Wilfred Chen

List of Publications by Citations

241 papers	13,239 citations	65 h-index	103 g-index
249 ext. papers	14,286 ext. citations	6.3 avg, IF	6.47 L-index

#	Paper	IF	Citations
241	Nanowire-Based Electrochemical Biosensors. *Electroanalysis*, **2006**, 18, 533-550	3	390
240	Bioaffinity sensing using biologically functionalized conducting-polymer nanowire. *Journal of the American Chemical Society*, **2005**, 127, 496-7	16.4	357
239	Microbial biosensors. *Analytica Chimica Acta*, **2006**, 568, 200-10	6.6	353
238	Reversible conversion of conducting polymer films from superhydrophobic to superhydrophilic. *Angewandte Chemie - International Edition*, **2005**, 44, 6009-12	16.4	341
237	Biosensors for direct determination of organophosphate pesticides. *Biosensors and Bioelectronics*, **2001**, 16, 225-30	11.8	297
236	Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase. *Nature Biotechnology*, **1997**, 15, 984-7	44.5	260
235	Determination of organophosphate pesticides at a carbon nanotube/organophosphorus hydrolase electrochemical biosensor. *Analytica Chimica Acta*, **2005**, 530, 185-189	6.6	227
234	Engineering plant-microbe symbiosis for rhizoremediation of heavy metals. *Applied and Environmental Microbiology*, **2006**, 72, 1129-34	4.8	222
233	Individually Addressable Conducting Polymer Nanowires Array. *Nano Letters*, **2004**, 4, 1237-1239	11.5	213
232	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. *Electroanalysis*, **2005**, 17, 54-58	3	200
231	Detection of heavy metal ions in drinking water using a high-resolution differential surface plasmon resonance sensor. *Environmental Science & Technology*, **2005**, 39, 1257-62	10.3	184
230	Enhanced bioaccumulation of heavy metals by bacterial cells displaying synthetic phytochelatins. *Biotechnology and Bioengineering*, **2000**, 70, 518-24	4.9	166
229	Functional assembly of minicellulosomes on the Saccharomyces cerevisiae cell surface for cellulose hydrolysis and ethanol production. *Applied and Environmental Microbiology*, **2009**, 75, 6087-93	4.8	165
228	Biosensor for direct determination of organophosphate nerve agents using recombinant Escherichia coli with surface-expressed organophosphorus hydrolase. 1. Potentiometric microbial electrode. *Analytical Chemistry*, **1998**, 70, 4140-5	7.8	157
227	Biosensor for direct determination of organophosphate nerve agents. 1. Potentiometric enzyme electrode. *Biosensors and Bioelectronics*, **1999**, 14, 77-85	11.8	156
226	Bacterial cell surface display of organophosphorus hydrolase for selective screening of improved hydrolysis of organophosphate nerve agents. *Applied and Environmental Microbiology*, **2002**, 68, 2026-30	4.8	155
225	Amperometric thick-film strip electrodes for monitoring organophosphate nerve agents based on immobilized organophosphorus hydrolase. *Analytical Chemistry*, **1999**, 71, 2246-9	7.8	152

224	Enhanced arsenic accumulation in engineered bacterial cells expressing ArsR. *Applied and Environmental Microbiology*, **2004**, 70, 4582-7	4.8	147
223	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, 7514-20	4.8	141
222	Single conducting polymer nanowire chemiresistive label-free immunosensor for cancer biomarker. *Analytical Chemistry*, **2009**, 81, 2168-75	7.8	140
221	Single-walled carbon nanotube-based chemiresistive affinity biosensors for small molecules: ultrasensitive glucose detection. *Journal of the American Chemical Society*, **2010**, 132, 5024-6	16.4	136
220	Bioremediation: environmental clean-up through pathway engineering. *Current Opinion in Biotechnology*, **2008**, 19, 437-44	11.4	136
219	Microbial biosensors: engineered microorganisms as the sensing machinery. *Sensors*, **2013**, 13, 5777-95	3.8	135
218	Arsenic metabolism by microbes in nature and the impact on arsenic remediation. *Current Opinion in Biotechnology*, **2009**, 20, 659-67	11.4	131
