Wilfred Chen

List of Publications by Year in descending order

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244 papers

15,424 citations

70 h-index 23472 111 g-index

249 all docs 249 docs citations

249 times ranked

13693 citing authors

#	Article	IF	CITATIONS
1	Nanowire-Based Electrochemical Biosensors. Electroanalysis, 2006, 18, 533-550.	1.5	439
2	Microbial biosensors. Analytica Chimica Acta, 2006, 568, 200-210.	2.6	403
3	Bioaffinity Sensing Using Biologically Functionalized Conducting-Polymer Nanowire. Journal of the American Chemical Society, 2005, 127, 496-497.	6.6	385
4	Reversible Conversion of Conducting Polymer Films from Superhydrophobic to Superhydrophilic. Angewandte Chemie - International Edition, 2005, 44, 6009-6012.	7.2	368
5	Biosensors for direct determination of organophosphate pesticides. Biosensors and Bioelectronics, 2001, 16, 225-230.	5. 3	348
6	Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase. Nature Biotechnology, 1997, 15, 984-987.	9.4	298
7	Engineering Plant-Microbe Symbiosis for Rhizoremediation of Heavy Metals. Applied and Environmental Microbiology, 2006, 72, 1129-1134.	1.4	261
8	Determination of organophosphate pesticides at a carbon nanotube/organophosphorus hydrolase electrochemical biosensor. Analytica Chimica Acta, 2005, 530, 185-189.	2.6	251
9	Individually Addressable Conducting Polymer Nanowires Array. Nano Letters, 2004, 4, 1237-1239.	4.5	227
10	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. Electroanalysis, 2005, 17, 54-58.	1.5	220
11	Detection of Heavy Metal Ions in Drinking Water Using a High-Resolution Differential Surface Plasmon Resonance Sensor. Environmental Science & Environmental Science & 2005, 39, 1257-1262.	4.6	213
12	Functional Assembly of Minicellulosomes on the <i>Saccharomyces cerevisiae</i> Cell Surface for Cellulose Hydrolysis and Ethanol Production. Applied and Environmental Microbiology, 2009, 75, 6087-6093.	1.4	188
13	Enhanced bioaccumulation of heavy metals by bacterial cells displaying synthetic phytochelatins. Biotechnology and Bioengineering, 2000, 70, 518-524.	1.7	185
14	Biosensor for Direct Determination of Organophosphate Nerve Agents Using RecombinantEscherichia coliwith Surface-Expressed Organophosphorus Hydrolase. 1. Potentiometric Microbial Electrode. Analytical Chemistry, 1998, 70, 4140-4145.	3.2	181
15	Enhanced Arsenic Accumulation in Engineered Bacterial Cells Expressing ArsR. Applied and Environmental Microbiology, 2004, 70, 4582-4587.	1.4	181
16	Biosensor for direct determination of organophosphate nerve agents. 1. Potentiometric enzyme electrode. Biosensors and Bioelectronics, 1999, 14, 77-85.	5.3	178
17	Bacterial Cell Surface Display of Organophosphorus Hydrolase for Selective Screening of Improved Hydrolysis of Organophosphate Nerve Agents. Applied and Environmental Microbiology, 2002, 68, 2026-2030.	1.4	175
18	Amperometric Thick-Film Strip Electrodes for Monitoring Organophosphate Nerve Agents Based on Immobilized Organophosphorus Hydrolase. Analytical Chemistry, 1999, 71, 2246-2249.	3.2	172

