically Engineered <i>Escherichia coli</i> Strain with a Surface-Expressed Cellulose-Binding Domain and Organophosphorus Hydrolase. <i>Applied and Environmental Microbiology</i> , 2002, 68, 1684-1689.	1.4	59
107	Microchip Capillary Electrophoresis with Electrochemical Detection of Thiol-Containing Degradation Products of V-Type Nerve Agents. <i>Analytical Chemistry</i> , 2004, 76, 4721-4726.	3.2	59
108	Conducting polymer nanowire-based chemiresistive biosensor for the detection of bacterial spores. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2309-2312.	5.3	59

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109	Sensitive Detection of Elemental Mercury Vapor by Gold-Nanoparticle-Decorated Carbon Nanotube Sensors. <i>Journal of Physical Chemistry C</i> , 2011, 115, 13927-13931.	1.5	59
110	Developments and applications of biosensors. <i>Trends in Biotechnology</i> , 1988, 6, 310-316.	4.9	58
111	Dual amperometric-potentiometric biosensor detection system for monitoring organophosphorus neurotoxins. <i>Analytica Chimica Acta</i> , 2002, 469, 197-203.	2.6	58
112	Real-Time Nucleic Acid Sequence-Based Amplification Assay for Detection of Hepatitis A Virus. <i>Applied and Environmental Microbiology</i> , 2005, 71, 7113-7116.	1.4	58
113	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. <i>Electroanalysis</i> , 2002, 14, 273-276.	1.5	57
114	Microchip enzymatic assay of organophosphate nerve agents. <i>Analytica Chimica Acta</i> , 2004, 505, 183-187.	2.6	57
115	Electrical and gas sensing properties of polyaniline functionalized single-walled carbon nanotubes. <i>Nanotechnology</i> , 2010, 21, 075502.	1.3	57
116	Hybrid tin oxide-SWNT nanostructures based gas sensor. <i>Electrochimica Acta</i> , 2013, 92, 484-490.	2.6	57
117	Ferrocene-Conjugated Polyaniline-Modified Enzyme Electrodes for Determination of Peroxides in Organic Media. <i>Analytical Chemistry</i> , 1995, 67, 1109-1114.	3.2	56
118	Molecular beacons: A real-time polymerase chain reaction assay for detecting <i>Escherichia coli</i> from fresh produce and water. <i>Analytica Chimica Acta</i> , 2008, 614, 208-212.	2.6	56
119	Bactericidal and ammonia removal activity of silver ion-exchanged zeolite. <i>Bioresource Technology</i> , 2012, 117, 86-91.	4.8	56
120	Label-Free Electrical Immunosensor for Highly Sensitive and Specific Detection of Microcystin-LR in Water Samples. <i>Environmental Science & Technology</i> , 2015, 49, 9256-9263.	4.6	56
121	Development and application of a biosensor for hypoxanthine in fish extract. <i>Analytica Chimica Acta</i> , 1989, 221, 215-222.	2.6	55
122	Detoxification of the organophosphate nerve agent coumaphos using organophosphorus hydrolase immobilized on cellulose materials. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2005, 32, 554-560.	1.4	55
123	Primary amine-functionalized polyaniline nanothin film sensor for detecting formaldehyde. <i>Sensors and Actuators B: Chemical</i> , 2014, 194, 255-259.	4.0	54
124	A paper-based chemiresistive biosensor employing single-walled carbon nanotubes for low-cost, point-of-care detection. <i>Biosensors and Bioelectronics</i> , 2019, 130, 367-373.	5.3	54
125	Optimization of a whole-cell cadmium sensor with a toggle gene circuit. <i>Biotechnology Progress</i> , 2009, 25, 898-903.	1.3	53
126	Genetically Engineered Elastin-Protein A Fusion as a Universal Platform for Homogeneous, Phase-separation Immunoassay. <i>Analytical Chemistry</i> , 2005, 77, 2318-2322.	3.2	52

