Ashok Mulchandani

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

353 papers

17,050 citations

70 h-index 110 g-index

361 ext. papers

18,562 ext. citations

5.9 avg, IF

6.79 L-index

#	Paper	IF	Citations
353	Nanowire-Based Electrochemical Biosensors. <i>Electroanalysis</i> , 2006 , 18, 533-550	3	390
352	Bioaffinity sensing using biologically functionalized conducting-polymer nanowire. <i>Journal of the American Chemical Society</i> , 2005 , 127, 496-7	16.4	357
351	Microbial biosensors. <i>Analytica Chimica Acta</i> , 2006 , 568, 200-10	6.6	353
350	Reversible conversion of conducting polymer films from superhydrophobic to superhydrophilic. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 6009-12	16.4	341
349	Biosensors for direct determination of organophosphate pesticides. <i>Biosensors and Bioelectronics</i> , 2001 , 16, 225-30	11.8	297
348	Biodegradation of organophosphorus pesticides by surface-expressed organophosphorus hydrolase. <i>Nature Biotechnology</i> , 1997 , 15, 984-7	44.5	260
347	Determination of organophosphate pesticides at a carbon nanotube/organophosphorus hydrolase electrochemical biosensor. <i>Analytica Chimica Acta</i> , 2005 , 530, 185-189	6.6	227
346	Engineering plant-microbe symbiosis for rhizoremediation of heavy metals. <i>Applied and Environmental Microbiology</i> , 2006 , 72, 1129-34	4.8	222
345	Individually Addressable Conducting Polymer Nanowires Array. <i>Nano Letters</i> , 2004 , 4, 1237-1239	11.5	213
344	A Disposable Biosensor for Organophosphorus Nerve Agents Based on Carbon Nanotubes Modified Thick Film Strip Electrode. <i>Electroanalysis</i> , 2005 , 17, 54-58	3	200
343	MoS-Based Optoelectronic Gas Sensor with Sub-parts-per-billion Limit of NO Gas Detection. <i>ACS Nano</i> , 2019 , 13, 3196-3205	16.7	2 00
342	Graphene nanomesh as highly sensitive chemiresistor gas sensor. <i>Analytical Chemistry</i> , 2012 , 84, 8171-8	3 7.8	196
341	Enhanced bioaccumulation of heavy metals by bacterial cells displaying synthetic phytochelatins. <i>Biotechnology and Bioengineering</i> , 2000 , 70, 518-24	4.9	166
340	Biosensor for direct determination of organophosphate nerve agents using recombinant Escherichia coli with surface-expressed organophosphorus hydrolase. 1. Potentiometric microbial electrode. <i>Analytical Chemistry</i> , 1998 , 70, 4140-5	7.8	157
339	Biosensor for direct determination of organophosphate nerve agents. 1. Potentiometric enzyme electrode. <i>Biosensors and Bioelectronics</i> , 1999 , 14, 77-85	11.8	156
338	Sensitive detection of H2S using gold nanoparticle decorated single-walled carbon nanotubes. <i>Analytical Chemistry</i> , 2010 , 82, 250-7	7.8	155
337	Bacterial cell surface display of organophosphorus hydrolase for selective screening of improved hydrolysis of organophosphate nerve agents. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 2026-30	04.8	155

336	Amperometric thick-film strip electrodes for monitoring organophosphate nerve agents based on immobilized organophosphorus hydrolase. <i>Analytical Chemistry</i> , 1999 , 71, 2246-9	7.8	152	
335	Enhanced arsenic accumulation in engineered bacterial cells expressing ArsR. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 4582-7	4.8	147	
334	Thermal conductivity of graphene with defects induced by electron beam irradiation. <i>Nanoscale</i> , 2016 , 8, 14608-16	7.7	144	
333	Polyaniline nanowires-gold nanoparticles hybrid network based chemiresistive hydrogen sulfide sensor. <i>Applied Physics Letters</i> , 2009 , 94, 083502	3.4	144	
332	Single conducting polymer nanowire chemiresistive label-free immunosensor for cancer biomarker. <i>Analytical Chemistry</i> , 2009 , 81, 2168-75	7.8	140	
331	Single Polypyrrole Nanowire Ammonia Gas Sensor. <i>Electroanalysis</i> , 2007 , 19, 2125-2130	3	140	
330	Carbon nanomaterial-based electrochemical biosensors for label-free sensing of environmental pollutants. <i>Chemosphere</i> , 2016 , 143, 85-98	8.4	136	
329	Single-walled carbon nanotube-based chemiresistive affinity biosensors for small molecules: ultrasensitive glucose detection. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5024-6	16.4	136	
328	Phylogenetic diversity and metabolic potential of activated sludge microbial communities in full-scale wastewater treatment plants. <i>Environmental Science & Environmental Sci</i>	10.3	136	
327	Bioremediation: environmental clean-up through pathway engineering. <i>Current Opinion in Biotechnology</i> , 2008 , 19, 437-44	11.4	136	
326	Amperometric microbial biosensor for p-nitrophenol using Moraxella spmodified carbon paste electrode. <i>Biosensors and Bioelectronics</i> , 2005 , 21, 523-7	11.8	129	
325	Simultaneous degradation of organophosphorus pesticides and p-nitrophenol by a genetically engineered Moraxella sp. with surface-expressed organophosphorus hydrolase. <i>Biotechnology and Bioengineering</i> , 2001 , 76, 318-24	4.9	129	
324	Single-Channel Microchip for Fast Screening and Detailed Identification of Nitroaromatic Explosives or Organophosphate Nerve Agents. <i>Analytical Chemistry</i> , 2002 , 74, 1187-1191	7.8	129	
323	Molecular beacons: a real-time polymerase chain reaction assay for detecting Salmonella. <i>Analytical Biochemistry</i> , 2000 , 280, 166-72	3.1	129	
322	V-type nerve agent detection using a carbon nanotube-based amperometric enzyme electrode. <i>Analytical Chemistry</i> , 2006 , 78, 331-6	7.8	124	
321	Conducting polymer nanowires for chemiresistive and FET-based bio/chemical sensors. <i>Journal of Materials Chemistry</i> , 2010 , 20, 3131		122	
320	Removal of estrogenic pollutants from contaminated water using molecularly imprinted polymers. <i>Environmental Science & Environmental </i>	10.3	117	
319	Biosensor for direct determination of organophosphate nerve agents using recombinant Escherichia coli with surface-expressed organophosphorus hydrolase. 2. Fiber-optic microbial biosensor. <i>Analytical Chemistry</i> , 1998 , 70, 5042-6	7.8	116	