#	Article	IF	CITATION
19	Arsenic metabolism by microbes in nature and the impact on arsenic remediation. Current Opinion in Biotechnology, 2009, 20, 659-667.	3.3	166
20	Single Conducting Polymer Nanowire Chemiresistive Label-Free Immunosensor for Cancer Biomarker. Analytical Chemistry, 2009, 81, 2168-2175.	3.2	165
21	Microbial Biosensors: Engineered Microorganisms as the Sensing Machinery. Sensors, 2013, 13, 5777-5795.	2.1	165
22	Surface Display of a Functional Minicellulosome by Intracellular Complementation Using a Synthetic Yeast Consortium and Its Application to Cellulose Hydrolysis and Ethanol Production. Applied and Environmental Microbiology, 2010, 76, 7514-7520.	1.4	162
23	Bioremediation: environmental clean-up through pathway engineering. Current Opinion in Biotechnology, 2008, 19, 437-444.	3.3	159
24	Single-Walled Carbon Nanotube-Based Chemiresistive Affinity Biosensors for Small Molecules: Ultrasensitive Glucose Detection. Journal of the American Chemical Society, 2010, 132, 5024-5026.	6.6	149
25	Amperometric microbial biosensor for p-nitrophenol using Moraxella spmodified carbon paste electrode. Biosensors and Bioelectronics, 2005, 21, 523-527.	5.3	147
26	Molecular Beacons: A Real-Time Polymerase Chain Reaction Assay for Detecting Salmonella. Analytical Biochemistry, 2000, 280, 166-172.	1.1	146
27	V-Type Nerve Agent Detection Using a Carbon Nanotube-Based Amperometric Enzyme Electrode. Analytical Chemistry, 2006, 78, 331-336.	3.2	146
28	Capillary Electrophoresis Microchips for Separation and Detection of Organophosphate Nerve Agents. Analytical Chemistry, 2001, 73, 1804-1808.	3.2	144
29	Simultaneous degradation of organophosphorus pesticides and pâ€nitrophenol by a genetically engineered Moraxella sp. with surfaceâ€expressed organophosphorus hydrolase. Biotechnology and Bioengineering, 2001, 76, 318-324.	1.7	137
30	Use of Real-Time Polymerase Chain Reaction and Molecular Beacons for the Detection of Escherichia coli O157:H7. Analytical Biochemistry, 2001, 289, 281-288.	1.1	131
31	Amperometric microbial biosensor for direct determination of organophosphate pesticides using recombinant microorganism with surface expressed organophosphorus hydrolase. Biosensors and Bioelectronics, 2001, 16, 433-437.	5. 3	130
32	Biosensor for Direct Determination of Organophosphate Nerve Agents Using RecombinantEscherichia coliwith Surface-Expressed Organophosphorus Hydrolase. 2. Fiber-Optic Microbial Biosensor. Analytical Chemistry, 1998, 70, 5042-5046.	3.2	129
33	Genetic Engineering of Escherichia coli for Enhanced Uptake and Bioaccumulation of Mercury. Applied and Environmental Microbiology, 2001, 67, 5335-5338.	1.4	127
34	Microbial Synthesis of CdS Nanocrystals in Genetically Engineered <i>E.â€coli</i> Angewandte Chemie - International Edition, 2008, 47, 5186-5189.	7.2	125
35	Enhanced Mercury Biosorption by Bacterial Cells with Surface-Displayed MerR. Applied and Environmental Microbiology, 2003, 69, 3176-3180.	1.4	122
36	Removal of Estrogenic Pollutants from Contaminated Water Using Molecularly Imprinted Polymers. Environmental Science & Environ	4.6	121

