

Wilfred Chen

List of Publications by Year in descending order

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Version: 2024-02-01

244
papers

15,424
citations

11651

70
h-index

23533

111
g-index

249
all docs

249
docs citations

249
times ranked

13693
citing authors

#	ARTICLE	IF	CITATIONS
1	Outer membrane vesicles (OMVs) enabled bio-applications: A critical review. <i>Biotechnology and Bioengineering</i> , 2022, 119, 34-47.	3.3	25
2	Deciphering the Design Rules of Toehold-Gated sgRNA for Conditional Activation of Gene Expression and Protein Degradation in Mammalian Cells. <i>ACS Synthetic Biology</i> , 2022, 11, 397-405.	3.8	9
3	Incorporation of Endosomolytic Peptides with Varying Disruption Mechanisms into EGFR-Targeted Protein Conjugates: The Effect on Intracellular Protein Delivery and EGFR Specificity in Breast Cancer Cells. <i>Molecular Pharmaceutics</i> , 2022, 19, 661-673.	4.6	13
4	EGFR Ligand Clustering on E2 Bionanoparticles for Targeted Delivery of Chemotherapeutics to Breast Cancer Cells. <i>Bioconjugate Chemistry</i> , 2022, 33, 452-462.	3.6	11
5	Dynamic modulation of enzyme activity by synthetic CRISPR-Cas6 endonucleases. <i>Nature Chemical Biology</i> , 2022, 18, 492-500.	8.0	13
6	A microRNA-gated thgRNA platform for multiplexed activation of gene expression in mammalian cells. <i>Chemical Communications</i> , 2022, 58, 6215-6218.	4.1	6
7	Tunable and Modular miRNA Classifier through Indirect Associative Toehold Strand Displacement. <i>ACS Synthetic Biology</i> , 2022, 11, 2719-2725.	3.8	0
8	Self-assembling protein nanocages for modular enzyme assembly by orthogonal bioconjugation. <i>Biotechnology Progress</i> , 2021, 37, e3190.	2.6	6
9	Engineering a Blue Light Inducible SpyTag System (BLISS). <i>Journal of the American Chemical Society</i> , 2021, 143, 8572-8577.	13.7	23
10	Engineering bionanoparticles for improved biosensing and bioimaging. <i>Current Opinion in Biotechnology</i> , 2021, 71, 41-48.	6.6	14
11	Conditional Protein Rescue by Binding-Induced Protective Shielding. <i>ACS Synthetic Biology</i> , 2020, 9, 2639-2647.	3.8	1
12	Controlling metabolic flux by toehold-mediated strand displacement. <i>Current Opinion in Biotechnology</i> , 2020, 66, 150-157.	6.6	13
13	Modular Hepatitis B Virus-like Particle Platform for Biosensing and Drug Delivery. <i>ACS Nano</i> , 2020, 14, 12642-12651.	14.6	41
14	Site-Specific Bioconjugation Approaches for Enhanced Delivery of Protein Therapeutics and Protein Drug Carriers. <i>Bioconjugate Chemistry</i> , 2020, 31, 2272-2282.	3.6	36
15	A modular approach for dCas9-mediated enzyme cascading via orthogonal bioconjugation. <i>Chemical Communications</i> , 2020, 56, 11426-11428.	4.1	10
16	Biological Assembly of Modular Protein Building Blocks as Sensing, Delivery, and Therapeutic Agents. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2020, 11, 35-62.	6.8	14
17	A tribute to Frances Arnold. <i>AIChE Journal</i> , 2020, 66, e16923.	3.6	0
18	Synthesis of gold nanostructures using glycine as the reducing agent. <i>Nanotechnology</i> , 2020, 31, 455601.	2.6	6

