

# Jeong-Woo Choi

## List of Publications by Year in Descending Order

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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.

181  
papers

5,156  
citations

39  
h-index

65  
g-index

186  
ext. papers

5,733  
ext. citations

7  
avg, IF

5.76  
L-index

#	Paper	IF	Citations
181	Fabrication of MERS-nanovesicle biosensor composed of multi-functional DNA aptamer/graphene-MoS nanocomposite based on electrochemical and surface-enhanced Raman spectroscopy. <i>Sensors and Actuators B: Chemical</i> , <b>2022</b> , 352, 131060	8.5	3
180	Bionanohybrid composed of metalloprotein/DNA/MoS/peptides to control the intracellular redox states of living cells and its applicability as a cell-based biomemory device. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 196, 113725	11.8	4
179	Biomolecular Electron Controller Composed of Nanobiohybrid with Electrically Released Complex for Spatiotemporal Control of Neuronal Differentiation.. <i>Small Methods</i> , <b>2022</b> , 6, e2100912	12.8	2
178	Electrochemical Cell Chips Based on Functionalized Nanometals. <i>Frontiers in Chemistry</i> , <b>2021</b> , 9, 671922	5	
177	CRISPR-Cas12a-Based Nucleic Acid Amplification-Free DNA Biosensor via Au Nanoparticle-Assisted Metal-Enhanced Fluorescence and Colorimetric Analysis. <i>Nano Letters</i> , <b>2021</b> , 21, 693-699	11.5	55
176	Noble Metal-Assisted Surface Plasmon Resonance Immunosensors. <i>Sensors</i> , <b>2020</b> , 20,	3.8	18
175	Metallic Nanoparticle-Based Optical Cell Chip for Nondestructive Monitoring of Intra/Extracellular Signals. <i>Pharmaceutics</i> , <b>2020</b> , 12,	6.4	1
174	Detection of Neurotransmitters from Stem Cell-Derived Neural Interface at the Single-Cell Level via Graphene-Hybrid SERS Nanobiosensing. <i>Nano Letters</i> , <b>2020</b> , 20, 7670-7679	11.5	18
173	Resistive switching biodevice composed of MoS <sub>2</sub> -DNA heterolayer on the gold electrode. <i>Applied Surface Science</i> , <b>2019</b> , 478, 134-141	6.7	20
172	Multifunctional Nanobiohybrid Material Composed of Ag@BiSe/RNA Three-Way Junction/miRNA/Retinoic Acid for Neuroblastoma Differentiation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 8779-8788	9.5	13
171	Flexible electrochemical glucose biosensor based on GOx/gold/MoS/gold nanofilm on the polymer electrode. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 140, 111343	11.8	53
170	Development of Bioelectronic Devices Using Bionanohybrid Materials for Biocomputation System. <i>Micromachines</i> , <b>2019</b> , 10,	3.3	9
169	Electrochemical Dopamine Biosensor Composed of Silver Encapsulated MoS <sub>2</sub> Hybrid Nanoparticle. <i>Biotechnology and Bioprocess Engineering</i> , <b>2019</b> , 24, 135-144	3.1	28
168	HO biosensor consisted of hemoglobin-DNA conjugate on nanoporous gold thin film electrode with electrochemical signal enhancement. <i>Nano Convergence</i> , <b>2019</b> , 6, 1	9.2	37
167	Spectroelectrochemical detection of microRNA-155 based on functional RNA immobilization onto ITO/GNP nanopattern. <i>Journal of Biotechnology</i> , <b>2018</b> , 274, 40-46	3.7	18
166	Nondestructive Real-Time Monitoring of Enhanced Stem Cell Differentiation Using a Graphene-Au Hybrid Nanoelectrode Array. <i>Advanced Materials</i> , <b>2018</b> , 30, e1802762	24	34
165	Nanostructured surfaces for analysis of anticancer drug and cell diagnosis based on electrochemical and SERS tools. <i>Nano Convergence</i> , <b>2018</b> , 5, 11	9.2	32