#	Article	IF	CITATIONS
37	Novel synthetic phytochelatin-based capacitive biosensor for heavy metal ion detection. Biosensors and Bioelectronics, 2003, 18, 547-553.	5.3	120
38	Flow Injection Amperometric Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. Environmental Science &	4.6	111
39	Fiber-Optic Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. Biotechnology Progress, 1999, 15, 130-134.	1.3	109
40	Cell Surface Display of Organophosphorus Hydrolase Using Ice Nucleation Protein. Biotechnology Progress, 2001, 17, 76-80.	1.3	109
41	Altering the Substrate Specificity of Organophosphorus Hydrolase for Enhanced Hydrolysis of Chlorpyrifos. Applied and Environmental Microbiology, 2004, 70, 4681-4685.	1.4	106
42	Tunable Biopolymers for Heavy Metal Removal. Macromolecules, 2001, 34, 2257-2261.	2.2	105
43	Riboregulated toehold-gated gRNA for programmable CRISPR–Cas9 function. Nature Chemical Biology, 2019, 15, 217-220.	3.9	105
44	Cell-Surface display of heterologous proteins: From high-throughput screening to environmental applications. Biotechnology and Bioengineering, 2002, 79, 496-503.	1.7	104
45	Bacteria Metabolically Engineered for Enhanced Phytochelatin Production and Cadmium Accumulation. Applied and Environmental Microbiology, 2007, 73, 6317-6320.	1.4	104
46	Versatile microbial surface-display for environmental remediation and biofuels production. Trends in Microbiology, 2008, 16, 181-188.	3.5	104
47	Dynamic protein assembly by programmable DNA strand displacement. Nature Chemistry, 2018, 10, 474-481.	6.6	104
48	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. Biotechnology and Bioengineering, 2000, 69, 591-596.	1.7	100
49	Remote Biosensor for In-Situ MOnitoring of Organophosphate Nerve Agents. Electroanalysis, 1999, 11, 866-869.	1.5	97
50	Engineering of improved microbes and enzymes for bioremediation. Current Opinion in Biotechnology, 1999, 10, 137-141.	3.3	96
51	Nano Aptasensor for Protective Antigen Toxin of Anthrax. Analytical Chemistry, 2010, 82, 2042-2047.	3.2	95
52	Organophosphorus hydrolase multilayer modified microcantilevers for organophosphorus detection. Biosensors and Bioelectronics, 2007, 22, 2636-2642.	5.3	94
53	Engineering the bioconversion of methane and methanol to fuels and chemicals in native and synthetic methylotrophs. Current Opinion in Biotechnology, 2018, 50, 81-93.	3.3	94
54	Scaffoldless engineered enzyme assembly for enhanced methanol utilization. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12691-12696.	3.3	93

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55	Simultaneous cell growth and ethanol production from cellulose by an engineered yeast consortium displaying a functional mini-cellulosome. Microbial Cell Factories, 2011, 10, 89.	1.9	91
56	Tuning biphenyl dioxygenase for extended substrate specificity., 1999, 63, 544-551.		90
57	Highly Sensitive and Selective Amperometric Microbial Biosensor for Direct Determination ofp-Nitrophenyl-Substituted Organophosphate Nerve Agents. Environmental Science & Emp; Technology, 2005, 39, 8853-8857.	4.6	90
58	Functional assembly of a multi-enzyme methanol oxidation cascade on a surface-displayed trifunctional scaffold for enhanced NADH production. Chemical Communications, 2013, 49, 3766.	2.2	90
59	Detoxification of organophosphate nerve agents by immobilizedEscherichia coli with surface-expressed organophosphorus hydrolase. Biotechnology and Bioengineering, 1999, 63, 216-223.	1.7	84
60	Functional Display of Complex Cellulosomes on the Yeast Surface via Adaptive Assembly. ACS Synthetic Biology, 2013, 2, 14-21.	1.9	84
61	Synthetic scaffolds for pathway enhancement. Current Opinion in Biotechnology, 2015, 36, 98-106.	3.3	84
62	The use of live biocatalysts for pesticide detoxification. Trends in Biotechnology, 1998, 16, 71-76.	4.9	83
63	Protein Engineering of Epoxide Hydrolase from Agrobacterium radiobacter AD1 for Enhanced Activity and Enantioselective Production of (R)-1-Phenylethane-1,2-Diol. Applied and Environmental Microbiology, 2005, 71, 3995-4003.	1.4	79
64	Field-Effect Transistors Based on Single Nanowires of Conducting Polymers. Journal of Physical Chemistry C, 2007, 111, 5218-5221.	1.5	77
65	Carbon nanotubes-based chemiresistive immunosensor for small molecules: Detection of nitroaromatic explosives. Biosensors and Bioelectronics, 2010, 26, 1297-1301.	5.3	76
66	Recent biosensing developments in environmental security. Journal of Environmental Monitoring, 2008, 10, 703.	2.1	75
67	Cell surface display of synthetic phytochelatins using ice nucleation protein for enhanced heavy metal bioaccumulation. Journal of Inorganic Biochemistry, 2002, 88, 223-227.	1.5	73
68	Fabrication of Antibody Arrays Using Thermally Responsive Elastin Fusion Proteins. Journal of the American Chemical Society, 2006, 128, 676-677.	6.6	73
69	Intracellular expression of Vitreoscilla hemoglobin alters the aerobic metabolism of Saccharomyces cerevisiae. Biotechnology Progress, 1994, 10, 308-313.	1. 3	72
70	A Temperature Responsive Biopolymer for Mercury Remediation. Environmental Science & Emp; Technology, 2003, 37, 4457-4462.	4.6	72
71	Electrochemical Synthesis of Perfluorinated Ion Doped Conducting Polyaniline Films Consisting of Helical Fibers and their Reversible Switching between Superhydrophobicity and Superhydrophilicity. Macromolecular Rapid Communications, 2008, 29, 832-838.	2.0	72
72	Highly Selective and Rapid Arsenic Removal by Metabolically Engineered <i>Escherichia coli</i> Cells Expressing <i>Fucus vesiculosus</i> Metallothionein. Applied and Environmental Microbiology, 2008, 74, 2924-2927.	1.4	72