318	Use of real-time polymerase chain reaction and molecular beacons for the detection of Escherichia coli O157:H7. <i>Analytical Biochemistry</i> , 2001 , 289, 281-8	3.1	113
317	Amperometric microbial biosensor for direct determination of organophosphate pesticides using recombinant microorganism with surface expressed organophosphorus hydrolase. <i>Biosensors and Bioelectronics</i> , 2001 , 16, 433-7	11.8	113
316	Genetic engineering of Escherichia coli for enhanced uptake and bioaccumulation of mercury. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 5335-8	4.8	112
315	Measurements of chemical warfare agent degradation products using an electrophoresis microchip with contactless conductivity detector. <i>Analytical Chemistry</i> , 2002 , 74, 6121-5	7.8	112
314	Capillary electrophoresis microchips for separation and detection of organophosphate nerve agents. <i>Analytical Chemistry</i> , 2001 , 73, 1804-8	7.8	112
313	Enhanced mercury biosorption by bacterial cells with surface-displayed MerR. <i>Applied and Environmental Microbiology</i> , 2003 , 69, 3176-80	4.8	110
312	Novel synthetic phytochelatin-based capacitive biosensor for heavy metal ion detection. <i>Biosensors and Bioelectronics</i> , 2003 , 18, 547-53	11.8	105
311	Porphyrins-Functionalized Single-Walled Carbon Nanotubes Chemiresistive Sensor Arrays for VOCs. Journal of Physical Chemistry C, 2012 , 116, 3845-3850	3.8	104
310	Carbon nanotubes-based chemiresistive biosensors for detection of microorganisms. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 1437-41	11.8	102
309	Flow injection amperometric enzyme biosensor for direct determination of organophosphate nerve agents. <i>Environmental Science & Environmental Science </i>	10.3	100
308	Microbial synthesis of CdS nanocrystals in genetically engineered E. coli. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 5186-9	16.4	98
307	Altering the substrate specificity of organophosphorus hydrolase for enhanced hydrolysis of chlorpyrifos. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 4681-5	4.8	94
306	Tunable Biopolymers for Heavy Metal Removal. <i>Macromolecules</i> , 2001 , 34, 2257-2261	5.5	94
305	Carbon nanotubes and graphene nano field-effect transistor-based biosensors. <i>TrAC - Trends in Analytical Chemistry</i> , 2016 , 79, 222-232	14.6	92
304	Versatile microbial surface-display for environmental remediation and biofuels production. <i>Trends in Microbiology</i> , 2008 , 16, 181-8	12.4	91
303	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes. <i>Biotechnology and Bioengineering</i> , 2000 , 69, 591-	6 ^{4.9}	89
302	Remote Biosensor for In-Situ MOnitoring of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1999 , 11, 866-869	3	89
301	Bacteria metabolically engineered for enhanced phytochelatin production and cadmium accumulation. <i>Applied and Environmental Microbiology</i> , 2007 , 73, 6317-20	4.8	88

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300	Engineering of improved microbes and enzymes for bioremediation. <i>Current Opinion in Biotechnology</i> , 1999 , 10, 137-41	11.4	88
299	Fiber-optic enzyme biosensor for direct determination of organophosphate nerve agents. <i>Biotechnology Progress</i> , 1999 , 15, 130-4	2.8	88
298	Biofunctionalized Nanostructured Zirconia for Biomedical Application: A Smart Approach for Oral Cancer Detection. <i>Advanced Science</i> , 2015 , 2, 1500048	13.6	87
297	Nano aptasensor for protective antigen toxin of anthrax. <i>Analytical Chemistry</i> , 2010 , 82, 2042-7	7.8	87
296	Cell surface display of organophosphorus hydrolase using ice nucleation protein. <i>Biotechnology Progress</i> , 2001 , 17, 76-80	2.8	87
295	Electronic detection of microRNA at attomolar level with high specificity. <i>Analytical Chemistry</i> , 2013 , 85, 8061-4	7.8	86
294	Organophosphorus hydrolase multilayer modified microcantilevers for organophosphorus detection. <i>Biosensors and Bioelectronics</i> , 2007 , 22, 2636-42	11.8	85
293	Highly sensitive and selective amperometric microbial biosensor for direct determination of p-nitrophenyl-substituted organophosphate nerve agents. <i>Environmental Science & amp; Technology</i> , 2005 , 39, 8853-7	10.3	82
292	Coimmobilization of urease and glutamate dehydrogenase in electrochemically prepared polypyrrole-polyvinyl sulfonate films. <i>Applied Biochemistry and Biotechnology</i> , 2001 , 96, 249-57	3.2	81
291	Hexavalent chromium removal mechanism using conducting polymers. <i>Journal of Hazardous Materials</i> , 2013 , 252-253, 99-106	12.8	78
29 0	Microbial inhibition kinetics revisited. Enzyme and Microbial Technology, 1989, 11, 66-73	3.8	77
289	Detoxification of organophosphate nerve agents by immobilized Escherichia coli with surface-expressed organophosphorus hydrolase. <i>Biotechnology and Bioengineering</i> , 1999 , 63, 216-23	4.9	75
288	Label-free, chemiresistor immunosensor for stress biomarker cortisol in saliva. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 4382-6	11.8	74
287	The use of live biocatalysts for pesticide detoxification. <i>Trends in Biotechnology</i> , 1998 , 16, 71-6	15.1	73
286	Amperometric Detection of Peroxides with Poly(anilinomethylferrocene)-Modified Enzyme Electrodes. <i>Analytical Chemistry</i> , 1995 , 67, 94-100	7.8	73
285	A dual amperometric/potentiometric FIA-based biosensor for the distinctive detection of organophosphorus pesticides. <i>Sensors and Actuators B: Chemical</i> , 2003 , 95, 291-296	8.5	71
284	Molecular beacon-quantum dot-Au nanoparticle hybrid nanoprobes for visualizing virus replication in living cells. <i>Chemical Communications</i> , 2010 , 46, 3914-6	5.8	70
283	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	4.8	70

282	Aqueous sol-gel encapsulation of genetically engineered Moraxella spp. cells for the detection of organophosphates. <i>Biosensors and Bioelectronics</i> , 2005 , 20, 1433-7	11.8	70
281	Field-Effect Transistors Based on Single Nanowires of Conducting Polymers. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 5218-5221	3.8	69
280	Simple and label-free electrochemical impedance Amelogenin gene hybridization biosensing based on reduced graphene oxide. <i>Biosensors and Bioelectronics</i> , 2014 , 58, 145-52	11.8	68
279	Size-controlled electrochemical synthesis and properties of SnO2 nanotubes. <i>Nanotechnology</i> , 2009 , 20, 185602	3.4	68
278	Nonenzymatic Glucose Sensor Based on Platinum Nanoflowers Decorated Multiwalled Carbon Nanotubes-Graphene Hybrid Electrode. <i>Electroanalysis</i> , 2014 , 26, 103-108	3	67
277	Thermally triggered purification and immobilization of elastin-OPH fusions. <i>Biotechnology and Bioengineering</i> , 2003 , 81, 74-9	4.9	66
276	Flow injection amperometric detection of OP nerve agents based on an organophosphorus-hydrolase biosensor detector. <i>Biosensors and Bioelectronics</i> , 2003 , 18, 255-60	11.8	66
275	Fabrication of antibody arrays using thermally responsive elastin fusion proteins. <i>Journal of the American Chemical Society</i> , 2006 , 128, 676-7	16.4	65
274	A temperature responsive biopolymer for mercury remediation. <i>Environmental Science & Environmental Science & Environmental Science & Technology</i> , 2003 , 37, 4457-62	10.3	65
273	Carbon Nanotubes-Modified Screen-Printed Electrodes for Chemical Sensors and Biosensors. <i>Analytical Letters</i> , 2004 , 37, 3185-3204	2.2	65
272	Carbon nanotubes-based chemiresistive immunosensor for small molecules: detection of nitroaromatic explosives. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 1297-301	11.8	64
271	Electrodeposition of maghemite (Fe2O3) nanoparticles. Chemical Engineering Journal, 2008, 139, 208-2	2 1 624.7	63
270	Oxygen requirement in pullulan fermentation. Applied Microbiology and Biotechnology, 1988, 28, 361-36	5 6 .7	63
269	Conducting polymer nanowires-based label-free biosensors. <i>Current Opinion in Biotechnology</i> , 2011 , 22, 502-8	11.4	62
268	Organophosphorus hydrolase-based assay for organophosphate pesticides. <i>Biotechnology Progress</i> , 1999 , 15, 517-21	2.8	62
267	Recent biosensing developments in environmental security. <i>Journal of Environmental Monitoring</i> , 2008 , 10, 703-12		61
266	Cell surface display of synthetic phytochelatins using ice nucleation protein for enhanced heavy metal bioaccumulation. <i>Journal of Inorganic Biochemistry</i> , 2002 , 88, 223-7	4.2	61
265	Highly selective and rapid arsenic removal by metabolically engineered Escherichia coli cells expressing Fucus vesiculosus metallothionein. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 2924-7	74.8	60