217	Amperometric microbial biosensor for p-nitrophenol using Moraxella sp.-modified carbon paste electrode. *Biosensors and Bioelectronics*, **2005**, 21, 523-7	11.8	129
216	Simultaneous degradation of organophosphorus pesticides and p-nitrophenol by a genetically engineered Moraxella sp. with surface-expressed organophosphorus hydrolase. *Biotechnology and Bioengineering*, **2001**, 76, 318-24	4.9	129
215	Molecular beacons: a real-time polymerase chain reaction assay for detecting Salmonella. *Analytical Biochemistry*, **2000**, 280, 166-72	3.1	129
214	V-type nerve agent detection using a carbon nanotube-based amperometric enzyme electrode. *Analytical Chemistry*, **2006**, 78, 331-6	7.8	124
213	Removal of estrogenic pollutants from contaminated water using molecularly imprinted polymers. *Environmental Science & Technology*, **2005**, 39, 8958-62	10.3	117
212	Biosensor for direct determination of organophosphate nerve agents using recombinant Escherichia coli with surface-expressed organophosphorus hydrolase. 2. Fiber-optic microbial biosensor. *Analytical Chemistry*, **1998**, 70, 5042-6	7.8	116
211	Use of real-time polymerase chain reaction and molecular beacons for the detection of Escherichia coli O157:H7. *Analytical Biochemistry*, **2001**, 289, 281-8	3.1	113
210	Amperometric microbial biosensor for direct determination of organophosphate pesticides using recombinant microorganism with surface expressed organophosphorus hydrolase. *Biosensors and Bioelectronics*, **2001**, 16, 433-7	11.8	113
209	Genetic engineering of Escherichia coli for enhanced uptake and bioaccumulation of mercury. *Applied and Environmental Microbiology*, **2001**, 67, 5335-8	4.8	112
208	Capillary electrophoresis microchips for separation and detection of organophosphate nerve agents. *Analytical Chemistry*, **2001**, 73, 1804-8	7.8	112
207	Enhanced mercury biosorption by bacterial cells with surface-displayed MerR. *Applied and Environmental Microbiology*, **2003**, 69, 3176-80	4.8	110

206	Novel synthetic phytochelatin-based capacitive biosensor for heavy metal ion detection. *Biosensors and Bioelectronics*, **2003**, 18, 547-53	11.8	105
205	Flow injection amperometric enzyme biosensor for direct determination of organophosphate nerve agents. *Environmental Science & Technology*, **2001**, 35, 2562-5	10.3	100
204	Microbial synthesis of CdS nanocrystals in genetically engineered E. coli. *Angewandte Chemie - International Edition*, **2008**, 47, 5186-9	16.4	98
203	Altering the substrate specificity of organophosphorus hydrolase for enhanced hydrolysis of chlorpyrifos. *Applied and Environmental Microbiology*, **2004**, 70, 4681-5	4.8	94
202	Cell-Surface display of heterologous proteins: From high-throughput screening to environmental applications. *Biotechnology and Bioengineering*, **2002**, 79, 496-503	4.9	94
201	Tunable Biopolymers for Heavy Metal Removal. *Macromolecules*, **2001**, 34, 2257-2261	5.5	94
200	Versatile microbial surface-display for environmental remediation and biofuels production. *Trends in Microbiology*, **2008**, 16, 181-8	12.4	91
199	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. *Biotechnology and Bioengineering*, **2000**, 69, 591-6	4.9	89
198	Remote Biosensor for In-Situ MOnitoring of Organophosphate Nerve Agents. *Electroanalysis*, **1999**, 11, 866-869	3	89
197	Bacteria metabolically engineered for enhanced phytochelatin production and cadmium accumulation. *Applied and Environmental Microbiology*, **2007**, 73, 6317-20	4.8	88
196	Engineering of improved microbes and enzymes for bioremediation. *Current Opinion in Biotechnology*, **1999**, 10, 137-41	11.4	88
195	Fiber-optic enzyme biosensor for direct determination of organophosphate nerve agents. *Biotechnology Progress*, **1999**, 15, 130-4	2.8	88