164	Live cell biosensing platforms using graphene-based hybrid nanomaterials. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 94, 485-499	11.8	38
163	Electrochemical HO biosensor composed of myoglobin on MoS nanoparticle-graphene oxide hybrid structure. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 93, 14-20	11.8	93
162	Azurin/CdSe-ZnS-Based Bio-Nano Hybrid Structure for Nanoscale Resistive Memory Device. <i>Materials</i> , <b>2017</b> , 10,	3.5	4
161	Electrochemical nitric oxide biosensor based on amine-modified MoS/graphene oxide/myoglobin hybrid. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2017</b> , 159, 729-736	6	28
160	Electrochemical nucleic acid detection based on parallel structural dsDNA/recombinant azurin hybrid. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 98, 292-298	11.8	22
159	Recombinant azurin-CdSe/ZnS hybrid structures for nanoscale resistive random access memory device. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 90, 23-30	11.8	18
158	Multi-electrochemical signal generation using metalloprotein based on selective surface modification. <i>Biochip Journal</i> , <b>2017</b> , 11, 322-328	4	2
157	Magnetic Force-Driven Graphene Patterns to Direct Synaptogenesis of Human Neuronal Cells. <i>Materials</i> , <b>2017</b> , 10,	3.5	9
156	Electrochemical Detection of Dopamine Using 3D Porous Graphene Oxide/Gold Nanoparticle Composites. <i>Sensors</i> , <b>2017</b> , 17,	3.8	54
155	Microdevice Platform for In Vitro Nervous System and Its Disease Model. <i>Bioengineering</i> , <b>2017</b> , 4,	5.3	12
154	Priming nanoparticle-guided diagnostics and therapeutics towards human organs-on-chips microphysiological system. <i>Nano Convergence</i> , <b>2016</b> , 3, 24	9.2	20
153	Fabrication of fusion protein-based heterolayers composed of redox protein/myoglobin for bioelectronic device. <i>Biochip Journal</i> , <b>2016</b> , 10, 103-110	4	4
152	In situ label-free quantification of human pluripotent stem cells with electrochemical potential. <i>Biomaterials</i> , <b>2016</b> , 75, 250-259	15.6	20
151	Electrical Impedance Monitoring of C2C12 Myoblast Differentiation on an Indium Tin Oxide Electrode. <i>Sensors</i> , <b>2016</b> , 16,	3.8	10
150	Investigation of Hemoglobin/Gold Nanoparticle Heterolayer on Micro-Gap for Electrochemical Biosensor Application. <i>Sensors</i> , <b>2016</b> , 16,	3.8	5
149	Nano-Biosensor for Monitoring the Neural Differentiation of Stem Cells. <i>Nanomaterials</i> , <b>2016</b> , 6,	5.4	14
148	Phototactic guidance of a tissue-engineered soft-robotic ray. <i>Science</i> , <b>2016</b> , 353, 158-62	33.3	371
147	Control of electrochemical signals from quantum dots conjugated to organic materials by using DNA structure in an analog logic gate. <i>Bioelectrochemistry</i> , <b>2016</b> , 111, 1-6	5.6	8