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264	Microbial biosensor for direct determination of nitrophenyl-substituted organophosphate nerve agents using genetically engineered Moraxella sp. <i>Analytica Chimica Acta</i> , 2006 , 568, 217-21	6.6	59	
263	A heparin-functionalized carbon nanotube-based affinity biosensor for dengue virus. <i>Biosensors and Bioelectronics</i> , 2017 , 91, 811-816	11.8	58	
262	Conducting polymer coated single-walled carbon nanotube gas sensors for the detection of volatile organic compounds. <i>Talanta</i> , 2014 , 123, 109-14	6.2	58	
261	Magnetically Assembled Multisegmented Nanowires and Their Applications. <i>Electroanalysis</i> , 2009 , 21, 61-67	3	58	
260	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, 17522-5	11.5	58	
259	A simple colorimetric DNA detection by target-induced hybridization chain reaction for isothermal signal amplification. <i>Analytical Biochemistry</i> , 2014 , 457, 19-23	3.1	57	
258	Graphene hybrids: synthesis strategies and applications in sensors and sensitized solar cells. <i>Frontiers in Chemistry</i> , 2015 , 3, 38	5	57	
257	Efficient reduction of CO by the molybdenum-containing formate dehydrogenase from (). <i>Journal of Biological Chemistry</i> , 2017 , 292, 16872-16879	5.4	56	
256	Principles and applications of biosensors for bioprocess monitoring and control. <i>Critical Reviews in Biotechnology</i> , 1995 , 15, 105-24	9.4	56	
255	Sensitive Detection of Elemental Mercury Vapor by Gold Nanoparticle Decorated Carbon Nanotube Sensors. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 13927-13931	3.8	55	
254	Surface display of organophosphorus hydrolase on Saccharomyces cerevisiae. <i>Biotechnology Progress</i> , 2006 , 22, 939-43	2.8	55	
253	Microchip capillary electrophoresis with electrochemical detection of thiol-containing degradation products of V-type nerve agents. <i>Analytical Chemistry</i> , 2004 , 76, 4721-6	7.8	55	
252	Mediator-free microfluidics biosensor based on titania irconia nanocomposite for urea detection. <i>RSC Advances</i> , 2013 , 3, 228-235	3.7	54	
251	Hybrid tin oxide-SWNT nanostructures based gas sensor. <i>Electrochimica Acta</i> , 2013 , 92, 484-490	6.7	53	
250	Real-time nucleic acid sequence-based amplification assay for detection of hepatitis A virus. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 7113-6	4.8	53	
249	Batch kinetics of microbial polysaccharide biosynthesis. <i>Biotechnology and Bioengineering</i> , 1988 , 32, 63	9-46	53	
248	Electrical and gas sensing properties of polyaniline functionalized single-walled carbon nanotubes. <i>Nanotechnology</i> , 2010 , 21, 75502	3.4	52	
247	Conducting polymer nanowire-based chemiresistive biosensor for the detection of bacterial spores. <i>Biosensors and Bioelectronics</i> , 2010 , 25, 2309-12	11.8	52	

246	Biomolecules-carbon nanotubes doped conducting polymer nanocomposites and their sensor application. <i>Talanta</i> , 2007 , 74, 370-5	6.2	52
245	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity. <i>Electroanalysis</i> , 2002 , 14, 273-276	3	52
244	Bactericidal and ammonia removal activity of silver ion-exchanged zeolite. <i>Bioresource Technology</i> , 2012 , 117, 86-91	11	51
243	Molecular beacons: a real-time polymerase chain reaction assay for detecting Escherichia coli from fresh produce and water. <i>Analytica Chimica Acta</i> , 2008 , 614, 208-12	6.6	51
242	Dual amperometricpotentiometric biosensor detection system for monitoring organophosphorus neurotoxins. <i>Analytica Chimica Acta</i> , 2002 , 469, 197-203	6.6	51
241	Development and application of a biosensor for hypoxanthine in fish extract. <i>Analytica Chimica Acta</i> , 1989 , 221, 215-222	6.6	51
240	Developments and applications of biosensors. <i>Trends in Biotechnology</i> , 1988 , 6, 310-316	15.1	50
239	Electrochemically Functionalized Seamless Three-Dimensional Graphene-Carbon Nanotube Hybrid for Direct Electron Transfer of Glucose Oxidase and Bioelectrocatalysis. <i>Langmuir</i> , 2015 , 31, 13054-61	4	49
238	An electrochemically reduced graphene oxide chemiresistive sensor for sensitive detection of Hg ion in water samples. <i>Journal of Hazardous Materials</i> , 2016 , 320, 226-233	12.8	49
237	Genetically engineered elastin-protein A fusion as a universal platform for homogeneous, phase-separation immunoassay. <i>Analytical Chemistry</i> , 2005 , 77, 2318-22	7.8	49
236	Simple conjugation and purification of quantum dot-antibody complexes using a thermally responsive elastin-protein L scaffold as immunofluoresecent agents. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14756-7	16.4	49
235	Microchip enzymatic assay of organophosphate nerve agents. <i>Analytica Chimica Acta</i> , 2004 , 505, 183-18	7 6.6	49
234	Detoxification of the organophosphate nerve agent coumaphos using organophosphorus hydrolase immobilized on cellulose materials. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2005 , 32, 554-60	4.2	49
233	Platinum nanoflowers decorated three-dimensional graphenellarbon nanotubes hybrid with enhanced electrocatalytic activity. <i>Journal of Power Sources</i> , 2013 , 223, 23-29	8.9	48
232	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. <i>Applied and Environmental Microbiology</i> , 2002 , 68, 1684-9	4.8	48
231	Label-Free Electrical Immunosensor for Highly Sensitive and Specific Detection of Microcystin-LR in Water Samples. <i>Environmental Science & Environmental Science & Environmen</i>	10.3	47
230	Single-Walled Carbon Nanotube P oly(porphyrin) Hybrid for Volatile Organic Compounds Detection. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 1602-1610	3.8	47
229	Synthesis and characterization of cadmium telluride nanowire. <i>Nanotechnology</i> , 2008 , 19, 325711	3.4	47

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228	putida JS444 with surface-expressed organophosphorous hydrolase. 2. Modified carbon paste electrode. <i>Applied Biochemistry and Biotechnology</i> , 2007 , 136, 243-50	3.2	47	
227	One-step metal-affinity purification of histidine-tagged proteins by temperature-triggered precipitation. <i>Biotechnology and Bioengineering</i> , 2003 , 82, 605-11	4.9	47	
226	Ferrocene-Conjugated Polyaniline-Modified Enzyme Electrodes for Determination of Peroxides in Organic Media. <i>Analytical Chemistry</i> , 1995 , 67, 1109-1114	7.8	47	
225	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, 4371-4	4.8	46	
224	Functional analysis of organophosphorus hydrolase variants with high degradation activity towards organophosphate pesticides. <i>Protein Engineering, Design and Selection</i> , 2006 , 19, 99-105	1.9	45	
223	Primary amine-functionalized polyaniline nanothin film sensor for detecting formaldehyde. <i>Sensors and Actuators B: Chemical</i> , 2014 , 194, 255-259	8.5	44	
222	A Potentiometric Microbial Biosensor for Direct Determination of Organophosphate Nerve Agents. <i>Electroanalysis</i> , 1998 , 10, 733-737	3	44	
221	Surface display of MPH on Pseudomonas putida JS444 using ice nucleation protein and its application in detoxification of organophosphates. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 30-7	4.9	44	
220	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. <i>Electroanalysis</i> , 2006 , 18, 1047-1054	3	44	
219	Coexpression of two detoxifying pesticide-degrading enzymes in a genetically engineered bacterium. <i>International Biodeterioration and Biodegradation</i> , 2006 , 58, 70-76	4.8	44	
218	Temperature-triggered purification of antibodies. <i>Biotechnology and Bioengineering</i> , 2005 , 90, 373-9	4.9	44	
217	Optimization of a whole-cell cadmium sensor with a toggle gene circuit. <i>Biotechnology Progress</i> , 2009 , 25, 898-903	2.8	43	
216	Direct determination of p-nitrophenyl substituent organophosphorus nerve agents using a recombinant Pseudomonas putida JS444-modified Clark oxygen electrode. <i>Journal of Agricultural and Food Chemistry</i> , 2005 , 53, 524-7	5.7	43	
215	Ferrocene-conjugated m-phenylenediamine conducting polymer-incorporated peroxidase biosensors. <i>Analytical Biochemistry</i> , 1999 , 267, 141-7	3.1	43	
214	Biosynthesis of pullulan using immobilized Aureobasidium pullulans cells. <i>Biotechnology and Bioengineering</i> , 1989 , 33, 306-12	4.9	43	
213	Cadmium removal from contaminated soil by tunable biopolymers. <i>Environmental Science & Environmental </i>	10.3	42	
212	Single-walled carbon nanotube chemoresistive label-free immunosensor for salivary stress biomarkers. <i>Analyst, The</i> , 2010 , 135, 2637-42	5	41	
211	Genetic engineering of self-assembled protein hydrogel based on elastin-like sequences with metal binding functionality. <i>Biomacromolecules</i> , 2007 , 8, 3736-9	6.9	41	