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73	Molecular beacon–quantum dot–Au nanoparticle hybrid nanoprobes for visualizing virus replication in living cells. Chemical Communications, 2010, 46, 3914.	2.2	72
74	Microbial biosensor for direct determination of nitrophenyl-substituted organophosphate nerve agents using genetically engineered Moraxella sp Analytica Chimica Acta, 2006, 568, 217-221.	2.6	70
75	Enantioconvergent production of (R)-1-phenyl-1,2-ethanediol from styrene oxide by combining theSolanum tuberosum and an evolvedAgrobacterium radiobacter AD1 epoxide hydrolases. Biotechnology and Bioengineering, 2006, 94, 522-529.	1.7	67
76	Biomolecular scaffolds for enhanced signaling and catalytic efficiency. Current Opinion in Biotechnology, 2014, 28, 59-68.	3.3	67
77	Thermally triggered purification and immobilization of elastin-OPH fusions. Biotechnology and Bioengineering, 2003, 81, 74-79.	1.7	66
78	ELP-OPH/BSA/TiO2 nanofibers/c-MWCNTs based biosensor for sensitive and selective determination of p-nitrophenyl substituted organophosphate pesticides in aqueous system. Biosensors and Bioelectronics, 2016, 85, 935-942.	5.3	66
79	Rapid identification of inhibitors that interfere with poliovirus replication using a cell-based assay. Antiviral Research, 2008, 77, 232-236.	1.9	65
80	Visualizing the dynamics of viral replication in living cells via Tat peptide delivery of nuclease-resistant molecular beacons. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17522-17525.	3.3	64
81	Polypyrrole nanoribbon based chemiresistive immunosensors for viral plant pathogen detection. Analytical Methods, 2013, 5, 3497.	1.3	62
82	Positional Assembly of Enzymes on Bacterial Outer Membrane Vesicles for Cascade Reactions. PLoS ONE, 2014, 9, e97103.	1.1	62
83	Surface Display of Organophosphorus Hydrolase on Saccharomyces cerevisiae. Biotechnology Progress, 2006, 22, 939-943.	1.3	61
84	Biomolecules-carbon nanotubes doped conducting polymer nanocomposites and their sensor application. Talanta, 2007, 74, 370-375.	2.9	60
85	Sortase A-mediated multi-functionalization of protein nanoparticles. Chemical Communications, 2015, 51, 12107-12110.	2.2	60
86	Specific Adhesion to Cellulose and Hydrolysis of Organophosphate Nerve Agents by a Genetically Engineered Escherichia coli Strain with a Surface-Expressed Cellulose-Binding Domain and Organophosphorus Hydrolase. Applied and Environmental Microbiology, 2002, 68, 1684-1689.	1.4	59
87	Active Site Engineering of the Epoxide Hydrolase from Agrobacterium radiobacter AD1 to Enhance Aerobic Mineralization of cis-1,2-Dichloroethylene in Cells Expressing an Evolved Toluene ortho-Monooxygenase. Journal of Biological Chemistry, 2004, 279, 46810-46817.	1.6	59
88	Dual amperometric–potentiometric biosensor detection system for monitoring organophosphorus neurotoxins. Analytica Chimica Acta, 2002, 469, 197-203.	2.6	58
89	Real-Time Nucleic Acid Sequence-Based Amplification Assay for Detection of Hepatitis A Virus. Applied and Environmental Microbiology, 2005, 71, 7113-7116.	1.4	58
90	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. Electroanalysis, 2002, 14, 273-276.	1.5	57