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19	Tunable modulation of antibody-antigen interaction by protease cleavage of protein M. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2834-2842.	3.3	4
20	Synthetic biology approaches for targeted protein degradation. <i>Biotechnology Advances</i> , 2019, 37, 107446.	11.7	14
21	Artificial scaffolds for enhanced biocatalysis. <i>Methods in Enzymology</i> , 2019, 617, 363-383.	1.0	7
22	Artificial Cellulosome Complex from the Self-Assembly of Ni-NTA-Functionalized Polymeric Micelles and Cellulases. <i>ChemBioChem</i> , 2019, 20, 1394-1399.	2.6	20
23	Exploiting dCas9 fusion proteins for dynamic assembly of synthetic metabolons. <i>Chemical Communications</i> , 2019, 55, 8219-8222.	4.1	21
24	Genetically engineered bio-nanoparticles with co-expressed enzyme reporter and recognition element for IgG immunoassay. <i>Sensors and Actuators Reports</i> , 2019, 1, 100003.	4.4	8
25	Genetically Engineered Bacterial Outer Membrane Vesicles with Expressed Nanoluciferase Reporter for <i>in Vivo</i> Bioluminescence Kinetic Modeling through Noninvasive Imaging. <i>ACS Applied Bio Materials</i> , 2019, 2, 5608-5615.	4.6	15
26	Controlled Epidermal Growth Factor Receptor Ligand Display on Cancer Suicide Enzymes via Unnatural Amino Acid Engineering for Enhanced Intracellular Delivery in Breast Cancer Cells. <i>Bioconjugate Chemistry</i> , 2019, 30, 432-442.	3.6	24
27	Riboregulated toehold-gated gRNA for programmable CRISPR-Cas9 function. <i>Nature Chemical Biology</i> , 2019, 15, 217-220.	8.0	105
28	High-efficiency affinity precipitation of multiple industrial mAbs and Fc-fusion proteins from cell culture harvests using Z-ELP nanocages. <i>Biotechnology and Bioengineering</i> , 2018, 115, 2039-2047.	3.3	12
29	Dynamic protein assembly by programmable DNA strand displacement. <i>Nature Chemistry</i> , 2018, 10, 474-481.	13.6	104
30	One-step affinity capture and precipitation for improved purification of an industrial monoclonal antibody using Z-ELP functionalized nanocages. <i>Biotechnology and Bioengineering</i> , 2018, 115, 423-432.	3.3	22
31	Engineering the bioconversion of methane and methanol to fuels and chemicals in native and synthetic methyloprophs. <i>Current Opinion in Biotechnology</i> , 2018, 50, 81-93.	6.6	94
32	Rapid Quantification of Monoclonal Antibody Titer in Cell Culture Harvests by Antibody-Induced Z-ELP-E2 Nanoparticle Cross-Linking. <i>Analytical Chemistry</i> , 2018, 90, 14447-14452.	6.5	12
33	A tribute to Professor Jay Bailey: A pioneer in biochemical engineering. <i>AIChE Journal</i> , 2018, 64, 4179-4181.	3.6	1
34	SpyTag/SpyCatcher Functionalization of E2 Nanocages with Stimuli-Responsive Z-ELP Affinity Domains for Tunable Monoclonal Antibody Binding and Precipitation Properties. <i>Bioconjugate Chemistry</i> , 2018, 29, 3113-3120.	3.6	24
35	Ligand-Induced Cross-Linking of Z-Elastin-like Polypeptide-Functionalized E2 Protein Nanoparticles for Enhanced Affinity Precipitation of Antibodies. <i>Biomacromolecules</i> , 2017, 18, 1654-1659.	5.4	25
36	Control of the Yeast Mating Pathway by Reconstitution of Functional \pm -Factor Using Split Intein-Catalyzed Reactions. <i>ACS Synthetic Biology</i> , 2017, 6, 1453-1460.	3.8	5

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37	Engineering multi-functional bacterial outer membrane vesicles as modular nanodevices for biosensing and bioimaging. <i>Chemical Communications</i> , 2017, 53, 7569-7572.	4.1	45
38	In vitro methanol production from methyl coenzyme M using the <i>Methanosarcina barkeri</i> MtaABC protein complex. <i>Biotechnology Progress</i> , 2017, 33, 1243-1249.	2.6	10
39	Bio-orthogonal conjugation and enzymatically triggered release of proteins within multi-layered hydrogels. <i>Acta Biomaterialia</i> , 2017, 56, 80-90.	8.3	38
40	DNA-guided assembly of a five-component enzyme cascade for enhanced conversion of cellulose to gluconic acid and H ₂ O ₂ . <i>Journal of Biotechnology</i> , 2017, 263, 30-35.	3.8	16
41	Induced prodrug activation by conditional protein degradation. <i>Journal of Biotechnology</i> , 2017, 260, 62-66.	3.8	6
42	HaloTag mediated artificial cellulosome assembly on a rolling circle amplification DNA template for efficient cellulose hydrolysis. <i>Chemical Communications</i> , 2016, 52, 6701-6704.	4.1	30
43	A non-chromatographic protein purification strategy using Src 3 homology domains as generalized capture domains. <i>Journal of Biotechnology</i> , 2016, 234, 27-34.	3.8	13
44	Protein nanoparticles as multifunctional biocatalysts and health assessment sensors. <i>Current Opinion in Chemical Engineering</i> , 2016, 13, 109-118.	7.8	25
45	Scaffoldless engineered enzyme assembly for enhanced methanol utilization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12691-12696.	7.1	93
46	ELP-OPH/BSA/TiO ₂ nanofibers/c-MWCNTs based biosensor for sensitive and selective determination of p-nitrophenyl substituted organophosphate pesticides in aqueous system. <i>Biosensors and Bioelectronics</i> , 2016, 85, 935-942.	10.1	66
47	Bioengineering strategies to generate artificial protein complexes. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1495-1505.	3.3	12
48	Post-Translational Modification of Bionanoparticles as a Modular Platform for Biosensor Assembly. <i>ACS Nano</i> , 2015, 9, 8554-8561.	14.6	46
49	Sortase A-mediated multi-functionalization of protein nanoparticles. <i>Chemical Communications</i> , 2015, 51, 12107-12110.	4.1	60
50	Synthetic scaffolds for pathway enhancement. <i>Current Opinion in Biotechnology</i> , 2015, 36, 98-106.	6.6	84
51	Fluorescent protein-based molecular beacons by zinc finger protein-guided assembly. <i>Biotechnology and Bioengineering</i> , 2015, 112, 236-241.	3.3	8
52	Positional Assembly of Enzymes on Bacterial Outer Membrane Vesicles for Cascade Reactions. <i>PLoS ONE</i> , 2014, 9, e97103.	2.5	62
53	Biomolecular scaffolds for enhanced signaling and catalytic efficiency. <i>Current Opinion in Biotechnology</i> , 2014, 28, 59-68.	6.6	67
54	Quantitative assessment of in vivo HIV protease activity using genetically engineered QD-based FRET probes. <i>Biotechnology and Bioengineering</i> , 2014, 111, 1082-1087.	3.3	12