194	Nano aptasensor for protective antigen toxin of anthrax. *Analytical Chemistry*, **2010**, 82, 2042-7	7.8	87
193	Cell surface display of organophosphorus hydrolase using ice nucleation protein. *Biotechnology Progress*, **2001**, 17, 76-80	2.8	87
192	Organophosphorus hydrolase multilayer modified microcantilevers for organophosphorus detection. *Biosensors and Bioelectronics*, **2007**, 22, 2636-42	11.8	85
191	Highly sensitive and selective amperometric microbial biosensor for direct determination of p-nitrophenyl-substituted organophosphate nerve agents. *Environmental Science & Technology* , **2005**, 39, 8853-7	10.3	82
190	Tuning biphenyl dioxygenase for extended substrate specificity. *Biotechnology and Bioengineering*, **1999**, 63, 544-51	4.9	81
189	Simultaneous cell growth and ethanol production from cellulose by an engineered yeast consortium displaying a functional mini-cellulosome. *Microbial Cell Factories*, **2011**, 10, 89	6.4	79

188	Functional assembly of a multi-enzyme methanol oxidation cascade on a surface-displayed trifunctional scaffold for enhanced NADH production. *Chemical Communications*, **2013**, 49, 3766-8	5.8	77
187	Detoxification of organophosphate nerve agents by immobilized Escherichia coli with surface-expressed organophosphorus hydrolase. *Biotechnology and Bioengineering*, **1999**, 63, 216-23	4.9	75
186	The use of live biocatalysts for pesticide detoxification. *Trends in Biotechnology*, **1998**, 16, 71-6	15.1	73
185	Functional display of complex cellulosomes on the yeast surface via adaptive assembly. *ACS Synthetic Biology*, **2013**, 2, 14-21	5.7	72
184	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	11.5	70
183	Molecular beacon-quantum dot-Au nanoparticle hybrid nanoprobes for visualizing virus replication in living cells. *Chemical Communications*, **2010**, 46, 3914-6	5.8	70
182	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	4.8	70
181	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	4.8	70
180	Field-Effect Transistors Based on Single Nanowires of Conducting Polymers. *Journal of Physical Chemistry C*, **2007**, 111, 5218-5221	3.8	69
179	Intracellular expression of Vitreoscilla hemoglobin alters the aerobic metabolism of Saccharomyces cerevisiae. *Biotechnology Progress*, **1994**, 10, 308-13	2.8	69
178	Thermally triggered purification and immobilization of elastin-OPH fusions. *Biotechnology and Bioengineering*, **2003**, 81, 74-9	4.9	66
177	Fabrication of antibody arrays using thermally responsive elastin fusion proteins. *Journal of the American Chemical Society*, **2006**, 128, 676-7	16.4	65
176	A temperature responsive biopolymer for mercury remediation. *Environmental Science & Technology*, **2003**, 37, 4457-62	10.3	65
175	Carbon nanotubes-based chemiresistive immunosensor for small molecules: detection of nitroaromatic explosives. *Biosensors and Bioelectronics*, **2010**, 26, 1297-301	11.8	64
174	Engineering the bioconversion of methane and methanol to fuels and chemicals in native and synthetic methylotrophs. *Current Opinion in Biotechnology*, **2018**, 50, 81-93	11.4	64
173	Synthetic scaffolds for pathway enhancement. *Current Opinion in Biotechnology*, **2015**, 36, 98-106	11.4	63
172	Dynamic protein assembly by programmable DNA strand displacement. *Nature Chemistry*, **2018**, 10, 474-481	17.6	62
171	Recent biosensing developments in environmental security. *Journal of Environmental Monitoring*, **2008**, 10, 703-12		61

170	Enantioconvergent production of (R)-1-phenyl-1,2-ethanediol from styrene oxide by combining the Solanum tuberosum and an evolved Agrobacterium radiobacter AD1 epoxide hydrolases. *Biotechnology and Bioengineering*, **2006**, 94, 522-9	4.9	61