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91	Microchip enzymatic assay of organophosphate nerve agents. Analytica Chimica Acta, 2004, 505, 183-187.	2.6	57
92	Molecular beacons: A real-time polymerase chain reaction assay for detecting Escherichia coli from fresh produce and water. Analytica Chimica Acta, 2008, 614, 208-212.	2.6	56
93	Detoxification of the organophosphate nerve agent coumaphos using organophosphorus hydrolase immobilized on cellulose materials. Journal of Industrial Microbiology and Biotechnology, 2005, 32, 554-560.	1.4	55
94	Optimization of a wholeâ€eell cadmium sensor with a toggle gene circuit. Biotechnology Progress, 2009, 25, 898-903.	1.3	53
95	Genetically Engineered Elastin-Protein A Fusion as a Universal Platform for Homogeneous, Phase-separation Immunoassay. Analytical Chemistry, 2005, 77, 2318-2322.	3.2	52
96	Simple Conjugation and Purification of Quantum Dotâ^'Antibody Complexes Using a Thermally Responsive Elastin-Protein L Scaffold As Immunofluorescent Agents. Journal of the American Chemical Society, 2006, 128, 14756-14757.	6.6	52
97	Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides. Protein Engineering, Design and Selection, 2006, 19, 99-105.	1.0	52
98	Biosensor for direct determination of fenitrothion and EPN using recombinant Pseudomonas putida JS444 with surface-expressed organophosphorous hydrolase. 2. Modified carbon paste electrode. Applied Biochemistry and Biotechnology, 2007, 136, 243-250.	1.4	52
99	Synthesis and characterization of cadmium telluride nanowire. Nanotechnology, 2008, 19, 325711.	1.3	52
100	A Potentiometric Microbial Biosensor for Direct Determination of Organophosphate Nerve Agents. Electroanalysis, 1998, 10, 733-737.	1.5	50
101	Combined Immunomagnetic Separation-Molecular Beacon-Reverse Transcription-PCR Assay for Detection of Hepatitis A Virus from Environmental Samples. Applied and Environmental Microbiology, 2004, 70, 4371-4374.	1.4	50
102	Surface display of MPH onPseudomonas putida JS444 using ice nucleation protein and its application in detoxification of organophosphates. Biotechnology and Bioengineering, 2008, 99, 30-37.	1.7	50
103	One-step metal-affinity purification of histidine-tagged proteins by temperature-triggered precipitation. Biotechnology and Bioengineering, 2003, 82, 605-611.	1.7	49
104	Temperature-triggered purification of antibodies. Biotechnology and Bioengineering, 2005, 90, 373-379.	1.7	49
105	Cadmium Removal from Contaminated Soil by Tunable Biopolymers. Environmental Science & Emp; Technology, 2004, 38, 3148-3152.	4.6	48
106	Direct Determination of p-Nitrophenyl Substituent Organophosphorus Nerve Agents Using a Recombinant Pseudomonas putida JS444-Modified Clark Oxygen Electrode. Journal of Agricultural and Food Chemistry, 2005, 53, 524-527.	2.4	48
107	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. Electroanalysis, 2006, 18, 1047-1054.	1.5	48
108	Enhanced arsenic accumulation by engineered yeast cells expressing <i>Arabidopsis thaliana</i> phytochelatin synthase. Biotechnology and Bioengineering, 2008, 99, 333-340.	1.7	47