146	Nanopatterned Surfaces for Stem-Cell Engineering <b>2015</b> , 97-122		
145	Three-dimensional crumpled graphene-based platinum-gold alloy nanoparticle composites as superior electrocatalysts for direct methanol fuel cells. <i>Carbon</i> , <b>2015</b> , 93, 869-877	10.4	68
144	Synthesis of 3D Silver-Graphene-Titanium Dioxide Composite via Aerosol Spray Pyrolysis for Sensitive Glucose Biosensor. <i>Aerosol Science and Technology</i> , <b>2015</b> , 49, 538-546	3.4	18
143	In situ monitoring of doxorubicin release from biohybrid nanoparticles modified with antibody and cell-penetrating peptides in breast cancer cells using surface-enhanced Raman spectroscopy. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 71, 300-305	11.8	30
142	Controlling differentiation of adipose-derived stem cells using combinatorial graphene hybrid-pattern arrays. <i>ACS Nano</i> , <b>2015</b> , 9, 3780-90	16.7	124
141	Fabrication of new single cell chip to monitor intracellular and extracellular redox state based on spectroelectrochemical method. <i>Biomaterials</i> , <b>2015</b> , 40, 80-7	15.6	26
140	3D label-free prostate specific antigen (PSA) immunosensor based on graphene-gold composites. <i>Biosensors and Bioelectronics</i> , <b>2015</b> , 63, 546-551	11.8	140
139	Electrochemical Bioelectronic Device Consisting of Metalloprotein for Analog Decision Making. <i>Scientific Reports</i> , <b>2015</b> , 5, 14501	4.9	7
138	A biomemory chip composed of a myoglobin/CNT heterolayer fabricated by the protein-adsorption-precipitation-crosslinking (PAPC) technique. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2015</b> , 136, 853-8	6	6
137	Large-Scale Nanoelectrode Arrays to Monitor the Dopaminergic Differentiation of Human Neural Stem Cells. <i>Advanced Materials</i> , <b>2015</b> , 27, 6356-62	24	46
136	Graphene-Based Materials for Stem Cell Applications. <i>Materials</i> , <b>2015</b> , 8, 8674-8690	3.5	51
135	Synthesis of metal nanoparticles inside living human cells based on the intracellular formation process. <i>Advanced Materials</i> , <b>2014</b> , 26, 910-8	24	39
134	Bioprocessing Device Composed of Protein/DNA/Inorganic Material Hybrid. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1781-1789	15.6	19
133	Fusion protein-based biofilm fabrication composed of recombinant azurin-myoglobin for dual-level biomemory application. <i>Applied Surface Science</i> , <b>2014</b> , 320, 448-454	6.7	4
132	Fusion protein bilayer fabrication composed of recombinant azurin/cytochrome P450 by the sortase-mediated ligation method. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2014</b> , 120, 215-21	6	3
131	Aerosol Processing of Graphene and Its Application to Oil Absorbent and Glucose Biosensor. <i>KONA Powder and Particle Journal</i> , <b>2014</b> , 31, 111-125	3.4	9
130	Chemical and Biosensors Based on Graphene Materials <b>2014</b> , 235-260		
129	Electrically controlled delivery of cargo into single human neural stem cell. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 20709-16	9.5	3