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127	Simple Conjugation and Purification of Quantum Dot [®] Antibody Complexes Using a Thermally Responsive Elastin-Protein L Scaffold As Immunofluorescent Agents. <i>Journal of the American Chemical Society</i> , 2006, 128, 14756-14757.	6.6	52
128	Coexpression of two detoxifying pesticide-degrading enzymes in a genetically engineered bacterium. <i>International Biodeterioration and Biodegradation</i> , 2006, 58, 70-76.	1.9	52
129	Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides. <i>Protein Engineering, Design and Selection</i> , 2006, 19, 99-105.	1.0	52
130	Biosensor for direct determination of fenitrothion and EPN using recombinant <i>Pseudomonas putida</i> JS444 with surface-expressed organophosphorous hydrolase. 2. Modified carbon paste electrode. <i>Applied Biochemistry and Biotechnology</i> , 2007, 136, 243-250.	1.4	52
131	Synthesis and characterization of cadmium telluride nanowire. <i>Nanotechnology</i> , 2008, 19, 325711.	1.3	52
132	Non-lytic M13 phage-based highly sensitive impedimetric cytosensor for detection of coliforms. <i>Biosensors and Bioelectronics</i> , 2020, 148, 111794.	5.3	52
133	Single-Walled Carbon Nanotube [®] “Poly(porphyrin) Hybrid for Volatile Organic Compounds Detection. <i>Journal of Physical Chemistry C</i> , 2014, 118, 1602-1610.	1.5	51
134	A Potentiometric Microbial Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1998, 10, 733-737.	1.5	50
135	Combined Immunomagnetic Separation-Molecular Beacon-Reverse Transcription-PCR Assay for Detection of Hepatitis A Virus from Environmental Samples. <i>Applied and Environmental Microbiology</i> , 2004, 70, 4371-4374.	1.4	50
136	Surface display of MPH on <i>Pseudomonas putida</i> JS444 using ice nucleation protein and its application in detoxification of organophosphates. <i>Biotechnology and Bioengineering</i> , 2008, 99, 30-37.	1.7	50
137	Raman spectra of twisted CVD bilayer graphene. <i>Carbon</i> , 2017, 123, 302-306.	5.4	50
138	One-step metal-affinity purification of histidine-tagged proteins by temperature-triggered precipitation. <i>Biotechnology and Bioengineering</i> , 2003, 82, 605-611.	1.7	49
139	Temperature-triggered purification of antibodies. <i>Biotechnology and Bioengineering</i> , 2005, 90, 373-379.	1.7	49
140	Platinum nanoflowers decorated three-dimensional graphene [®] “carbon nanotubes hybrid with enhanced electrocatalytic activity. <i>Journal of Power Sources</i> , 2013, 223, 23-29.	4.0	49
141	Biosynthesis of pullulan using immobilized <i>Aureobasidium pullulans</i> cells. <i>Biotechnology and Bioengineering</i> , 1989, 33, 306-312.	1.7	48
142	Cadmium Removal from Contaminated Soil by Tunable Biopolymers. <i>Environmental Science & Technology</i> , 2004, 38, 3148-3152.	4.6	48
143	Direct Determination of p-Nitrophenyl Substituent Organophosphorus Nerve Agents Using a Recombinant <i>Pseudomonas putida</i> JS444-Modified Clark Oxygen Electrode. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 524-527.	2.4	48
144	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. <i>Electroanalysis</i> , 2006, 18, 1047-1054.	1.5	48

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145	Carbon allotropes as sensors for environmental monitoring. <i>Current Opinion in Electrochemistry</i> , 2017, 3, 106-113.	2.5	48
146	Enhanced arsenic accumulation by engineered yeast cells expressing <i>Arabidopsis thaliana</i> phytochelatin synthase. <i>Biotechnology and Bioengineering</i> , 2008, 99, 333-340.	1.7	47
147	Single-walled carbon nanotube chemoresistive label-free immunosensor for salivary stress biomarkers. <i>Analyst</i> , 2010, 135, 2637.	1.7	47
148	Development of a glucose sensor employing quick and easy modification method with mediator for altering electron acceptor preference. <i>Bioelectrochemistry</i> , 2018, 121, 185-190.	2.4	47
149	Ferrocene-Conjugated m-Phenylenediamine Conducting Polymer-Incorporated Peroxidase Biosensors. <i>Analytical Biochemistry</i> , 1999, 267, 141-147.	1.1	46
150	Genetic Engineering of Self-Assembled Protein Hydrogel Based on Elastin-like Sequences with Metal Binding Functionality. <i>Biomacromolecules</i> , 2007, 8, 3736-3739.	2.6	45
151	Graphene based biosensors for healthcare. <i>Journal of Materials Research</i> , 2017, 32, 2905-2929.	1.2	45
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