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55	Development of an ELP-Z based mAb affinity precipitation process using scaled-down filtration techniques. <i>Journal of Biotechnology</i> , 2014, 192, 11-19.	3.8	13
56	Halo-tag mediated self-labeling of fluorescent proteins to molecular beacons for nucleic acid detection. <i>Chemical Communications</i> , 2014, 50, 13735-13738.	4.1	24
57	Creation of artificial cellulosomes on DNA scaffolds by zinc finger protein-guided assembly for efficient cellulose hydrolysis. <i>Chemical Communications</i> , 2014, 50, 1423-1425.	4.1	35
58	Affinity precipitation of a monoclonal antibody from an industrial harvest feedstock using an ELP- ζ stimuli responsive biopolymer. <i>Biotechnology and Bioengineering</i> , 2014, 111, 1595-1603.	3.3	32
59	Bactericidal activity of elastin-like polypeptide biopolymer with polyhistidine domain and silver. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 119, 66-70.	5.0	11
60	Functional assembly of a multi-enzyme methanol oxidation cascade on a surface-displayed trifunctional scaffold for enhanced NADH production. <i>Chemical Communications</i> , 2013, 49, 3766.	4.1	90
61	Microbial Biosensors: Engineered Microorganisms as the Sensing Machinery. <i>Sensors</i> , 2013, 13, 5777-5795.	3.8	165
62	Polypyrrole nanoribbon based chemiresistive immunosensors for viral plant pathogen detection. <i>Analytical Methods</i> , 2013, 5, 3497.	2.7	62
63	ELP-z and ELP-zz capturing scaffolds for the purification of immunoglobulins by affinity precipitation. <i>Journal of Biotechnology</i> , 2013, 163, 10-16.	3.8	42
64	Use of Flow Cytometry for Rapid, Quantitative Detection of Poliovirus-Infected Cells via TAT Peptide-Delivered Molecular Beacons. <i>Applied and Environmental Microbiology</i> , 2013, 79, 696-700.	3.1	9
65	High-throughput screening for the development of a monoclonal antibody affinity precipitation step using ELP- ζ stimuli responsive biopolymers. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2664-2676.	3.3	23
66	Functional Display of Complex Cellulosomes on the Yeast Surface via Adaptive Assembly. <i>ACS Synthetic Biology</i> , 2013, 2, 14-21.	3.8	84
67	Engineering protein modules for diagnostic applications. <i>Current Opinion in Chemical Engineering</i> , 2013, 2, 416-424.	7.8	2
68	Size-modulated synergy of cellulase clustering for enhanced cellulose hydrolysis. <i>Biotechnology Journal</i> , 2013, 8, 257-261.	3.5	33
69	Functional assembly and characterization of a modular xylanosome for hemicellulose hydrolysis in yeast. <i>Biotechnology and Bioengineering</i> , 2013, 110, 275-285.	3.3	31
70	Engineering a recyclable elastin-like polypeptide capturing scaffold for non-chromatographic protein purification. <i>Biotechnology Progress</i> , 2013, 29, 968-971.	2.6	11
71	Simultaneous Detection of Infectious Human Echoviruses and Adenoviruses by an <i>In Situ</i> Nuclease-Resistant Molecular Beacon-Based Assay. <i>Applied and Environmental Microbiology</i> , 2012, 78, 1584-1588.	3.1	10
72	Tuning Electrical and Optoelectronic Properties of Single Cadmium Telluride Nanoribbon. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9202-9208.	3.1	15

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73	Biologically Assembled Nanobiocatalysts. <i>Topics in Catalysis</i> , 2012, 55, 1138-1145.	2.8	10
74	Engineering a high-affinity scaffold for non-chromatographic protein purification via intein-mediated cleavage. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2829-2835.	3.3	25
75	Enhanced arsenate uptake in <i>Saccharomyces cerevisiae</i> overexpressing the Pho84 phosphate transporter. <i>Biotechnology Progress</i> , 2012, 28, 654-661.	2.6	24
76	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. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 352-357.	4.4	38
77	Co-expression of <i>Arabidopsis thaliana</i> phytochelatin synthase and <i>Treponema denticola</i> cysteine desulphydrase for enhanced arsenic accumulation. <i>Biotechnology and Bioengineering</i> , 2012, 109, 605-608.	3.3	18
78	Synthesis of chalcogenide ternary and quaternary nanotubes through directed compositional alterations of bacterial As ₂ S ₃ nanotubes. <i>Journal of Materials Chemistry</i> , 2011, 21, 10277.	6.7	8
79	A quantum-dot based protein module for in vivo monitoring of protease activity through fluorescence resonance energy transfer. <i>Chemical Communications</i> , 2011, 47, 5259.	4.1	44
80	Detecting RNA viruses in living mammalian cells by fluorescence microscopy. <i>Trends in Biotechnology</i> , 2011, 29, 307-313.	9.3	36
81	A fluorescence resonance energy transfer-based fluorometer assay for screening anti-coxsackievirus B3 compounds. <i>Journal of Virological Methods</i> , 2011, 171, 176-182.	2.1	2
82	Simultaneous cell growth and ethanol production from cellulose by an engineered yeast consortium displaying a functional mini-cellulosome. <i>Microbial Cell Factories</i> , 2011, 10, 89.	4.0	91
83	Single Conducting Polymer Nanowire Based Sequence-Specific, Base-Pair-Length Dependant Label-free DNA Sensor. <i>Electroanalysis</i> , 2011, 23, 371-379.	2.9	38
84	Selective and Rapid Room Temperature Detection of H ₂ S Using Gold Nanoparticle Chain Arrays. <i>Electroanalysis</i> , 2011, 23, 2623-2628.	2.9	32
85	Detection of Murine Norovirus-1 by Using TAT Peptide-Delivered Molecular Beacons. <i>Applied and Environmental Microbiology</i> , 2011, 77, 5517-5520.	3.1	11
86	Systematic engineering of phytochelatin synthesis and arsenic transport for enhanced arsenic accumulation in <i>E. coli</i> . <i>Biotechnology and Bioengineering</i> , 2010, 105, 780-785.	3.3	32
87	Carbon nanotubes-based chemiresistive immunosensor for small molecules: Detection of nitroaromatic explosives. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1297-1301.	10.1	76
88	Conducting polymer 1-dimensional nanostructures for FET sensors. <i>Thin Solid Films</i> , 2010, 519, 964-973.	1.8	40
89	Detection of Infective Poliovirus by a Simple, Rapid, and Sensitive Flow Cytometry Method Based on Fluorescence Resonance Energy Transfer Technology. <i>Applied and Environmental Microbiology</i> , 2010, 76, 584-588.	3.1	19
90	Enzyme mediated synthesis of phytochelatin-capped CdS nanocrystals. <i>Applied Physics Letters</i> , 2010, 97, 123703.	3.3	15