210	Enhanced arsenic accumulation by engineered yeast cells expressing Arabidopsis thaliana phytochelatin synthase. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 333-40	4.9	41
209	Pt nanoparticles-chemical vapor deposited graphene composite based immunosensor for the detection of human cardiac troponin I. <i>Sensors and Actuators B: Chemical</i> , 2014 , 205, 363-370	8.5	39
208	Gas Sensing Mechanism of Gold Nanoparticles Decorated Single-Walled Carbon Nanotubes. <i>Electroanalysis</i> , 2011 , 23, 2687-2692	3	39
207	Graphene and carbon nanotubegraphene hybrid nanomaterials for human embryonic stem cell culture. <i>Materials Letters</i> , 2013 , 92, 122-125	3.3	38
206	Label-free chemiresistive immunosensors for viruses. <i>Environmental Science & Environmental Science & </i>	10.3	38
205	Detection of tumor markers based on extinction spectra of visible light passing through gold nanoholes. <i>Applied Physics Letters</i> , 2007 , 90, 073901	3.4	38
204	Development of a biosensor for assaying postmortem nucleotide degradation in fish tissues. <i>Biotechnology and Bioengineering</i> , 1990 , 35, 739-45	4.9	38
203	Electrochemical Impedance Spectroscopy (EIS): Principles, Construction, and Biosensing Applications. <i>Sensors</i> , 2021 , 21,	3.8	38
202	A quantum-dot based protein module for in vivo monitoring of protease activity through fluorescence resonance energy transfer. <i>Chemical Communications</i> , 2011 , 47, 5259-61	5.8	37
201	Single-Walled Carbon Nanotube Based Real-Time Organophosphate Detector. <i>Electroanalysis</i> , 2007 , 19, 616-619	3	37
200	Cell surface display of organophosphorus hydrolase in Pseudomonas putida using an ice-nucleation protein anchor. <i>Biotechnology Progress</i> , 2003 , 19, 1612-4	2.8	37
199	Single Conducting Polymer Nanowire Based Sequence-Specific, Base-Pair-Length Dependant Label-free DNA Sensor. <i>Electroanalysis</i> , 2011 , 23, 371-379	3	36
198	Selective Discrimination among Benzene, Toluene, and Xylene: Probing Metalloporphyrin-Functionalized Single-Walled Carbon Nanotube-Based Field Effect Transistors. Journal of Physical Chemistry C, 2014 , 118, 24034-24041	3.8	35
197	Raman spectra of twisted CVD bilayer graphene. <i>Carbon</i> , 2017 , 123, 302-306	10.4	35
196	Effect of (L:D) Aspect Ratio on Single Polypyrrole Nanowire FET Device. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 13375-13380	3.8	35
195	Single-walled carbon nanotubes chemiresistor aptasensors for small molecules: picomolar level detection of adenosine triphosphate. <i>Chemical Communications</i> , 2011 , 47, 3793-5	5.8	35
194	Conducting polymer 1-dimensional nanostructures for FET sensors. <i>Thin Solid Films</i> , 2010 , 519, 964-973	2.2	35
193	Bienzyme sensors based on poly(anilinomethylferrocene)-modified electrodes. <i>Electroanalysis</i> , 1996 , 8, 414-419	3	35

192	Carbon allotropes as sensors for environmental monitoring. <i>Current Opinion in Electrochemistry</i> , 2017 , 3, 106-113	7.2	34	
191	Electrical and Sensing Properties of Single-Walled Carbon Nanotubes Network: Effect of Alignment and Selective Breakdown. <i>Electroanalysis</i> , 2010 , 22, 99-105	3	34	
190	A capacitive field-effect sensor for the direct determination of organophosphorus pesticides. <i>Sensors and Actuators B: Chemical</i> , 2003 , 91, 92-97	8.5	34	
189	Whole-cell immobilization using cell surface-exposed cellulose-binding domain. <i>Biotechnology Progress</i> , 2001 , 17, 407-11	2.8	34	
188	Bioelectrochemistry of heme peptide at seamless three-dimensional carbon nanotubes/graphene hybrid films for highly sensitive electrochemical biosensing. <i>ACS Applied Materials & ACS ACS APPLIED MATERIAL & ACS APPLIED MATER</i>	9.5	33	
187	Label-free chemiresistive biosensor for mercury (II) based on single-walled carbon nanotubes and structure-switching DNA. <i>Applied Physics Letters</i> , 2013 , 102, 13701	3.4	33	
186	Microbial biosensors for organophosphate pesticides. <i>Applied Biochemistry and Biotechnology</i> , 2011 , 165, 687-99	3.2	33	
185	The production of oxygenated polycrystalline graphene by one-step ethanol-chemical vapor deposition. <i>Carbon</i> , 2011 , 49, 3789-3795	10.4	33	
184	Poly(3-aminophenylboronic acid)-functionalized carbon nanotubes-based chemiresistive sensors for detection of sugars. <i>Analyst, The</i> , 2014 , 139, 3077-82	5	32	
183	Selective and Rapid Room Temperature Detection of H2S Using Gold Nanoparticle Chain Arrays. <i>Electroanalysis</i> , 2011 , 23, 2623-2628	3	32	
182	Improved degradation of organophosphorus nerve agents and p-nitrophenol by Pseudomonas putida JS444 with surface-expressed organophosphorus hydrolase. <i>Biotechnology Progress</i> , 2005 , 21, 678-81	2.8	32	
181	Detoxification of organophosphate nerve agents by immobilized dual functional biocatalysts in a cellulose hollow fiber bioreactor. <i>Biotechnology and Bioengineering</i> , 2005 , 91, 379-86	4.9	32	
180	A miniature chemiresistor sensor for carbon dioxide. <i>Analytica Chimica Acta</i> , 2015 , 874, 54-8	6.6	31	
179	Cotranslocation of methyl parathion hydrolase to the periplasm and of organophosphorus hydrolase to the cell surface of Escherichia coli by the Tat pathway and ice nucleation protein display system. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 434-40	4.8	31	
178	Whole cell-enzyme hybrid amperometric biosensor for direct determination of organophosphorous nerve agents with p-nitrophenyl substituent. <i>Biotechnology and Bioengineering</i> , 2004 , 85, 706-13	4.9	31	
177	Customizable Biopolymers for Heavy Metal Remediation. <i>Journal of Nanoparticle Research</i> , 2005 , 7, 51	7- <u>5</u> 2 ₃ 3	31	
176	A mediated amperometric enzyme electrode using tetrathiafulvalene and l-glutamate oxidase for the determination of l-glutamic acid. <i>Analytica Chimica Acta</i> , 1993 , 282, 353-361	6.6	31	
175	A paper-based chemiresistive biosensor employing single-walled carbon nanotubes for low-cost, point-of-care detection. <i>Biosensors and Bioelectronics</i> , 2019 , 130, 367-373	11.8	31	