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109	Post-Translational Modification of Bionanoparticles as a Modular Platform for Biosensor Assembly. ACS Nano, 2015, 9, 8554-8561.	7.3	46
110	Genetic Engineering of Self-Assembled Protein Hydrogel Based on Elastin-like Sequences with Metal Binding Functionality. Biomacromolecules, 2007, 8, 3736-3739.	2.6	45
111	Engineering multi-functional bacterial outer membrane vesicles as modular nanodevices for biosensing and bioimaging. Chemical Communications, 2017, 53, 7569-7572.	2.2	45
112	Cell Surface Display of Organophosphorus Hydrolase in Pseudomonas putida Using an Ice-Nucleation Protein Anchor. Biotechnology Progress, 2003, 19, 1612-1614.	1.3	44
113	Label-Free Chemiresistive Immunosensors for Viruses. Environmental Science & E	4.6	44
114	A quantum-dot based protein module for in vivo monitoring of protease activity through fluorescence resonance energy transfer. Chemical Communications, 2011, 47, 5259.	2.2	44
115	ELP-z and ELP-zz capturing scaffolds for the purification of immunoglobulins by affinity precipitation. Journal of Biotechnology, 2013, 163, 10-16.	1.9	42
116	Modular Hepatitis B Virus-like Particle Platform for Biosensing and Drug Delivery. ACS Nano, 2020, 14, 12642-12651.	7.3	41
117	Engineering TCE-degrading rhizobacteria for heavy metal accumulation and enhanced TCE degradation. Biotechnology and Bioengineering, 2006, 95, 399-403.	1.7	40
118	Conducting polymer 1-dimensional nanostructures for FET sensors. Thin Solid Films, 2010, 519, 964-973.	0.8	40
119	Effect of Aspect Ratio (Length:Diameter) on a Single Polypyrrole Nanowire FET Device. Journal of Physical Chemistry C, 2010, 114, 13375-13380.	1.5	40
120	Whole-Cell Immobilization Using Cell Surface-Exposed Cellulose-Binding Domain. Biotechnology Progress, 2001, 17, 407-411.	1.3	38
121	Customizable Biopolymers for Heavy Metal Remediation. Journal of Nanoparticle Research, 2005, 7, 517-523.	0.8	38
122	Single-Walled Carbon Nanotube Based Real-Time Organophosphate Detector. Electroanalysis, 2007, 19, 616-619.	1.5	38
123	Single Conducting Polymer Nanowire Based Sequenceâ€Specific, Baseâ€Pairâ€Length Dependant Labelâ€free DNA Sensor. Electroanalysis, 2011, 23, 371-379.	1.5	38
124	Hydrophilic and antimicrobial Ag-exchanged zeolite a coatings: A year-long durability study and preliminary evidence for their general microbiocidal efficacy to bacteria, fungus and yeast. Microporous and Mesoporous Materials, 2012, 151, 352-357.	2.2	38
125	Bio-orthogonal conjugation and enzymatically triggered release of proteins within multi-layered hydrogels. Acta Biomaterialia, 2017, 56, 80-90.	4.1	38
126	Use of Fluorescence Resonance Energy Transfer for Rapid Detection of Enteroviral Infection In Vivo. Applied and Environmental Microbiology, 2006, 72, 3710-3715.	1.4	37