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91	Surface Display of a Functional Minicellulosome by Intracellular Complementation Using a Synthetic Yeast Consortium and Its Application to Cellulose Hydrolysis and Ethanol Production. <i>Applied and Environmental Microbiology</i> , 2010, 76, 7514-7520.	3.1	162
92	Nano Aptasensor for Protective Antigen Toxin of Anthrax. <i>Analytical Chemistry</i> , 2010, 82, 2042-2047.	6.5	95
93	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.	13.7	149
94	Effect of Aspect Ratio (Length:Diameter) on a Single Polypyrrole Nanowire FET Device. <i>Journal of Physical Chemistry C</i> , 2010, 114, 13375-13380.	3.1	40
95	Label-Free Chemiresistive Immunosensors for Viruses. <i>Environmental Science & Technology</i> , 2010, 44, 9030-9035.	10.0	44
96	Molecular beacon-quantum dot-Au nanoparticle hybrid nanoprobe for visualizing virus replication in living cells. <i>Chemical Communications</i> , 2010, 46, 3914.	4.1	72
97	Functional Assembly of Minicellulosomes on the <i>Saccharomyces cerevisiae</i> Cell Surface for Cellulose Hydrolysis and Ethanol Production. <i>Applied and Environmental Microbiology</i> , 2009, 75, 6087-6093.	3.1	188
98	Optimization of a whole-cell cadmium sensor with a toggle gene circuit. <i>Biotechnology Progress</i> , 2009, 25, 898-903.	2.6	53
99	Label-free detection of cupric ions and histidine-tagged proteins using single poly(pyrrole)-NTA chelator conducting polymer nanotube chemiresistive sensor. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1451-1455.	10.1	33
100	Arsenic metabolism by microbes in nature and the impact on arsenic remediation. <i>Current Opinion in Biotechnology</i> , 2009, 20, 659-667.	6.6	166
101	Simultaneous Degradation of Organophosphates and 4-Substituted Phenols by <i>Stenotrophomonas</i> Species LZ-1 with Surface-Displayed Organophosphorus Hydrolase. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 6171-6177.	5.2	24
102	Real-time molecular methods to detect infectious viruses. <i>Seminars in Cell and Developmental Biology</i> , 2009, 20, 49-54.	5.0	33
103	Single Conducting Polymer Nanowire Chemiresistive Label-Free Immunosensor for Cancer Biomarker. <i>Analytical Chemistry</i> , 2009, 81, 2168-2175.	6.5	165
104	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.	5.4	56
105	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.	3.9	72
106	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.	3.3	50
107	Presentation of functional organophosphorus hydrolase fusions on the surface of <i>Escherichia coli</i> by the AIDA autotransporter pathway. <i>Biotechnology and Bioengineering</i> , 2008, 99, 485-490.	3.3	35
108	Enhanced arsenic accumulation by engineered yeast cells expressing <i>Arabidopsis thaliana</i> phytochelatin synthase. <i>Biotechnology and Bioengineering</i> , 2008, 99, 333-340.	3.3	47