174	Simultaneous degradation of organophosphate and organochlorine pesticides by Sphingobium japonicum UT26 with surface-displayed organophosphorus hydrolase. <i>Biodegradation</i> , 2013 , 24, 295-30)3 ^{4.1}	30	
173	Presentation of functional organophosphorus hydrolase fusions on the surface of Escherichia coli by the AIDA-I autotransporter pathway. <i>Biotechnology and Bioengineering</i> , 2008 , 99, 485-90	4.9	30	
172	Kinetics of biopolymer synthesis: A revisit. Enzyme and Microbial Technology, 1988, 10, 326-332	3.8	30	
171	Real-time molecular methods to detect infectious viruses. <i>Seminars in Cell and Developmental Biology</i> , 2009 , 20, 49-54	7.5	29	
170	Biosensor for Direct Determination of Fenitrothion and EPN Using Recombinant Pseudomonas putida JS444 with Surface Expressed Organophosphorus Hydrolase. 1. Modified Clark Oxygen Electrode. <i>Sensors</i> , 2006 , 6, 466-472	3.8	29	
169	Microbial biosensor for p-nitrophenol using Moraxella sp Analytica Chimica Acta, 2002 , 470, 79-86	6.6	29	
168	A Microbial Biosensor for p-Nitrophenol Using Arthrobacter Sp <i>Electroanalysis</i> , 2003 , 15, 1160-1164	3	29	
167	Detection of benzene, toluene, ethyl benzene, and xylenes (BTEX) using toluene dioxygenase-peroxidase coupling reactions. <i>Biotechnology Progress</i> , 2003 , 19, 1812-5	2.8	29	
166	A microbial biosensor for trimethylamine using Pseudomonas aminovorans cells. <i>Biosensors and Bioelectronics</i> , 1991 , 6, 125-31	11.8	29	
165	Graphene based biosensors for healthcare. <i>Journal of Materials Research</i> , 2017 , 32, 2905-2929	2.5	28	
164	Development of a glucose sensor employing quick and easy modification method with mediator for altering electron acceptor preference. <i>Bioelectrochemistry</i> , 2018 , 121, 185-190	5.6	28	
163	A Pathogen Secreted Protein as a Detection Marker for Citrus Huanglongbing. <i>Frontiers in Microbiology</i> , 2017 , 8, 2041	5.7	28	
162	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, 1451-5	11.8	28	
161	Controlled functionalization of single-walled carbon nanotubes for enhanced ammonia sensing: a comparative study. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 355305	3	27	
160	Biologically programmed synthesis of core-shell CdSe/ZnS nanocrystals. <i>Chemical Communications</i> , 2010 , 46, 1473-5	5.8	27	
159	Environmental biotechnology: Challenges and opportunities for chemical engineers. <i>AICHE Journal</i> , 2005 , 51, 690-695	3.6	27	
158	Heavy metal removal by novel CBD-EC20 sorbents immobilized on cellulose. <i>Biomacromolecules</i> , 2002 , 3, 462-5	6.9	27	
157	Room temperature detection of NO2 using InSb nanowire. <i>Applied Physics Letters</i> , 2011 , 99, 033103	3.4	26	

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-	156	Detection of hepatitis a virus by using a combined cell culture-molecular beacon assay. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 2239-43	4.8	26
-	155	An immunoassay for atrazine using tunable immunosorbent. <i>Analytical Biochemistry</i> , 2003 , 322, 251-6	3.1	26
-	154	Enzyme biosensor for determination of organophosphates. <i>Field Analytical Chemistry and Technology</i> , 1998 , 2, 363-369		25
-	153	Cadmium removal from contaminated soil by thermally responsive elastin (ELPEC20) biopolymers. <i>Biotechnology and Bioengineering</i> , 2007 , 98, 349-55	4.9	25
-	152	Bioremediation of organophosphorus pesticides by surface-expressed carboxylesterase from mosquito on Escherichia coli. <i>Biotechnology Progress</i> , 2004 , 20, 1567-71	2.8	25
-	151	Non-lytic M13 phage-based highly sensitive impedimetric cytosensor for detection of coliforms. <i>Biosensors and Bioelectronics</i> , 2020 , 148, 111794	11.8	25
-	150	Point-of-Use Nanobiosensor for Detection of Dengue Virus NS1 Antigen in Adult Aedes aegypti: A Potential Tool for Improved Dengue Surveillance. <i>Analytical Chemistry</i> , 2018 , 90, 679-684	7.8	25
-	149	Monitoring of microbial cell viability using nanostructured electrodes modified with Graphene/Alumina nanocomposite. <i>Biosensors and Bioelectronics</i> , 2017 , 91, 857-862	11.8	24
-	148	Highly sensitive detection of Cr(VI) by reduced graphene oxide chemiresistor and 1,4-dithiothreitol functionalized Au nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2017 , 247, 265-272	8.5	24
-	147	Affinity purification of plasmid DNA by temperature-triggered precipitation. <i>Biotechnology and Bioengineering</i> , 2004 , 85, 293-7	4.9	24
-	146	ZnS nanocrystals decorated single-walled carbon nanotube based chemiresistive label-free DNA sensor. <i>Applied Physics Letters</i> , 2011 , 98, 13701	3.4	23
-	145	Cell surface display of functional macromolecule fusions on Escherichia coli for development of an autofluorescent whole-cell biocatalyst. <i>Environmental Science & Environmental Science & Environmen</i>	10.3	23
-	144	DNA Assisted Assembly of Multisegmented Nanowires. <i>Electroanalysis</i> , 2007 , 19, 2287-2293	3	23
-	143	Production of acetone-butanol-ethanol by Clostridium acetobutylicum using a spin filter perfusion bioreactor. <i>Journal of Biotechnology</i> , 1994 , 34, 51-60	3.7	23
-	142	MoS2-graphene heterostructures as efficient organic compounds sensing 2D materials. <i>Carbon</i> , 2019 , 142, 504-512	10.4	23
-	141	Synthesis of Formate from CO Gas Catalyzed by an O-Tolerant NAD-Dependent Formate Dehydrogenase and Glucose Dehydrogenase. <i>Biochemistry</i> , 2019 , 58, 1861-1868	3.2	22
-	140	Improvement in organophosphorus hydrolase activity of cell surface-engineered yeast strain using Flo1p anchor system. <i>Biotechnology Letters</i> , 2010 , 32, 655-9	3	22
	139	Decontamination of vegetables sprayed with organophosphate pesticides by organophosphorus hydrolase and carboxylesterase (B1). <i>Applied Biochemistry and Biotechnology</i> , 2007 , 136, 233-41	3.2	22