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127	Microbial biosensor for p-nitrophenol using Moraxella sp Analytica Chimica Acta, 2002, 470, 79-86.	2.6	36
128	Improved Degradation of Organophosphorus Nerve Agents and p-Nitrophenol by Pseudomonas putida JS444 with Surface-Expressed Organophosphorus Hydrolase. Biotechnology Progress, 2008, 21, 678-681.	1.3	36
129	Detecting RNA viruses in living mammalian cells by fluorescence microscopy. Trends in Biotechnology, 2011, 29, 307-313.	4.9	36
130	Site-Specific Bioconjugation Approaches for Enhanced Delivery of Protein Therapeutics and Protein Drug Carriers. Bioconjugate Chemistry, 2020, 31, 2272-2282.	1.8	36
131	Detoxification of organophosphate nerve agents by immobilized dual functional biocatalysts in a cellulose hollow fiber bioreactor. Biotechnology and Bioengineering, 2005, 91, 379-386.	1.7	35
132	Presentation of functional organophosphorus hydrolase fusions on the surface of <i>Escherichia coli</i> by the AIDAâ€I autotransporter pathway. Biotechnology and Bioengineering, 2008, 99, 485-490.	1.7	35
133	Creation of artificial cellulosomes on DNA scaffolds by zinc finger protein-guided assembly for efficient cellulose hydrolysis. Chemical Communications, 2014, 50, 1423-1425.	2.2	35
134	Whole cell-enzyme hybrid amperometric biosensor for direct determination of organophosphorous nerve agents withp-nitrophenyl substituent. Biotechnology and Bioengineering, 2004, 85, 706-713.	1.7	34
135	Construction and characterization of a novel cross-regulation system for regulating cloned gene expression in Escherichia coli. Gene, 1993, 130, 15-22.	1.0	33
136	A Microbial Biosensor forp-Nitrophenol UsingArthrobacter Sp Electroanalysis, 2003, 15, 1160-1164.	1.5	33
137	Detection of Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) Using Toluene Dioxygenase-Peroxidase Coupling Reactions. Biotechnology Progress, 2003, 19, 1812-1815.	1.3	33
138	Biosensor for Direct Determination of Fenitrothion and EPN Using Recombinant Pseudomonas putida JS444 with Surface Expressed Organophosphorus Hydrolase. 1. Modified Clark Oxygen Electrode. Sensors, 2006, 6, 466-472.	2.1	33
139	Comparison of a Reporter Assay and Immunomagnetic Separation Real-Time Reverse Transcription-PCR for the Detection of Enteroviruses in Seeded Environmental Water Samples. Applied and Environmental Microbiology, 2007, 73, 2338-2340.	1.4	33
140	Label-free detection of cupric ions and histidine-tagged proteins using single poly(pyrrole)-NTA chelator conducting polymer nanotube chemiresistive sensor. Biosensors and Bioelectronics, 2009, 24, 1451-1455.	5. 3	33
141	Real-time molecular methods to detect infectious viruses. Seminars in Cell and Developmental Biology, 2009, 20, 49-54.	2.3	33
142	Sizeâ€modulated synergy of cellulase clustering for enhanced cellulose hydrolysis. Biotechnology Journal, 2013, 8, 257-261.	1.8	33
143	Heavy Metal Removal by Novel CBD-EC20 Sorbents Immobilized on Cellulose. Biomacromolecules, 2002, 3, 462-465.	2.6	32
144	Systematic engineering of phytochelatin synthesis and arsenic transport for enhanced arsenic accumulation in <i>E. coli i>E. coli</i>	1.7	32