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109	Microbial Synthesis of CdS Nanocrystals in Genetically Engineered <i>E. coli</i> . <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5186-5189.	13.8	125
110	Bioremediation: environmental clean-up through pathway engineering. <i>Current Opinion in Biotechnology</i> , 2008, 19, 437-444.	6.6	159
111	Chemical biotechnology: microbial solutions to global change. <i>Current Opinion in Biotechnology</i> , 2008, 19, 541-543.	6.6	10
112	Improved Degradation of Organophosphorus Nerve Agents and p-Nitrophenol by <i>Pseudomonas putida</i> JS444 with Surface-Expressed Organophosphorus Hydrolase. <i>Biotechnology Progress</i> , 2008, 21, 678-681.	2.6	36
113	Rapid identification of inhibitors that interfere with poliovirus replication using a cell-based assay. <i>Antiviral Research</i> , 2008, 77, 232-236.	4.1	65
114	Synthesis and characterization of cadmium telluride nanowire. <i>Nanotechnology</i> , 2008, 19, 325711.	2.6	52
115	Recent biosensing developments in environmental security. <i>Journal of Environmental Monitoring</i> , 2008, 10, 703.	2.1	75
116	Versatile microbial surface-display for environmental remediation and biofuels production. <i>Trends in Microbiology</i> , 2008, 16, 181-188.	7.7	104
117	Cell Surface Display of Functional Macromolecule Fusions on <i>Escherichia coli</i> for Development of an Autofluorescent Whole-Cell Biocatalyst. <i>Environmental Science & Technology</i> , 2008, 42, 6105-6110.	10.0	28
118	Detection of recombinant <i>Pseudomonas putida</i> in the wheat rhizosphere by fluorescence in situ hybridization targeting mRNA and rRNA. <i>Applied Microbiology and Biotechnology</i> , 2008, 79, 511-518.	3.6	10
119	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.	3.1	72
120	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.	7.1	64
121	Detection of Hepatitis A Virus by Using a Combined Cell Culture-Molecular Beacon Assay. <i>Applied and Environmental Microbiology</i> , 2008, 74, 2239-2243.	3.1	30
122	Development of an Autofluorescent Whole-Cell Biocatalyst by Displaying Dual Functional Moieties on <i>Escherichia coli</i> Cell Surfaces and Construction of a Coculture with Organophosphate-Mineralizing Activity. <i>Applied and Environmental Microbiology</i> , 2008, 74, 7733-7739.	3.1	23
123	Bacteria Metabolically Engineered for Enhanced Phytochelatin Production and Cadmium Accumulation. <i>Applied and Environmental Microbiology</i> , 2007, 73, 6317-6320.	3.1	104
124	Comparison of a Reporter Assay and Immunomagnetic Separation Real-Time Reverse Transcription-PCR for the Detection of Enteroviruses in Seeded Environmental Water Samples. <i>Applied and Environmental Microbiology</i> , 2007, 73, 2338-2340.	3.1	33
125	Elastin [®] Calmodulin Scaffold for Protein Microarray Fabrication. <i>Langmuir</i> , 2007, 23, 2277-2279.	3.5	9
126	Biomolecules-carbon nanotubes doped conducting polymer nanocomposites and their sensor application. <i>Talanta</i> , 2007, 74, 370-375.	5.5	60

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127	Genetic Engineering of Self-Assembled Protein Hydrogel Based on Elastin-like Sequences with Metal Binding Functionality. <i>Biomacromolecules</i> , 2007, 8, 3736-3739.	5.4	45
128	Field-Effect Transistors Based on Single Nanowires of Conducting Polymers. <i>Journal of Physical Chemistry C</i> , 2007, 111, 5218-5221.	3.1	77
129	Cadmium removal from contaminated soil by thermally responsive elastin (ELPEC20) biopolymers. <i>Biotechnology and Bioengineering</i> , 2007, 98, 349-355.	3.3	26
130	Single-Walled Carbon Nanotube Based Real-Time Organophosphate Detector. <i>Electroanalysis</i> , 2007, 19, 616-619.	2.9	38
131	In Situ Fabrication of Single Poly(methyl pyrrole) Nanowire. <i>Electroanalysis</i> , 2007, 19, 793-797.	2.9	21
132	Organophosphorus hydrolase multilayer modified microcantilevers for organophosphorus detection. <i>Biosensors and Bioelectronics</i> , 2007, 22, 2636-2642.	10.1	94
133	Affinity purification of plasmid DNA by temperature-triggered precipitation. <i>Nature Protocols</i> , 2007, 2, 1263-1268.	12.0	17
134	Biosensor for direct determination of fenitrothion and EPN using recombinant <i>Pseudomonas putida</i> JS444 with surface-expressed organophosphorus hydrolase. 2. Modified carbon paste electrode. <i>Applied Biochemistry and Biotechnology</i> , 2007, 136, 243-250.	2.9	52
135	Fabrication of Antibody Arrays Using Thermally Responsive Elastin Fusion Proteins. <i>Journal of the American Chemical Society</i> , 2006, 128, 676-677.	13.7	73
136	Use of Fluorescence Resonance Energy Transfer for Rapid Detection of Enteroviral Infection In Vivo. <i>Applied and Environmental Microbiology</i> , 2006, 72, 3710-3715.	3.1	37
137	V-Type Nerve Agent Detection Using a Carbon Nanotube-Based Amperometric Enzyme Electrode. <i>Analytical Chemistry</i> , 2006, 78, 331-336.	6.5	146
138	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.	13.7	52
139	Controlled assembly of multi-segment nanowires by histidine-tagged peptides. <i>Nanotechnology</i> , 2006, 17, 3375-3379.	2.6	23
140	Proteome Changes after Metabolic Engineering to Enhance Aerobic Mineralization of cis-1,2-Dichloroethylene. <i>Journal of Proteome Research</i> , 2006, 5, 1388-1397.	3.7	31
141	Biosensor for Direct Determination of Fenitrothion and EPN Using Recombinant <i>Pseudomonas putida</i> JS444 with Surface Expressed Organophosphorus Hydrolase. 1. Modified Clark Oxygen Electrode. <i>Sensors</i> , 2006, 6, 466-472.	3.8	33
142	Surface Display of Organophosphorus Hydrolase on <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Progress</i> , 2006, 22, 939-943.	2.6	61
143	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.	5.4	70
144	Microbial biosensors. <i>Analytica Chimica Acta</i> , 2006, 568, 200-210.	5.4	403