169	Cell surface display of synthetic phytochelatins using ice nucleation protein for enhanced heavy metal bioaccumulation. *Journal of Inorganic Biochemistry*, **2002**, 88, 223-7	4.2	61
168	Riboregulated toehold-gated gRNA for programmable CRISPR-Cas9 function. *Nature Chemical Biology*, **2019**, 15, 217-220	11.7	61
167	Rapid identification of inhibitors that interfere with poliovirus replication using a cell-based assay. *Antiviral Research*, **2008**, 77, 232-6	10.8	60
166	Highly selective and rapid arsenic removal by metabolically engineered Escherichia coli cells expressing Fucus vesiculosus metallothionein. *Applied and Environmental Microbiology*, **2008**, 74, 2924-7	4.8	60
165	Microbial biosensor for direct determination of nitrophenyl-substituted organophosphate nerve agents using genetically engineered Moraxella sp. *Analytica Chimica Acta*, **2006**, 568, 217-21	6.6	59
164	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, 17522-5	11.5	58
163	Biomolecular scaffolds for enhanced signaling and catalytic efficiency. *Current Opinion in Biotechnology*, **2014**, 28, 59-68	11.4	57
162	Surface display of organophosphorus hydrolase on Saccharomyces cerevisiae. *Biotechnology Progress*, **2006**, 22, 939-43	2.8	55
161	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	11.8	54
160	Real-time nucleic acid sequence-based amplification assay for detection of hepatitis A virus. *Applied and Environmental Microbiology*, **2005**, 71, 7113-6	4.8	53
159	Biomolecules-carbon nanotubes doped conducting polymer nanocomposites and their sensor application. *Talanta*, **2007**, 74, 370-5	6.2	52
158	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, 46810-7	5.4	52
157	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. *Electroanalysis*, **2002**, 14, 273-276	3	52
156	Molecular beacons: a real-time polymerase chain reaction assay for detecting Escherichia coli from fresh produce and water. *Analytica Chimica Acta*, **2008**, 614, 208-12	6.6	51
155	Dual amperometric–potentiometric biosensor detection system for monitoring organophosphorus neurotoxins. *Analytica Chimica Acta*, **2002**, 469, 197-203	6.6	51
154	Genetically engineered elastin-protein A fusion as a universal platform for homogeneous, phase-separation immunoassay. *Analytical Chemistry*, **2005**, 77, 2318-22	7.8	49
153	Simple conjugation and purification of quantum dot-antibody complexes using a thermally responsive elastin-protein L scaffold as immunofluoresecent agents. *Journal of the American Chemical Society*, **2006**, 128, 14756-7	16.4	49

152	Microchip enzymatic assay of organophosphate nerve agents. *Analytica Chimica Acta*, **2004**, 505, 183-187	6.6	49
151	Detoxification of the organophosphate nerve agent coumaphos using organophosphorus hydrolase immobilized on cellulose materials. *Journal of Industrial Microbiology and Biotechnology*, **2005**, 32, 554-60	4.2	49
150	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, 1684-9	4.8	48
149	Sortase A-mediated multi-functionalization of protein nanoparticles. *Chemical Communications*, **2015**, 51, 12107-10	5.8	47
148	Positional assembly of enzymes on bacterial outer membrane vesicles for cascade reactions. *PLoS ONE*, **2014**, 9, e97103	3.7	47
147	Synthesis and characterization of cadmium telluride nanowire. *Nanotechnology*, **2008**, 19, 325711	3.4	47
146	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, 243-50	3.2	47
145	One-step metal-affinity purification of histidine-tagged proteins by temperature-triggered precipitation. *Biotechnology and Bioengineering*, **2003**, 82, 605-11	4.9	47
144	Polypyrrole nanoribbon based chemiresistive immunosensors for viral plant pathogen detection. *Analytical Methods*, **2013**, 5, 3497	3.2	46
143	Combined immunomagnetic separation-molecular beacon-reverse transcription-PCR assay for detection of hepatitis A virus from environmental samples. *Applied and Environmental Microbiology*, **2004**, 70, 4371-4	4.8	46