128	Multilevel electrochemical signal detections of metalloprotein heterolayers for bioelectronic device. <i>Thin Solid Films</i> , <b>2014</b> , 551, 174-180	2.2	7
127	Prospects for graphene-nanoparticle-based hybrid sensors. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 12785-99	3.6	132
126	Synthesis of graphene based noble metal composites for glucose biosensor. <i>Materials Letters</i> , <b>2013</b> , 106, 277-280	3.3	22
125	An enzymatic biosensor for hydrogen peroxide based on CeO <sub>2</sub> nanostructure electrodeposited on ITO surface. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 47, 385-90	11.8	58
124	Nanoscale biomemory composed of recombinant azurin on a nanogap electrode. <i>Nanotechnology</i> , <b>2013</b> , 24, 365301	3.4	6
123	ITO/gold nanoparticle/RGD peptide composites to enhance electrochemical signals and proliferation of human neural stem cells. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2013</b> , 9, 336-44	6	39
122	In situ electrochemical detection of embryonic stem cell differentiation. <i>Journal of Biotechnology</i> , <b>2013</b> , 166, 1-5	3.7	14
121	A robust nanoscale biomemory device composed of recombinant azurin on hexagonally packed Au-nano array. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 40, 283-90	11.8	15
120	Electrochemical cell chip to detect environmental toxicants based on cell cycle arrest technique. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 41, 192-8	11.8	20
119	3D graphene oxide-encapsulated gold nanoparticles to detect neural stem cell differentiation. <i>Biomaterials</i> , <b>2013</b> , 34, 8660-70	15.6	115
118	One-Step Synthesis of Pt-Nanoparticles-Laden Graphene Crumples by Aerosol Spray Pyrolysis and Evaluation of Their Electrocatalytic Activity. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 93-98	3.4	43
117	STM and cyclic voltammetric investigation of recombinant azurin-gold nanoparticle hybrids. <i>Bioelectrochemistry</i> , <b>2012</b> , 83, 8-14	5.6	11
116	Cell adhesion, spreading, and proliferation on surface functionalized with RGD nanopillar arrays. <i>Biomaterials</i> , <b>2012</b> , 33, 731-9	15.6	60
115	Highly sensitive electrochemical detection of potential cytotoxicity of CdSe/ZnS quantum dots using neural cell chip. <i>Biosensors and Bioelectronics</i> , <b>2012</b> , 32, 266-72	11.8	24
114	A glucose biosensor based on TiO <sub>2</sub> -Graphene composite. <i>Biosensors and Bioelectronics</i> , <b>2012</b> , 38, 184-8	11.8	165
113	Electrochemical performance of gold nanoparticle-cytochrome c hybrid interface for H <sub>2</sub> O <sub>2</sub> detection. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2012</b> , 92, 161-7	6	58
112	Analysis of intracellular state based on controlled 3D nanostructures mediated surface enhanced Raman scattering. <i>PLoS ONE</i> , <b>2011</b> , 6, e15836	3.7	34
111	Multifunctional 4-bit biomemory chip consisting of recombinant azurin variants. <i>Biomaterials</i> , <b>2011</b> , 32, 3815-21	15.6	27

110	Multifunctional DNA-based biomemory device consisting of ssDNA/Cu heterolayers. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 2304-10	11.8	10
109	Electrochemical cell-based chip for the detection of toxic effects of bisphenol-A on neuroblastoma cells. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 3371-5	11.8	33
108	Signal Enhancement of Electrochemical Biomemory Device Composed of Recombinant Azurin/Gold Nanoparticle. <i>Electroanalysis</i> , <b>2011</b> , 23, 2023-2029	3	14
107	Fabrication of cell chip for detection of cell cycle progression based on electrochemical method. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 2104-11	7.8	22
106	Investigation of the redox property of a metalloprotein layer self-assembled on various chemical linkers. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2011</b> , 87, 36-41	6	9
105	Amperometric sensor for hydrogen peroxide based on direct electron transfer of spinach ferredoxin on Au electrode. <i>Bioelectrochemistry</i> , <b>2011</b> , 80, 169-74	5.6	29
104	Fabrication of gold nanodot arrays on a transparent substrate as a nanobioplatform for label-free visualization of living cells. <i>Nanotechnology</i> , <b>2011</b> , 22, 235304	3.4	24
103	Electrochemical Detection of Bisphenol A Induced Neuronal Toxicity Using RGD Peptide Modified ITO Electrode Cell Chip. <i>Molecular Crystals and Liquid Crystals</i> , <b>2010</b> , 519, 36-42	0.5	9
102	Fabrication of Biomemory Device Composed of Myoglobin on DTSSP Layer. <i>Molecular Crystals and Liquid Crystals</i> , <b>2010</b> , 519, 19-26	0.5	6
101	Three-dimensional mesoporous gold film to enhance the sensitivity of electrochemical detection. <i>Nanotechnology</i> , <b>2010</b> , 21, 455501	3.4	13
100	Detection of human serum albumin on protein array using scanning tunneling microscopy. <i>Ultramicroscopy</i> , <b>2010</b> , 110, 723-8	3.1	2
99	Electrochemical biomemory device consisting of recombinant protein molecules. <i>Biotechnology and Bioprocess Engineering</i> , <b>2010</b> , 15, 30-39	3.1	10
98	Nanoscale fabrication of a peptide layer in cell chip to detect effects of environmental toxins on HEK293 cells. <i>Biotechnology Letters</i> , <b>2010</b> , 32, 1797-802	3	10
97	Multilevel biomemory device consisting of recombinant azurin/cytochrome C. <i>Advanced Materials</i> , <b>2010</b> , 22, 510-4	24	98
96	Analysis of effect of nanoporous alumina substrate coated with polypyrrole nanowire on cell morphology based on AFM topography. <i>Ultramicroscopy</i> , <b>2010</b> , 110, 676-81	3.1	29
95	Verification of surfactant CHAPS effect using AFM for making biomemory device consisting of recombinant azurin monolayer. <i>Ultramicroscopy</i> , <b>2010</b> , 110, 712-7	3.1	5
94	Application of peptide nucleic acid towards development of nanobiosensor arrays. <i>Bioelectrochemistry</i> , <b>2010</b> , 79, 153-61	5.6	69
93	Nanoscale protein-based memory device composed of recombinant azurin. <i>Biomaterials</i> , <b>2010</b> , 31, 1293-85.6	85.6	20