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145	Enantioconvergent production of (R)-1-phenyl-1,2-ethanediol from styrene oxide by combining the <i>Solanum tuberosum</i> and an evolved <i>Agrobacterium radiobacter</i> AD1 epoxide hydrolases. <i>Biotechnology and Bioengineering</i> , 2006, 94, 522-529.	3.3	67
146	Engineering TCE-degrading rhizobacteria for heavy metal accumulation and enhanced TCE degradation. <i>Biotechnology and Bioengineering</i> , 2006, 95, 399-403.	3.3	40
147	Nanowire-Based Electrochemical Biosensors. <i>Electroanalysis</i> , 2006, 18, 533-550.	2.9	439
148	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. <i>Electroanalysis</i> , 2006, 18, 1047-1054.	2.9	48
149	Durability of hydrophilic and antimicrobial zeolite coatings under water immersion. <i>AIChE Journal</i> , 2006, 52, 1157-1161.	3.6	30
150	Engineering Plant-Microbe Symbiosis for Rhizoremediation of Heavy Metals. <i>Applied and Environmental Microbiology</i> , 2006, 72, 1129-1134.	3.1	261
151	Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides. <i>Protein Engineering, Design and Selection</i> , 2006, 19, 99-105.	2.1	52
152	Electrochemical and optical bioassays of nerve agents based on the organophosphorus-hydrolase mediated growth of cupric ferrocyanide nanoparticles. <i>Electrochemistry Communications</i> , 2005, 7, 1371-1374.	4.7	13
153	Amperometric microbial biosensor for p-nitrophenol using <i>Moraxella</i> sp.-modified carbon paste electrode. <i>Biosensors and Bioelectronics</i> , 2005, 21, 523-527.	10.1	147
154	Determination of organophosphate pesticides at a carbon nanotube/organophosphorus hydrolase electrochemical biosensor. <i>Analytica Chimica Acta</i> , 2005, 530, 185-189.	5.4	251
155	Detection of Heavy Metal Ions in Drinking Water Using a High-Resolution Differential Surface Plasmon Resonance Sensor. <i>Environmental Science & Technology</i> , 2005, 39, 1257-1262.	10.0	213
156	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. <i>Electroanalysis</i> , 2005, 17, 54-58.	2.9	220
157	Reversible Conversion of Conducting Polymer Films from Superhydrophobic to Superhydrophilic. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 6009-6012.	13.8	368
158	Temperature-triggered purification of antibodies. <i>Biotechnology and Bioengineering</i> , 2005, 90, 373-379.	3.3	49
159	Detoxification of organophosphate nerve agents by immobilized dual functional biocatalysts in a cellulose hollow fiber bioreactor. <i>Biotechnology and Bioengineering</i> , 2005, 91, 379-386.	3.3	35
160	Environmental biotechnology: Challenges and opportunities for chemical engineers. <i>AIChE Journal</i> , 2005, 51, 690-695.	3.6	31
161	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.	3.0	55
162	Customizable Biopolymers for Heavy Metal Remediation. <i>Journal of Nanoparticle Research</i> , 2005, 7, 517-523.	1.9	38

#	ARTICLE	IF	CITATIONS
163	Visualization and Detection of Infectious Coxsackievirus Replication Using a Combined Cell Culture-Molecular Beacon Assay. <i>Applied and Environmental Microbiology</i> , 2005, 71, 8397-8401.	3.1	19
164	Real-Time Nucleic Acid Sequence-Based Amplification Assay for Detection of Hepatitis A Virus. <i>Applied and Environmental Microbiology</i> , 2005, 71, 7113-7116.	3.1	58
165	Protein Engineering of Epoxide Hydrolase from <i>Agrobacterium radiobacter</i> AD1 for Enhanced Activity and Enantioselective Production of (R)-1-Phenylethane-1,2-Diol. <i>Applied and Environmental Microbiology</i> , 2005, 71, 3995-4003.	3.1	79
166	Bioaffinity Sensing Using Biologically Functionalized Conducting-Polymer Nanowire. <i>Journal of the American Chemical Society</i> , 2005, 127, 496-497.	13.7	385
167	Genetically Engineered Elastin-Protein A Fusion as a Universal Platform for Homogeneous, Phase-separation Immunoassay. <i>Analytical Chemistry</i> , 2005, 77, 2318-2322.	6.5	52
168	Direct Determination of p-Nitrophenyl Substituent Organophosphorus Nerve Agents Using a Recombinant <i>Pseudomonas putida</i> S444-Modified Clark Oxygen Electrode. <i>Journal of Agricultural and Food Chemistry</i> , 2005, 53, 524-527.	5.2	48
169	Removal of Estrogenic Pollutants from Contaminated Water Using Molecularly Imprinted Polymers. <i>Environmental Science & Technology</i> , 2005, 39, 8958-8962.	10.0	121
170	Highly Sensitive and Selective Amperometric Microbial Biosensor for Direct Determination of p-Nitrophenyl-Substituted Organophosphate Nerve Agents. <i>Environmental Science & Technology</i> , 2005, 39, 8853-8857.	10.0	90
171	Altering the Substrate Specificity of Organophosphorus Hydrolase for Enhanced Hydrolysis of Chlorpyrifos. <i>Applied and Environmental Microbiology</i> , 2004, 70, 4681-4685.	3.1	106
172	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.	3.1	50
173	Active Site Engineering of the Epoxide Hydrolase from <i>Agrobacterium radiobacter</i> AD1 to Enhance Aerobic Mineralization of cis-1,2-Dichloroethylene in Cells Expressing an Evolved Toluene ortho-Monooxygenase. <i>Journal of Biological Chemistry</i> , 2004, 279, 46810-46817.	3.4	59
174	Affinity purification of plasmid DNA by temperature-triggered precipitation. <i>Biotechnology and Bioengineering</i> , 2004, 85, 293-297.	3.3	27
175	Whole cell-enzyme hybrid amperometric biosensor for direct determination of organophosphorus nerve agents with p-nitrophenyl substituent. <i>Biotechnology and Bioengineering</i> , 2004, 85, 706-713.	3.3	34
176	Microchip enzymatic assay of organophosphate nerve agents. <i>Analytica Chimica Acta</i> , 2004, 505, 183-187.	5.4	57
177	Outrunning Nature: Directed Evolution of Superior Biocatalysts. <i>Journal of Chemical Education</i> , 2004, 81, 126.	2.3	15
178	Cadmium Removal from Contaminated Soil by Tunable Biopolymers. <i>Environmental Science & Technology</i> , 2004, 38, 3148-3152.	10.0	48
179	Enhanced Arsenic Accumulation in Engineered Bacterial Cells Expressing ArsR. <i>Applied and Environmental Microbiology</i> , 2004, 70, 4582-4587.	3.1	181
180	Individually Addressable Conducting Polymer Nanowires Array. <i>Nano Letters</i> , 2004, 4, 1237-1239.	9.1	227