138	Continuous-flow fluoro-immunosensor for paclitaxel measurement. <i>Biosensors and Bioelectronics</i> , 2001 , 16, 647-52	11.8	22
137	Controlled assembly of multi-segment nanowires by histidine-tagged peptides. <i>Nanotechnology</i> , 2006 , 17, 3375-9	3.4	21
136	Towards a Capacitive Enzyme Sensor for Direct Determination of Organophosphorus Pesticides: Fundamental Studies and Aspects of Development. <i>Sensors</i> , 2003 , 3, 119-127	3.8	21
135	Determination of sulfite in food products by an enzyme electrode. <i>Journal of Biotechnology</i> , 1991 , 18, 93-102	3.7	21
134	Development of an alginate hydrogel to deliver aqueous bait for pest ant management. <i>Pest Management Science</i> , 2017 , 73, 2028-2038	4.6	20
133	Nanothin Polyaniline Film for Highly Sensitive Chemiresistive Gas Sensing. <i>Electroanalysis</i> , 2013 , 25, 14	139 , -144	520
132	Iron tetraphenyl porphyrin functionalized single wall carbon nanotubes for the detection of benzene. <i>Materials Letters</i> , 2013 , 96, 38-41	3.3	20
131	Systematic engineering of phytochelatin synthesis and arsenic transport for enhanced arsenic accumulation in E. coli. <i>Biotechnology and Bioengineering</i> , 2010 , 105, 780-5	4.9	20
130	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. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 7733-9	4.8	20
129	Carbon nanotubes-based label-free affinity sensors for environmental monitoring. <i>Applied Biochemistry and Biotechnology</i> , 2013 , 170, 1011-25	3.2	19
128	Simultaneous degradation of organophosphates and 4-substituted phenols by Stenotrophomonas species LZ-1 with surface-displayed organophosphorus hydrolase. <i>Journal of Agricultural and Food Chemistry</i> , 2009 , 57, 6171-7	5.7	19
127	On-line culture fluorescence measurement during the batch cultivation of poly-Ehydroxybutyrate producing Alcaligenes eutrophus. <i>Journal of Biotechnology</i> , 1988 , 8, 271-278	3.7	19
126	Field effect transistor based on proton conductive metal organic framework (CuBTC). <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 335105	3	18
125	Genetic engineering of Stenotrophomonas strain YC-1 to possess a broader substrate range for organophosphates. <i>Journal of Agricultural and Food Chemistry</i> , 2010 , 58, 6762-6	5.7	18
124	In Situ Fabrication of Single Poly(methyl pyrrole) Nanowire. <i>Electroanalysis</i> , 2007 , 19, 793-797	3	18
123	Microbial Synthesis of CdS Nanocrystals in Genetically Engineered E. coli. <i>Angewandte Chemie</i> , 2008 , 120, 5264-5267	3.6	18
122	Vapor and liquid phase detection of cyanide on a microchip. <i>Electrophoresis</i> , 2004 , 25, 116-22	3.6	18
121	Visualization and detection of infectious coxsackievirus replication using a combined cell culture-molecular beacon assay. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 8397-401	4.8	18

(2012-2000)

120	Biodetoxification of coumaphos insecticide using immobilizedEscherichia coli expressing organophosphorus hydrolase enzyme on cell surface. <i>Biotechnology and Bioprocess Engineering</i> , 2000 , 5, 436-440	3.1	18
119	Affinity sensor for haemoglobin A1c based on single-walled carbon nanotube field-effect transistor and fructosyl amino acid binding protein. <i>Biosensors and Bioelectronics</i> , 2019 , 129, 254-259	11.8	18
118	Application of displacement principle for detecting heavy metal ions and EDTA using microcantilevers. <i>Sensors and Actuators B: Chemical</i> , 2012 , 161, 203-208	8.5	17
117	Detection of RNA viruses: current technologies and future perspectives. <i>Critical Reviews in Eukaryotic Gene Expression</i> , 2013 , 23, 125-37	1.3	17
116	Hybrid ZnO/SWNT Nanostructures Based Gas Sensor. <i>Electroanalysis</i> , 2012 , 24, 1613-1620	3	17
115	Synthesis of Sn doped CuO nanotubes from core-shell Cu/SnO(2) nanowires by the Kirkendall effect. <i>Nanotechnology</i> , 2010 , 21, 295601	3.4	17
114	Maskless electrodeposited contact for conducting polymer nanowires. <i>Applied Physics Letters</i> , 2008 , 92, 073104	3.4	17
113	Development of a fluorescence immunoassay for measurement of paclitaxel in human plasma. <i>Analytical Biochemistry</i> , 2000 , 283, 33-8	3.1	17
112	Detection of a secreted protein biomarker for citrus Huanglongbing using a single-walled carbon nanotubes-based chemiresistive biosensor. <i>Biosensors and Bioelectronics</i> , 2020 , 147, 111766	11.8	17
111	Electro-oxidized Monolayer CVD Graphene Film Transducer for Ultrasensitive Impedimetric DNA Biosensor. <i>Electroanalysis</i> , 2018 , 30, 1791-1800	3	16
110	Electronic-nose for detecting environmental pollutants: signal processing and analog front-end design. <i>Analog Integrated Circuits and Signal Processing</i> , 2012 , 70, 15-32	1.2	16
109	Twin-arginine translocation of methyl parathion hydrolase in Bacillus subtilis. <i>Environmental Science & Environmental & Envir</i>	10.3	16
108	Affinity purification of plasmid DNA by temperature-triggered precipitation. <i>Nature Protocols</i> , 2007 , 2, 1263-8	18.8	16
107	Determination of aspartame in dietary food products by a FIA biosensor. <i>Biosensors and Bioelectronics</i> , 1991 , 6, 117-123	11.8	16
106	Salivary Detection of Dengue Virus NS1 Protein with a Label-Free Immunosensor for Early Dengue Diagnosis. <i>Sensors</i> , 2018 , 18,	3.8	15
105	Single-walled Carbon Nanotube-Calixarene Based Chemiresistor for Volatile Organic Compounds. <i>Electroanalysis</i> , 2018 , 30, 2077-2084	3	15
104	Chemiresistive sensor based on polythiophene-modified single-walled carbon nanotubes for detection of NO2. <i>Modern Physics Letters B</i> , 2015 , 29, 1540046	1.6	15
103	Tuning Electrical and Optoelectronic Properties of Single Cadmium Telluride Nanoribbon. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 9202-9208	3.8	15

102	Analytical applications of planar bilayer lipid membranes. <i>Analytical and Bioanalytical Chemistry</i> , 2004 , 379, 347-50	4.4	15
101	Ormosil Encapsulated Pyrroloquinoline Quinone-Modified Electrochemical Sensor for Thiols. <i>Electroanalysis</i> , 2004 , 16, 1938-1943	3	15
100	Arthrobacter sp. JS443-Based Whole Cell Amperometric Biosensor for p-Nitrophenol. <i>Electroanalysis</i> , 2004 , 16, 2030-2034	3	15
99	Tetrathiafulvalene-mediated Biosensor for L-lactate in Dairy Products. <i>Journal of Food Science</i> , 1995 , 60, 74-78	3.4	15
98	The development of an amperometric microbial biosensor using Acetobacter pasteurianus for lactic acid. <i>Journal of Biotechnology</i> , 1989 , 10, 241-252	3.7	15
97	Methanol tolerant, high performance, noble metal free electrocatalyst developed from polyaniline and ferric chloride for the oxygen reduction reaction. <i>RSC Advances</i> , 2015 , 5, 92648-92655	3.7	14
96	An oligonucleotide-functionalized carbon nanotube chemiresistor for sensitive detection of mercury in saliva. <i>Analyst, The</i> , 2016 , 141, 2756-60	5	14
95	Protein functionalized Pt nanoparticles-conducting polymer nanocomposite film: Characterization and immunosensor application. <i>Polymer</i> , 2014 , 55, 4003-4011	3.9	14
94	Factors influencing parathion degradation by recombinant Escherichia coli with surface-expressed organophosphorus hydrolase. <i>Biotechnology Progress</i> , 1998 , 14, 275-8	2.8	13
93	Mathematical modeling of affinity ultrafiltration process. <i>Biotechnology and Bioengineering</i> , 1988 , 32, 451-9	4.9	13
92	Electrochemical properties of seamless three-dimensional carbon nanotubes-grown graphene modified with horseradish peroxidase. <i>Bioelectrochemistry</i> , 2016 , 111, 57-61	5.6	13
91	Spore-displayed enzyme cascade with tunable stoichiometry. <i>Biotechnology Progress</i> , 2017 , 33, 383-389	2.8	12
90	Calixarene-functionalized single-walled carbon nanotubes for sensitive detection of volatile amines. <i>Sensors and Actuators B: Chemical</i> , 2018 , 268, 115-122	8.5	12
89	Gas Biosensor Arrays Based on Single-Stranded DNA-Functionalized Single-Walled Carbon Nanotubes for the Detection of Volatile Organic Compound Biomarkers Released by Huanglongbing Disease-Infected Citrus Trees. <i>Sensors</i> , 2019 , 19,	3.8	12
88	Quantitative assessment of in vivo HIV protease activity using genetically engineered QD-based FRET probes. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 1082-7	4.9	12
87	Conducting polymer functionalized single-walled carbon nanotube based chemiresistive biosensor for the detection of human cardiac myoglobin. <i>Applied Physics Letters</i> , 2014 , 105, 153701	3.4	12
86	Recent Advances in Bioprocess Monitoring and Control. ACS Symposium Series, 1996, 88-98	0.4	12
85	Determination of glutamine and glutamic acid in mammalian cell cultures using tetrathiafulvalene modified enzyme electrodes. <i>Biosensors and Bioelectronics</i> , 1996 , 11, 271-80	11.8	12