92	Effects of nanopatterned RGD peptide layer on electrochemical detection of neural cell chip. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1359-65	11.8	28
91	Detection of effect of chemotherapeutic agents to cancer cells on gold nanoflower patterned substrate using surface-enhanced Raman scattering and cyclic voltammetry. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1486-92	11.8	56
90	Polyaniline based catalase biosensor for the detection of hydrogen peroxide and azide. <i>Biotechnology and Bioprocess Engineering</i> , <b>2009</b> , 14, 443-449	3.1	23
89	Write-OnceBead-Many-Times (WORM) biomemory device consisting of cysteine modified ferredoxin. <i>Electrochemistry Communications</i> , <b>2009</b> , 11, 854-858	5.1	10
88	Nanoscaled redox active protein adsorption on Au-dot arrays: An electrochemical scanning probe microscopic investigation for application in nano-biodevices. <i>Thin Solid Films</i> , <b>2009</b> , 518, 634-637	2.2	14
87	Ultrathin polyaniline film coated on an indium tin oxide cell-based chip for study of anticancer effect. <i>Thin Solid Films</i> , <b>2009</b> , 518, 661-667	2.2	28
86	Biomemory device composed of mutant azurin thin films modified by site-directed mutagenesis. <i>Thin Solid Films</i> , <b>2009</b> , 518, 682-687	2.2	5
85	Nanoscale film formation of ferritin and its application to biomemory device. <i>Ultramicroscopy</i> , <b>2009</b> , 109, 974-9	3.1	7
84	Electrical detection of beta-amyloid (1-40) using scanning tunneling microscopy. <i>Ultramicroscopy</i> , <b>2009</b> , 109, 923-8	3.1	9
83	Cell-based chip for the detection of anticancer effect on HeLa cells using cyclic voltammetry. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1259-65	11.8	54
82	Multi-bit biomemory consisting of recombinant protein variants, azurin. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1503-7	11.8	20
81	Charge storage investigation in self-assembled monolayer of redox-active recombinant azurin. <i>Current Applied Physics</i> , <b>2009</b> , 9, e71-e75	2.6	7
80	Fabrication of self-assembled RGD layer for cell chip to detect anticancer drug effect on HepG2 cells. <i>Current Applied Physics</i> , <b>2009</b> , 9, e76-e80	2.6	12
79	The Application of Cell Based Biosensor and Biochip for Environmental Monitoring <b>2009</b> , 261-273		2
78	Fabrication of Mouse Embryonic Stem Cell Chip Using Self-Assembled Layer of Cysteine-Modified RGD Oligopeptide. <i>Molecular Crystals and Liquid Crystals</i> , <b>2008</b> , 492, 184/[548]-191/[555]	0.5	5
77	Fabrication of porous nanostructured TiO <sub>2</sub> particles by an aerosol templating method. <i>Ultramicroscopy</i> , <b>2008</b> , 108, 1241-5	3.1	12
76	The immobilization of animal cells using the cysteine-modified RGD oligopeptide. <i>Ultramicroscopy</i> , <b>2008</b> , 108, 1144-7	3.1	22
75	The fabrication of functional biosurface composed of iron storage protein, ferritin. <i>Ultramicroscopy</i> , <b>2008</b> , 108, 1356-9	3.1	12