142	Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides. *Protein Engineering, Design and Selection*, **2006**, 19, 99-105	1.9	45
141	A Potentiometric Microbial Biosensor for Direct Determination of Organophosphate Nerve Agents. *Electroanalysis*, **1998**, 10, 733-737	3	44
140	Surface display of MPH on Pseudomonas putida JS444 using ice nucleation protein and its application in detoxification of organophosphates. *Biotechnology and Bioengineering*, **2008**, 99, 30-7	4.9	44
139	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. *Electroanalysis*, **2006**, 18, 1047-1054	3	44
138	Temperature-triggered purification of antibodies. *Biotechnology and Bioengineering*, **2005**, 90, 373-9	4.9	44
137	Optimization of a whole-cell cadmium sensor with a toggle gene circuit. *Biotechnology Progress*, **2009**, 25, 898-903	2.8	43
136	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, 524-7	5.7	43
135	Cadmium removal from contaminated soil by tunable biopolymers. *Environmental Science & Technology*, **2004**, 38, 3148-52	10.3	42

134	Genetic engineering of self-assembled protein hydrogel based on elastin-like sequences with metal binding functionality. *Biomacromolecules*, **2007**, 8, 3736-9	6.9	41
133	Enhanced arsenic accumulation by engineered yeast cells expressing Arabidopsis thaliana phytochelatin synthase. *Biotechnology and Bioengineering*, **2008**, 99, 333-40	4.9	41
132	Engineering TCE-degrading rhizobacteria for heavy metal accumulation and enhanced TCE degradation. *Biotechnology and Bioengineering*, **2006**, 95, 399-403	4.9	40
131	Label-free chemiresistive immunosensors for viruses. *Environmental Science & Technology*, **2010**, 44, 9030-5	10.3	38
130	ELP-z and ELP-zz capturing scaffolds for the purification of immunoglobulins by affinity precipitation. *Journal of Biotechnology*, **2013**, 163, 10-6	3.7	37
129	A quantum-dot based protein module for in vivo monitoring of protease activity through fluorescence resonance energy transfer. *Chemical Communications*, **2011**, 47, 5259-61	5.8	37
128	Single-Walled Carbon Nanotube Based Real-Time Organophosphate Detector. *Electroanalysis*, **2007** , 19, 616-619	3	37
127	Cell surface display of organophosphorus hydrolase in Pseudomonas putida using an ice-nucleation protein anchor. *Biotechnology Progress*, **2003**, 19, 1612-4	2.8	37
126	Single Conducting Polymer Nanowire Based Sequence-Specific, Base-Pair-Length Dependant Label-free DNA Sensor. *Electroanalysis*, **2011**, 23, 371-379	3	36
125	Effect of (L:D) Aspect Ratio on Single Polypyrrole Nanowire FET Device. *Journal of Physical Chemistry C*, **2010**, 114, 13375-13380	3.8	35
124	Conducting polymer 1-dimensional nanostructures for FET sensors. *Thin Solid Films*, **2010**, 519, 964-973	2.2	35
123	Use of fluorescence resonance energy transfer for rapid detection of enteroviral infection in vivo. *Applied and Environmental Microbiology*, **2006**, 72, 3710-5	4.8	35
122	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	5.3	34
121	Whole-cell immobilization using cell surface-exposed cellulose-binding domain. *Biotechnology Progress*, **2001**, 17, 407-11	2.8	34
120	Engineering multi-functional bacterial outer membrane vesicles as modular nanodevices for biosensing and bioimaging. *Chemical Communications*, **2017**, 53, 7569-7572	5.8	32
119	Post-Translational Modification of Bionanoparticles as a Modular Platform for Biosensor Assembly. *ACS Nano*, **2015**, 9, 8554-61	16.7	32
118	Detecting RNA viruses in living mammalian cells by fluorescence microscopy. *Trends in Biotechnology*, **2011**, 29, 307-13	15.1	32
117	Selective and Rapid Room Temperature Detection of H2S Using Gold Nanoparticle Chain Arrays. *Electroanalysis*, **2011**, 23, 2623-2628	3	32