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145	Selective and Rapid Room Temperature Detection of H ₂ S Using Gold Nanoparticle Chain Arrays. Electroanalysis, 2011, 23, 2623-2628.	1.5	32
146	Affinity precipitation of a monoclonal antibody from an industrial harvest feedstock using an ELPâ€Z stimuli responsive biopolymer. Biotechnology and Bioengineering, 2014, 111, 1595-1603.	1.7	32
147	Environmental biotechnology: Challenges and opportunities for chemical engineers. AICHE Journal, 2005, 51, 690-695.	1.8	31
148	Proteome Changes after Metabolic Engineering to Enhance Aerobic Mineralization of cis-1,2-Dichloroethylene. Journal of Proteome Research, 2006, 5, 1388-1397.	1.8	31
149	Functional assembly and characterization of a modular xylanosome for hemicellulose hydrolysis in yeast. Biotechnology and Bioengineering, 2013, 110, 275-285.	1.7	31
150	Durability of hydrophilic and antimicrobial zeolite coatings under water immersion. AICHE Journal, 2006, 52, 1157-1161.	1.8	30
151	Detection of Hepatitis A Virus by Using a Combined Cell Culture-Molecular Beacon Assay. Applied and Environmental Microbiology, 2008, 74, 2239-2243.	1.4	30
152	HaloTag mediated artificial cellulosome assembly on a rolling circle amplification DNA template for efficient cellulose hydrolysis. Chemical Communications, 2016, 52, 6701-6704.	2.2	30
153	An immunoassay for atrazine using tunable immunosorbent. Analytical Biochemistry, 2003, 322, 251-256.	1.1	28
154	Cell Surface Display of Functional Macromolecule Fusions on Escherichia coli for Development of an Autofluorescent Whole-Cell Biocatalyst. Environmental Science & Environmental Science & 2008, 42, 6105-6110.	4.6	28
155	Affinity purification of plasmid DNA by temperature-triggered precipitation. Biotechnology and Bioengineering, 2004, 85, 293-297.	1.7	27
156	Improvement in recombinant protein production in ppGpp-deficientEscherichia coli., 1997, 53, 379-386.		26
157	Enzyme biosensor for determination of organophosphates. Field Analytical Chemistry and Technology, 1998, 2, 363-369.	0.9	26
158	Cadmium removal from contaminated soil by thermally responsive elastin (ELPEC20) biopolymers. Biotechnology and Bioengineering, 2007, 98, 349-355.	1.7	26
159	Engineering a highâ€affinity scaffold for nonâ€chromatographic protein purification via inteinâ€mediated cleavage. Biotechnology and Bioengineering, 2012, 109, 2829-2835.	1.7	25
160	Protein nanoparticles as multifunctional biocatalysts and health assessment sensors. Current Opinion in Chemical Engineering, 2016, 13, 109-118.	3.8	25
161	Ligand-Induced Cross-Linking of Z-Elastin-like Polypeptide-Functionalized E2 Protein Nanoparticles for Enhanced Affinity Precipitation of Antibodies. Biomacromolecules, 2017, 18, 1654-1659.	2.6	25
162	Outer membrane vesicles (OMVs) enabled bioâ€applications: A critical review. Biotechnology and Bioengineering, 2022, 119, 34-47.	1.7	25

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163	Towards a Capacitive Enzyme Sensor for Direct Determination of Organophosphorus Pesticides: Fundamental Studies and Aspects of Development. Sensors, 2003, 3, 119-127.	2.1	24
164	Simultaneous Degradation of Organophosphates and 4-Substituted Phenols by Stenotrophomonas Species LZ-1 with Surface-Displayed Organophosphorus Hydrolase. Journal of Agricultural and Food Chemistry, 2009, 57, 6171-6177.	2.4	24
165	Enhanced arsenate uptake in <i>Saccharomyces cerevisiae</i> overexpressing the Pho84 phosphate transporter. Biotechnology Progress, 2012, 28, 654-661.	1.3	24
166	Halo-tag mediated self-labeling of fluorescent proteins to molecular beacons for nucleic acid detection. Chemical Communications, 2014, 50, 13735-13738.	2.2	24
167	SpyTag/SpyCatcher Functionalization of E2 Nanocages with Stimuli-Responsive Z-ELP Affinity Domains for Tunable Monoclonal Antibody Binding and Precipitation Properties. Bioconjugate Chemistry, 2018, 29, 3113-3120.	1.8	24
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