74	The development of protein chip using protein G for the simultaneous detection of various pathogens. <i>Ultramicroscopy</i> , <b>2008</b> , 108, 1396-400	3.1	6
73	Ultra-sensitive surface plasmon resonance based immunosensor for prostate-specific antigen using gold nanoparticle-antibody complex. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2008</b> , 313-314, 655-659	5.1	62
72	Rectified photocurrent of biophotodiode composed of cytochrome c/chlorophyll a heterostructure. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2008</b> , 313-314, 636-641	5.1	2
71	Optical Detection of Pathogens using Protein Chip <b>2008</b> , 348-362		7
70	Antibody Immobilization for Immunosensor on ProteinA Fabricated by Electrostatic Interaction of Synthetic Peptide. <i>Molecular Crystals and Liquid Crystals</i> , <b>2007</b> , 463, 245/[527]-254/[536]	0.5	1
69	Polyelectrolyte multilayer microcapsules: Self-assembly and toward biomedical applications. <i>Biotechnology and Bioprocess Engineering</i> , <b>2007</b> , 12, 323-332	3.1	50
68	Protein-based biomemory device consisting of the cysteine-modified azurin. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 263902	3.4	46
67	Nanoscale Fabrication of P. aeruginosa Azurin on Self-Assembled Monolayer. <i>Molecular Crystals and Liquid Crystals</i> , <b>2007</b> , 463, 281/[563]-289/[571]	0.5	3
66	Application of complement 1q for the site-selective recognition of immune complex in protein chip. <i>Biosensors and Bioelectronics</i> , <b>2006</b> , 22, 764-7	11.8	12
65	Microchip-based one step DNA extraction and real-time PCR in one chamber for rapid pathogen identification. <i>Lab on A Chip</i> , <b>2006</b> , 6, 886-95	7.2	152
64	Immunosensor for the detection of Vibrio cholerae O1 using surface plasmon resonance. <i>Biosensors and Bioelectronics</i> , <b>2006</b> , 21, 2315-9	11.8	86
63	Study on orientation of immunoglobulin G on protein G layer. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 21, 103-10	11.8	117
62	Adenoviral p53 effects and cell-specific E7 protein-protein interactions of human cervical cancer cells. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 2236-43	11.8	6
61	Surface plasmon resonance immunosensor for the detection of Yersinia enterocolitica. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2005</b> , 257-258, 369-374	5.1	27
60	Fabrication of DNA-protein conjugate layer on gold-substrate and its application to immunosensor. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2005</b> , 40, 173-7	6	22
59	Immobilization of antibody fragment for immunosensor application based on surface plasmon resonance. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2005</b> , 40, 143-8	6	45
58	The fabrication of protein chip based on surface plasmon resonance for detection of pathogens. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 1847-50	11.8	90
57	Protein array consisting of sol-gel bioactive platform for detection of E. coli O157:H7. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 2292-9	11.8	32