84	Amperometric determination of lipid hydroperoxides. <i>Analytical Biochemistry</i> , 1995 , 225, 277-82	3.1	12
83	An origami electrical biosensor for multiplexed analyte detection in body fluids. <i>Biosensors and Bioelectronics</i> , 2021 , 171, 112721	11.8	12
82	Engineering Soluble Human Paraoxonase 2 for Quorum Quenching. ACS Chemical Biology, 2016, 11, 312	224.3913	111
81	Single-walled carbon nanotubes based chemiresistive genosensor for label-free detection of human rheumatic heart disease. <i>Applied Physics Letters</i> , 2014 , 105, 213701	3.4	11
80	A chemiresistive sensor based on conducting polymer/SWNT composite nanofibrillar matrix feet of 100 MeV O16ion irradiation on gas sensing properties. <i>Smart Materials and Structures</i> , 2013 , 22, 035004	3.4	11
79	Estimation of enzyme kinetic parameters of cell surface-displayed organophosphorus hydrolase and construction of a biosensing system for organophosphorus compounds. <i>Analytical Sciences</i> , 2011 , 27, 823-6	1.7	11
78	Enzyme mediated synthesis of phytochelatin-capped CdS nanocrystals. <i>Applied Physics Letters</i> , 2010 , 97, 123703	3.4	11
77	High performance dendrimer functionalized single-walled carbon nanotubes field effect transistor biosensor for protein detection. <i>Applied Physics Letters</i> , 2016 , 109, 243504	3.4	11
76	Molecular imprinted polymer functionalized carbon nanotube sensors for detection of saccharides. <i>Applied Physics Letters</i> , 2015 , 107, 093107	3.4	10
75	Selective recognition of xylene isomers using ZnO-SWNTs hybrid gas sensors. <i>Analyst, The</i> , 2012 , 137, 2549-52	5	10
74	Redox properties of engineered ruthenium myoglobin. <i>Bioelectrochemistry</i> , 2009 , 75, 182-8	5.6	10
73	Photo-induced charge transport in ZnS nanocrystals decorated single walled carbon nanotube field-effect transistor. <i>Applied Physics Letters</i> , 2011 , 99, 173110	3.4	10
72	A tubulin-based fluorescent polarization assay for paclitaxel. <i>Analytical Biochemistry</i> , 2003 , 321, 44-9	3.1	10
71	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	-15374	10
70	Enzymatic assay technique for the determination of aspartame. <i>Analytica Chimica Acta</i> , 1990 , 234, 465-	46%	10
69	Ultrasensitive electrochemical immunosensor based on Pt nanoparticle-graphene composite. <i>Applied Biochemistry and Biotechnology</i> , 2014 , 174, 971-83	3.2	9
68	Graphene-Based Biosensors and Their Applications in Biomedical and Environmental Monitoring. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2017 , 261-290	2	9
67	Organophosphorus compound detection on a cell chip with yeast coexpressing hydrolase and eGFP. <i>Biotechnology Journal</i> , 2010 , 5, 515-9	5.6	9

66	Detection of recombinant Pseudomonas putida in the wheat rhizosphere by fluorescence in situ hybridization targeting mRNA and rRNA. <i>Applied Microbiology and Biotechnology</i> , 2008 , 79, 511-8	5.7	9
65	Graphene nanogap electrodes in electrical biosensing. <i>Biosensors and Bioelectronics</i> , 2019 , 126, 838-844	11.8	9
64	Highly active spore biocatalyst by self-assembly of co-expressed anchoring scaffoldin and multimeric enzyme. <i>Biotechnology and Bioengineering</i> , 2018 , 115, 557-564	4.9	9
63	Biodegradable alginate hydrogel bait delivery system effectively controls high-density populations of Argentine ant in commercial citrus. <i>Journal of Pest Science</i> , 2020 , 93, 1031-1042	5.5	8
62	Lectin- and Saccharide-Functionalized Nano-Chemiresistor Arrays for Detection and Identification of Pathogenic Bacteria Infection. <i>Biosensors</i> , 2018 , 8,	5.9	8
61	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	4.8	8
60	Anchorage of GFP fusion on the cell surface of Pseudomonas putida. <i>Biodegradation</i> , 2011 , 22, 51-61	4.1	8
59	Elastin-calmodulin scaffold for protein microarray fabrication. <i>Langmuir</i> , 2007 , 23, 2277-9	4	8
58	Electrochemical Biosensor for Rapid Detection of Viable Bacteria and Antibiotic Screening. <i>Journal of Analysis and Testing</i> , 2019 , 3, 117-122	3.2	7
57	Bactericidal activity of elastin-like polypeptide biopolymer with polyhistidine domain and silver. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014 , 119, 66-70	6	7
56	Innovative bioreactors. Current Opinion in Biotechnology, 1997, 8, 165-8	11.4	7
55	Development of a substrate recycle amplification system for l-glutamic acid assay. <i>Enzyme and Microbial Technology</i> , 1991 , 13, 116-122	3.8	7
54	Hydrogels: From Controlled Release to a New Bait Delivery for Insect Pest Management. <i>Journal of Economic Entomology</i> , 2020 , 113, 2061-2068	2.2	7
53	Label-free chemiresistor biosensor based on reduced graphene oxide and M13 bacteriophage for detection of coliforms. <i>Analytica Chimica Acta</i> , 2021 , 1150, 338232	6.6	7
52	Tuning Coating Thickness of Iron Tetraphenyl Porphyrin on Single Walled Carbon Nanotubes by Annealing: Effect on Benzene Sensing Performance. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700956	1.6	6
51	A receptor protein-based bioassay for quantitative determination of paclitaxel. <i>Analytical Chemistry</i> , 1997 , 69, 3633-5	7.8	6
50	Principles of Enzyme Biosensors 1998 , 3-14		6
49	Bismuth Subcarbonate Decorated Reduced Graphene Oxide Nanocomposite for the Sensitive Stripping Voltammetry Analysis of Pb(II) and Cd(II) in Water. <i>Sensors</i> , 2020 , 20,	3.8	6