#	ARTICLE	IF	CITATIONS
181	Biological Detoxification of Organophosphate Pesticides. ACS Symposium Series, 2003, , 25-36.	0.5	2
182	A Microbial Biosensor for p-Nitrophenol Using <i>Arthrobacter</i> Sp.. Electroanalysis, 2003, 15, 1160-1164.	2.9	33
183	Thermally triggered purification and immobilization of elastin-OPH fusions. Biotechnology and Bioengineering, 2003, 81, 74-79.	3.3	66
184	One-step metal-affinity purification of histidine-tagged proteins by temperature-triggered precipitation. Biotechnology and Bioengineering, 2003, 82, 605-611.	3.3	49
185	An immunoassay for atrazine using tunable immunosorbent. Analytical Biochemistry, 2003, 322, 251-256.	2.4	28
186	A tubulin-based fluorescent polarization assay for paclitaxel. Analytical Biochemistry, 2003, 321, 44-49.	2.4	11
187	Novel synthetic phytochelatin-based capacitive biosensor for heavy metal ion detection. Biosensors and Bioelectronics, 2003, 18, 547-553.	10.1	120
188	Cell Surface Display of Organophosphorus Hydrolase in <i>Pseudomonas putida</i> Using an Ice-Nucleation Protein Anchor. Biotechnology Progress, 2003, 19, 1612-1614.	2.6	44
189	Detection of Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) Using Toluene Dioxygenase-Peroxidase Coupling Reactions. Biotechnology Progress, 2003, 19, 1812-1815.	2.6	33
190	A Temperature Responsive Biopolymer for Mercury Remediation. Environmental Science & Technology, 2003, 37, 4457-4462.	10.0	72
191	Enhanced Mercury Biosorption by Bacterial Cells with Surface-Displayed MerR. Applied and Environmental Microbiology, 2003, 69, 3176-3180.	3.1	122
192	Towards a Capacitive Enzyme Sensor for Direct Determination of Organophosphorus Pesticides: Fundamental Studies and Aspects of Development. Sensors, 2003, 3, 119-127.	3.8	24
193	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.	3.1	175
194	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. Applied and Environmental Microbiology, 2002, 68, 1684-1689.	3.1	59
195	Enhanced Bioaccumulation of Heavy Metals by Bacterial Cells with Surface-Displayed Synthetic Phytochelatin. ACS Symposium Series, 2002, , 411-418.	0.5	2
196	Heavy Metal Removal by Novel CBD-EC20 Sorbents Immobilized on Cellulose. Biomacromolecules, 2002, 3, 462-465.	5.4	32
197	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. Electroanalysis, 2002, 14, 273-276.	2.9	57
198	Cell-Surface display of heterologous proteins: From high-throughput screening to environmental applications. Biotechnology and Bioengineering, 2002, 79, 496-503.	3.3	104

#	ARTICLE	IF	CITATIONS
199	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.	3.5	73
200	Microbial biosensor for p-nitrophenol using <i>Moraxella</i> sp.. <i>Analytica Chimica Acta</i> , 2002, 470, 79-86.	5.4	36
201	Dual amperometric-potentiometric biosensor detection system for monitoring organophosphorus neurotoxins. <i>Analytica Chimica Acta</i> , 2002, 469, 197-203.	5.4	58
202	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. <i>Electroanalysis</i> , 2002, 14, 273.	2.9	1
203	Capillary Electrophoresis Microchips for Separation and Detection of Organophosphate Nerve Agents. <i>Analytical Chemistry</i> , 2001, 73, 1804-1808.	6.5	144
204	Flow Injection Amperometric Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Environmental Science & Technology</i> , 2001, 35, 2562-2565.	10.0	111
205	Biosensors for direct determination of organophosphate pesticides. <i>Biosensors and Bioelectronics</i> , 2001, 16, 225-230.	10.1	348
206	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.	2.4	131
207	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.	3.3	137
208	Tunable Biopolymers for Heavy Metal Removal. <i>Macromolecules</i> , 2001, 34, 2257-2261.	4.8	105
209	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.	10.1	130
210	Cell Surface Display of Organophosphorus Hydrolase Using Ice Nucleation Protein. <i>Biotechnology Progress</i> , 2001, 17, 76-80.	2.6	109
211	Effects of FIS Overexpression on Cell Growth, rRNA Synthesis, and Ribosome Content in <i>Escherichia coli</i> . <i>Biotechnology Progress</i> , 2001, 17, 252-257.	2.6	10
212	Whole-Cell Immobilization Using Cell Surface-Exposed Cellulose-Binding Domain. <i>Biotechnology Progress</i> , 2001, 17, 407-411.	2.6	38
213	Genetic Engineering of <i>Escherichia coli</i> for Enhanced Uptake and Bioaccumulation of Mercury. <i>Applied and Environmental Microbiology</i> , 2001, 67, 5335-5338.	3.1	127
214	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. <i>Biotechnology and Bioengineering</i> , 2000, 69, 591-596.	3.3	100
215	Enhanced bioaccumulation of heavy metals by bacterial cells displaying synthetic phytochelatins. <i>Biotechnology and Bioengineering</i> , 2000, 70, 518-524.	3.3	185
216	Molecular Beacons: A Real-Time Polymerase Chain Reaction Assay for Detecting <i>Salmonella</i> . <i>Analytical Biochemistry</i> , 2000, 280, 166-172.	2.4	146