56	Cell immobilization using self-assembled synthetic oligopeptide and its application to biological toxicity detection using surface plasmon resonance. <i>Biosensors and Bioelectronics</i> , <b>2005</b> , 20, 2300-5	11.8	71
55	Photoelectrical properties of molecular layer consisting of chlorophyll a ferredoxin heterostructure. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 6275-6277	3.4	22
54	Molecular-scale biophotodiode consisting of a green fluorescent protein/cytochrome c self-assembled heterolayer. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2187-2189	3.4	50
53	Nanoscale fabrication of biomolecular layer and its application to biodevices. <i>Biotechnology and Bioprocess Engineering</i> , <b>2004</b> , 9, 76-85	3.1	45
52	Site-directed immobilization of antibody onto solid surfaces for the construction of immunochip. <i>Biotechnology and Bioprocess Engineering</i> , <b>2004</b> , 9, 112-117	3.1	16
51	Fabrication of protein a-viologen hetero Langmuir-Blodgett film for fluorescence immunoassay. <i>Biotechnology and Bioprocess Engineering</i> , <b>2004</b> , 9, 241-244	3.1	6
50	Immunosensor for detection of Legionella pneumophila based on imaging ellipsometry. <i>Materials Science and Engineering C</i> , <b>2004</b> , 24, 61-64	8.3	16
49	Nanoscale fabrication of protein A on self-assembled monolayer and its application to surface plasmon resonance immunosensor. <i>Enzyme and Microbial Technology</i> , <b>2004</b> , 35, 678-682	3.8	24
48	Surface plasmon resonance immunosensor for the detection of Salmonella typhimurium. <i>Biosensors and Bioelectronics</i> , <b>2004</b> , 19, 1497-504	11.8	182
47	Surface plasmon resonance immunosensor using self-assembled protein G for the detection of Salmonella paratyphi. <i>Journal of Biotechnology</i> , <b>2004</b> , 111, 1-1	3.7	
46	Surface plasmon resonance immunosensor using self-assembled protein G for the detection of Salmonella paratyphi. <i>Journal of Biotechnology</i> , <b>2004</b> , 111, 1-8	3.7	80
45	Surface plasmon resonance immunosensor for detection of Legionella pneumophila. <i>Biotechnology and Bioprocess Engineering</i> , <b>2003</b> , 8, 112-116	3.1	14
44	Optical biosensor for simultaneous detection of captan and organophosphorus compounds. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 18, 591-7	11.8	16
43	Immunosensor for detection of Legionella pneumophila using surface plasmon resonance. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 18, 605-11	11.8	109
42	Optical biosensor consisting of glutathione-S-transferase for detection of captan. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 18, 1461-6	11.8	31
41	Fabrication of self-assembled protein A monolayer and its application as an immunosensor. <i>Biosensors and Bioelectronics</i> , <b>2003</b> , 19, 185-92	11.8	93
40	Adsorption behavior and photoelectric response characteristics of bacteriorhodopsin thin films fabricated by self-assembly technique. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2002</b> , 23, 327-337	6	16
39	Charge Distribution of Cytochrome c Monolayer Using Electrostatic Force Microscope. <i>Molecular Crystals and Liquid Crystals</i> , <b>2002</b> , 377, 253-256	0.5	3