116	Improved degradation of organophosphorus nerve agents and p-nitrophenol by Pseudomonas putida JS444 with surface-expressed organophosphorus hydrolase. *Biotechnology Progress*, **2005**, 21, 678-81	2.8	32
115	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, 2338-40	4.8	32
114	Detoxification of organophosphate nerve agents by immobilized dual functional biocatalysts in a cellulose hollow fiber bioreactor. *Biotechnology and Bioengineering*, **2005**, 91, 379-86	4.9	32
113	Creation of artificial cellulosomes on DNA scaffolds by zinc finger protein-guided assembly for efficient cellulose hydrolysis. *Chemical Communications*, **2014**, 50, 1423-5	5.8	31
112	Whole cell-enzyme hybrid amperometric biosensor for direct determination of organophosphorous nerve agents with p-nitrophenyl substituent. *Biotechnology and Bioengineering*, **2004**, 85, 706-13	4.9	31
111	Customizable Biopolymers for Heavy Metal Remediation. *Journal of Nanoparticle Research*, **2005**, 7, 517-523	2.3	31
110	Size-modulated synergy of cellulase clustering for enhanced cellulose hydrolysis. *Biotechnology Journal*, **2013**, 8, 257-61	5.6	30
109	Presentation of functional organophosphorus hydrolase fusions on the surface of Escherichia coli by the AIDA-I autotransporter pathway. *Biotechnology and Bioengineering*, **2008**, 99, 485-90	4.9	30
108	Proteome changes after metabolic engineering to enhance aerobic mineralization of cis-1,2-dichloroethylene. *Journal of Proteome Research*, **2006**, 5, 1388-97	5.6	30
107	Bio-orthogonal conjugation and enzymatically triggered release of proteins within multi-layered hydrogels. *Acta Biomaterialia*, **2017**, 56, 80-90	10.8	29
106	Affinity precipitation of a monoclonal antibody from an industrial harvest feedstock using an ELP-Z stimuli responsive biopolymer. *Biotechnology and Bioengineering*, **2014**, 111, 1595-603	4.9	29
105	Real-time molecular methods to detect infectious viruses. *Seminars in Cell and Developmental Biology*, **2009**, 20, 49-54	7.5	29
104	Durability of hydrophilic and antimicrobial zeolite coatings under water immersion. *AICHE Journal*, **2006**, 52, 1157-1161	3.6	29
103	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	3.8	29
102	Microbial biosensor for p-nitrophenol using Moraxella sp.. *Analytica Chimica Acta*, **2002**, 470, 79-86	6.6	29
101	A Microbial Biosensor for p-Nitrophenol Using Arthrobacter Sp.. *Electroanalysis*, **2003**, 15, 1160-1164	3	29
100	Detection of benzene, toluene, ethyl benzene, and xylenes (BTEX) using toluene dioxygenase-peroxidase coupling reactions. *Biotechnology Progress*, **2003**, 19, 1812-5	2.8	29
99	Construction and characterization of a novel cross-regulation system for regulating cloned gene expression in Escherichia coli. *Gene*, **1993**, 130, 15-22	3.8	29

98	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, 1451-5	11.8	28
97	Environmental biotechnology: Challenges and opportunities for chemical engineers. *AICHE Journal*, **2005**, 51, 690-695	3.6	27
96	Heavy metal removal by novel CBD-EC20 sorbents immobilized on cellulose. *Biomacromolecules*, **2002**, 3, 462-5	6.9	27
95	Functional assembly and characterization of a modular xylanosome for hemicellulose hydrolysis in yeast. *Biotechnology and Bioengineering*, **2013**, 110, 275-85	4.9	26
94	Detection of hepatitis a virus by using a combined cell culture-molecular beacon assay. *Applied and Environmental Microbiology*, **2008**, 74, 2239-43	4.8	26
93	An immunoassay for atrazine using tunable immunosorbent. *Analytical Biochemistry*, **2003**, 322, 251-6	3.1	26
92	Enzyme biosensor for determination of organophosphates. *Field Analytical Chemistry and Technology*, **1998**, 2, 363-369		25
91	Cadmium removal from contaminated soil by thermally responsive elastin (ELPEC20) biopolymers. *Biotechnology and Bioengineering*, **2007**, 98, 349-55	4.9	25