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48	Linker-Free Magnetite-Decorated Gold Nanoparticles (FeO-Au): Synthesis, Characterization, and Application for Electrochemical Detection of Arsenic (III). <i>Sensors</i> , 2021 , 21,	3.8	6	
47	Affinity chemiresistor sensor for sugars. <i>Talanta</i> , 2014 , 128, 473-9	6.2	5	
46	Organic field-effect transistors: predictive control on performance parameters. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 495110	3	5	
45	Non-Carbon 2D Materials-Based Field-Effect Transistor Biosensors: Recent Advances, Challenges, and Future Perspectives. <i>Sensors</i> , 2020 , 20,	3.8	5	
44	Scalable chemical vapor deposited graphene field-effect transistors for bio/chemical assay. <i>Applied Physics Reviews</i> , 2021 , 8, 011311	17.3	5	
43	Nano-FET-enabled biosensors: Materials perspective and recent advances in North America. <i>Biosensors and Bioelectronics</i> , 2021 , 176, 112941	11.8	5	
42	Characterisation of the heterojunction microstructure for electrodeposited vertical ZnO nanorods on CVD-graphene. <i>Materials Research Express</i> , 2018 , 5, 085031	1.7	5	
41	Current status, advances, challenges and perspectives on biosensors for COVID-19 diagnosis in resource-limited settings <i>Sensors and Actuators Reports</i> , 2021 , 3, 100025	4.7	5	
40	Expression, immobilization, and enzymatic characterization of cellulose-binding domain-organophosphorus hydrolase fusion enzymes 2000 , 69, 591		5	
39	Fe nanoparticle tailored poly(N-methyl pyrrole) nanowire matrix: a CHEMFET study from the perspective of discrimination among electron donating analytes. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 195301	3	4	
38	Chemically Modified Electrode for Hydrogen Peroxide Measurement by Reduction at Low Potential. <i>ACS Symposium Series</i> , 1996 , 61-69	0.4	4	
37	Laser-etched grooves for rapid fluid delivery for a paper-based chemiresistive biosensor. <i>Biosensors and Bioelectronics</i> , 2021 , 180, 113090	11.8	4	
36	Development of an Interdigitated Electrode-Based Disposable Enzyme Sensor Strip for Glycated Albumin Measurement. <i>Molecules</i> , 2021 , 26,	4.8	4	
35	Poly(o-toluidine) Nanowires Based Organic Field Effect Transistors: A Study on Influence of Anionic Size of Dopants and SWNTs as a Dopant. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 15414-15420	3.8	3	
34	Prospective of Conducting Polymer Nanowire for Gas Sensing Application to its Physical Scaling. <i>Advanced Materials Research</i> , 2012 , 584, 224-228	0.5	3	
33	Structure: Function Studies of the Cytosolic, Mo- and NAD+-Dependent Formate Dehydrogenase from Cupriavidus necator. <i>Inorganics</i> , 2020 , 8, 41	2.9	3	
32	Platinum nanoparticles-single-walled carbon nanotubes hybrid based chemiresistive sensor array for myoglobin detection. <i>Materials Research Express</i> , 2016 , 3, 035006	1.7	3	
31	Chemiresistor sensor based on ion-imprinted polymer (IIP)-functionalized rGO for Cd(II) ions in water. Sensors and Actuators B: Chemical, 2021, 346, 130474	8.5	3	

30	Glucose sensor based on conducting polyaniline nanowire electrode junction. <i>Modern Physics Letters B</i> , 2015 , 29, 1540045	1.6	2
29	Asymptomatic Diagnosis of Huanglongbing Disease Using Metalloporphyrin Functionalized Single-Walled Carbon Nanotubes Sensor Arrays. <i>Frontiers in Chemistry</i> , 2020 , 8, 362	5	2
28	Potassium Iodide-Functionalized Polyaniline Nanothin Film Chemiresistor for Ultrasensitive Ozone Gas Sensing. <i>Polymers</i> , 2017 , 9,	4.5	2
27	Single-walled carbon nanotubes based chemicapacitive sensors. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 1517-20	1.3	2
26	A real-time monitoring system for diesel and gasoline exhaust exposure 2009,		2
25	Biological Detoxification of Organophosphate Pesticides. ACS Symposium Series, 2003, 25-36	0.4	2
24	A novel bioassay for screening and quantification of taxanes. <i>Chemical Communications</i> , 2003 , 1188-9	5.8	2
23	Synthesis of pristine graphene-like behaving rGO thin film: Insights into what really matters. <i>Carbon</i> , 2022 , 186, 437-451	10.4	2
22	Electrodeposition of ZnO nanorods on graphene: tuning the topography for application as tin oxide-free electron transport layer. <i>Journal of Applied Electrochemistry</i> , 2021 , 51, 977-989	2.6	2
21	Functionalized Carbon Nanotubes for Detection of Volatile Organic Pollutant 2019,		2
20	Toward Rapid Detection of Trace Lead and Cadmium by Anodic Stripping Voltammetry in Complex Wastewater Streams. <i>ACS ES&T Engineering</i> ,		2
19	Remote Biosensor for In-Situ MOnitoring of Organophosphate Nerve Agents 1999 , 11, 866		2
18	Volatile Organic Compounds. Nanostructure Science and Technology, 2015, 1023-1046	0.9	1
17	A Tubulin-Based Quantitative Assay for Taxol (Paclitaxel) with Enzyme Channeling Sensing. <i>Electroanalysis</i> , 2004 , 16, 688-690	3	1
16	Enhanced Bioaccumulation of Heavy Metals by Bacterial Cells with Surface-Displayed Synthetic Phytochelatins. <i>ACS Symposium Series</i> , 2002 , 411-418	0.4	1
15	Chemical and Biological Sensors: Meeting the Challenges of Environmental Monitoring. <i>ACS Symposium Series</i> , 2000 , 1-6	0.4	1
14	Encapsulation of enzymes and cells in sol-gel matrices for biosensor applications 1999,		1
13	Biomolecular Sensing for Bioprocess and Environmental Monitoring Applications. <i>ACS Symposium Series</i> , 1996 , 2-8	0.4	1

LIST OF PUBLICATIONS

12	The evolution of metal size and partitioning throughout the wastewater treatment train. <i>Journal of Hazardous Materials</i> , 2021 , 402, 123761	12.8	1
11	Organophosphorus Hydrolase-Based Amperometric Sensor: Modulation of Sensitivity and Substrate Selectivity 2002 , 14, 273		1
10	Graphene compared to fluorine-doped tin oxide as transparent conductor in ZnO dye-sensitized solar cells. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 10, 107551	6.8	1
9	Conducting polyaniline nanowire electrode junction. <i>Modern Physics Letters B</i> , 2015 , 29, 1540036	1.6	O
8	Bio-sensitized solar cells built from renewable carbon sources. <i>Materials Today Energy</i> , 2021 , 23, 10091	0 7	0
7	Multiplexed Anodic Stripping Voltammetry Detection of Heavy Metals in Water Using Nanocomposites Modified Screen-Printed Electrodes Integrated With a 3D-Printed Flow Cell <i>Frontiers in Chemistry</i> , 2022 , 10, 815805	5	O
6	Development of a bioluminescent whole-cell biocatalyst by displaying functional fusions on the surface of Escherichia coli. <i>Journal of Biotechnology</i> , 2008 , 136, S689-S690	3.7	
5	Feldeffekt-Enzymsensor zur Detektion von Pestiziden (Field-effect Enzyme Sensor for the Detection of Pesticides). <i>TM Technisches Messen</i> , 2003 , 70, 561-564	0.7	
4	Engineering of Improved Biocatalysts in Bioremediation. Soil Biology, 2004, 235-250	1	
3	Detection of salmonella using a real-time PCR based on molecular beacons 2000 , 3926, 21		
2	Molecular Beacons: A New Approach for Detecting Salmonella Species. ACS Symposium Series, 2000, 29	2 ₆ 2,9 ₈	
1	Field-Deployable Amperometric Enzyme Electrodes for Direct Monitoring of Organophosphate Nerve Agents. <i>NATO Science Series Partnership Sub-series 1, Disarmament Technologies</i> , 2000 , 287-296		