#	ARTICLE	IF	CITATIONS
217	Biodetoxification of coumaphos insecticide using immobilized <i>Escherichia coli</i> expressing organophosphorus hydrolase enzyme on cell surface. <i>Biotechnology and Bioprocess Engineering</i> , 2000, 5, 436-440.	2.6	20
218	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. <i>Biotechnology and Bioengineering</i> , 2000, 69, 591-596.	3.3	5
219	Biosensor for direct determination of organophosphate nerve agents. 1. Potentiometric enzyme electrode. <i>Biosensors and Bioelectronics</i> , 1999, 14, 77-85.	10.1	178
220	Engineering of improved microbes and enzymes for bioremediation. <i>Current Opinion in Biotechnology</i> , 1999, 10, 137-141.	6.6	96
221	Fiber-Optic Enzyme Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Biotechnology Progress</i> , 1999, 15, 130-134.	2.6	109
222	Remote Biosensor for In-Situ Monitoring of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1999, 11, 866-869.	2.9	97
223	Proteome analysis of factor for inversion stimulation (Fis) overproduction in <i>Escherichia coli</i> . <i>Electrophoresis</i> , 1999, 20, 798-805.	2.4	17
224	Detoxification of organophosphate nerve agents by immobilized <i>Escherichia coli</i> with surface-expressed organophosphorus hydrolase. <i>Biotechnology and Bioengineering</i> , 1999, 63, 216-223.	3.3	84
225	Tuning biphenyl dioxygenase for extended substrate specificity. , 1999, 63, 544-551.		90
226	Amperometric Thick-Film Strip Electrodes for Monitoring Organophosphate Nerve Agents Based on Immobilized Organophosphorus Hydrolase. <i>Analytical Chemistry</i> , 1999, 71, 2246-2249.	6.5	172
227	Remote Biosensor for In-Situ Monitoring of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1999, 11, 866-869.	2.9	2
228	Factors Influencing Parathion Degradation by Recombinant <i>Escherichia coli</i> with Surface-Expressed Organophosphorus Hydrolase. <i>Biotechnology Progress</i> , 1998, 14, 275-278.	2.6	16
229	The use of live biocatalysts for pesticide detoxification. <i>Trends in Biotechnology</i> , 1998, 16, 71-76.	9.3	83
230	A Potentiometric Microbial Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1998, 10, 733-737.	2.9	50
231	Enzyme biosensor for determination of organophosphates. <i>Field Analytical Chemistry and Technology</i> , 1998, 2, 363-369.	0.8	26
232	Biosensor for Direct Determination of Organophosphate Nerve Agents Using Recombinant <i>Escherichia coli</i> with Surface-Expressed Organophosphorus Hydrolase. 2. Fiber-Optic Microbial Biosensor. <i>Analytical Chemistry</i> , 1998, 70, 5042-5046.	6.5	129
233	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.	6.5	181
234	Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase. <i>Nature Biotechnology</i> , 1997, 15, 984-987.	17.5	298

#	ARTICLE	IF	CITATIONS
235	Innovative bioreactors. <i>Current Opinion in Biotechnology</i> , 1997, 8, 165-168.	6.6	7
236	Improvement in recombinant protein production in ppGpp-deficient <i>Escherichia coli</i> . , 1997, 53, 379-386.		26
237	Design of expression systems for metabolic engineering: Coordinated synthesis and degradation of glycogen. , 1997, 55, 419-426.		2
238	Elevated Fis expression enhances recombinant protein production in <i>Escherichia coli</i> . , 1997, 56, 138-144.		4
239	Process characterization of a novel cross-regulation system for cloned protein production in <i>Escherichia coli</i> . <i>Biotechnology Progress</i> , 1995, 11, 397-402.	2.6	12
240	Communication to the editor. Application of the cross-regulation system as a metabolic switch. <i>Biotechnology and Bioengineering</i> , 1994, 43, 1190-1193.	3.3	13
241	Intracellular expression of <i>Vitreoscilla</i> hemoglobin alters the aerobic metabolism of <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Progress</i> , 1994, 10, 308-313.	2.6	72
242	Construction and characterization of a novel cross-regulation system for regulating cloned gene expression in <i>Escherichia coli</i> . <i>Gene</i> , 1993, 130, 15-22.	2.2	33
243	Molecular design of expression systems: Comparison of different control configurations using molecular mechanism models. <i>Biotechnology and Bioengineering</i> , 1991, 38, 679-687.	3.3	20
244	Prospective of Conducting Polymer Nanowire for Gas Sensing Application to its Physical Scaling. <i>Advanced Materials Research</i> , 0, 584, 224-228.	0.3	3