90	HaloTag mediated artificial cellulosome assembly on a rolling circle amplification DNA template for efficient cellulose hydrolysis. *Chemical Communications*, **2016**, 52, 6701-4	5.8	25
89	Affinity purification of plasmid DNA by temperature-triggered precipitation. *Biotechnology and Bioengineering*, **2004**, 85, 293-7	4.9	24
88	High-throughput screening for the development of a monoclonal antibody affinity precipitation step using ELP-z stimuli responsive biopolymers. *Biotechnology and Bioengineering*, **2013**, 110, 2664-76	4.9	23
87	Engineering a high-affinity scaffold for non-chromatographic protein purification via intein-mediated cleavage. *Biotechnology and Bioengineering*, **2012**, 109, 2829-35	4.9	23
86	Cell surface display of functional macromolecule fusions on Escherichia coli for development of an autofluorescent whole-cell biocatalyst. *Environmental Science & Technology*, **2008**, 42, 6105-10	10.3	23
85	Halo-tag mediated self-labeling of fluorescent proteins to molecular beacons for nucleic acid detection. *Chemical Communications*, **2014**, 50, 13735-8	5.8	21
84	Improvement in recombinant protein production in ppGpp-deficient Escherichia coli. *Biotechnology and Bioengineering*, **1997**, 53, 379-86	4.9	21
83	Controlled assembly of multi-segment nanowires by histidine-tagged peptides. *Nanotechnology*, **2006**, 17, 3375-9	3.4	21
82	Towards a Capacitive Enzyme Sensor for Direct Determination of Organophosphorus Pesticides: Fundamental Studies and Aspects of Development. *Sensors*, **2003**, 3, 119-127	3.8	21
81	One-step affinity capture and precipitation for improved purification of an industrial monoclonal antibody using Z-ELP functionalized nanocages. *Biotechnology and Bioengineering*, **2018**, 115, 423-432	4.9	20

80	Systematic engineering of phytochelatin synthesis and arsenic transport for enhanced arsenic accumulation in E. coli. *Biotechnology and Bioengineering*, **2010**, 105, 780-5	4.9	20
79	Development of an autofluorescent whole-cell biocatalyst by displaying dual functional moieties on Escherichia coli cell surfaces and construction of a coculture with organophosphate-mineralizing activity. *Applied and Environmental Microbiology*, **2008**, 74, 7733-9	4.8	20
78	Modular Hepatitis B Virus-like Particle Platform for Biosensing and Drug Delivery. *ACS Nano*, **2020**, 14, 12642-12651	16.7	20
77	Protein Nanoparticles as Multifunctional Biocatalysts and Health Assessment Sensors. *Current Opinion in Chemical Engineering*, **2016**, 13, 109-118	5.4	19
76	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, 6171-7	5.7	19
75	In Situ Fabrication of Single Poly(methyl pyrrole) Nanowire. *Electroanalysis*, **2007**, 19, 793-797	3	18
74	Visualization and detection of infectious coxsackievirus replication using a combined cell culture-molecular beacon assay. *Applied and Environmental Microbiology*, **2005**, 71, 8397-401	4.8	18
73	Biodetoxification of coumaphos insecticide using immobilizedEscherichia coli expressing organophosphorus hydrolase enzyme on cell surface. *Biotechnology and Bioprocess Engineering*, **2000**, 5, 436-440	3.1	18
72	Molecular design of expression systems: comparison of different control configurations using molecular mechanism models. *Biotechnology and Bioengineering*, **1991**, 38, 679-87	4.9	18
71	Ligand-Induced Cross-Linking of Z-Elastin-like Polypeptide-Functionalized E2 Protein Nanoparticles for Enhanced Affinity Precipitation of Antibodies. *Biomacromolecules*, **2017**, 18, 1654-1659	6.9	17
70	Detection of infective poliovirus by a simple, rapid, and sensitive flow cytometry method based on fluorescence resonance energy transfer technology. *Applied and Environmental Microbiology*, **2010**, 76, 584-8	4.8	17
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