38	Bioelectronic device consisting of cytochrome c/poly-L-aspartic acid adsorbed hetero-Langmuir-Blodgett films. <i>Journal of Biotechnology</i> , <b>2002</b> , 94, 225-33	3.7	8
37	Deposition behavior and photoelectrochemical characteristics of chlorophylla Langmuir-Blodgett films. <i>Biotechnology and Bioprocess Engineering</i> , <b>2001</b> , 6, 183-188	3.1	25
36	Color image detection by biomolecular photoreceptor using bacteriorhodopsin-based complex LB films. <i>Biosensors and Bioelectronics</i> , <b>2001</b> , 16, 925-35	11.8	16
35	Rectified photocurrent of molecular photodiode consisting of cytochrome c/GFP hetero thin films. <i>Biosensors and Bioelectronics</i> , <b>2001</b> , 16, 819-25	11.8	36
34	Optical organophosphorus biosensor consisting of acetylcholinesterase/viologen hetero Langmuir-Blodgett film. <i>Biosensors and Bioelectronics</i> , <b>2001</b> , 16, 937-43	11.8	71
33	Modification of Functional Group on the Cytochrome c Using SPDP Method. <i>Molecular Crystals and Liquid Crystals</i> , <b>2001</b> , 371, 387-390		2
32	Rectified photocurrent of the protein-based bio-photodiode. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 1570-1573	3.4	41
31	Photoelectric conversion of bacteriorhodopsin films fabricated by self-assembly technique. <i>Synthetic Metals</i> , <b>2001</b> , 117, 141-143	3.6	7
30	STM Analysis of Cytochrome c Adsorbed Hetero-LB Film using Bridging Molecules. <i>Molecular Crystals and Liquid Crystals</i> , <b>2001</b> , 370, 313-316		
29	Effect of Joule Heat on the Performance of Organic Electroluminescence Device. <i>Molecular Crystals and Liquid Crystals</i> , <b>2001</b> , 371, 285-288		5
28	Shift Register Memory Function of Molecular Photodiode Consisting of Flavin/Viologen/TCNQ Molecular Hetero-LB Films. <i>Molecular Crystals and Liquid Crystals</i> , <b>2001</b> , 371, 403-406		2
27	Fabrication of Cytochrome c Multi-Layers by Schaefer Technique. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 187-190		0
26	Photoelectric Response Characteristics of Molecular Photoreceptor Using Bacteriorhodopsin/Flavin Complex LB Films. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 299-302		
25	Bioelectronic Device Consisting of Bacteriorhodopsin for Pattern Recognition. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 311-314		
24	Fabrication of Molecular Scale Photodiode using Phase Separation Technique. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 319-322		1
23	Optimal Fabrication Condition of Bacteriorhodopsin Thin Films Onto Modified Self-Assembled Monolayers. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 303-306		2
22	Lateral Force Microscopy Investigation of Bacteriorhodopsin Adsorption onto Mixed Self-Assembled Monolayers. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 307-310		1
21	Effect of Polymer Layer Morphology by Thermal Treatment on I-V Characteristics of Electroluminescence Device. <i>Molecular Crystals and Liquid Crystals</i> , <b>2000</b> , 349, 463-466		

20	Ultrasonic pretreatment for thermophilic aerobic digestion in industrial waste activated sludge treatment. <i>Biotechnology and Bioprocess Engineering</i> , <b>2000</b> , 5, 469-474	3.1	7
19	Approximated solution of model for three-phase fluidized bed biofilm reactor in wastewater treatment. <i>Biotechnology and Bioprocess Engineering</i> , <b>2000</b> , 5, 65-70	3.1	6
18	Noise Filtering by Bioelectronic Device Consisting of Bacteriorhodopsin and Spiropyran. <i>Molecular Crystals and Liquid Crystals</i> , <b>1999</b> , 327, 263-266		
17	Mathematical model for a three-phase fluidized bed biofilm reactor in wastewater treatment. <i>Biotechnology and Bioprocess Engineering</i> , <b>1999</b> , 4, 51-58	3.1	4
16	Kinetic model of cell growth and secondary metabolite synthesis in plant cell culture of <i>Thalictrum rugosum</i> . <i>Biotechnology and Bioprocess Engineering</i> , <b>1999</b> , 4, 129-137	3.1	7
15	Bioreactor operating strategy in <i>Thalictrum rugosum</i> plant cell culture for the production of berberine. <i>Biotechnology and Bioprocess Engineering</i> , <b>1999</b> , 4, 138-146	3.1	2
14	Kinetic model for biotransformation of digitoxin in plant cell suspension culture of <i>Digitalis lanata</i> . <i>Biotechnology and Bioprocess Engineering</i> , <b>1999</b> , 4, 281-286	3.1	3
13	Characterization and Optimization of Device Configuration Composed of Bacteriorhodopsin-Flavin Complex LB Films. <i>Molecular Crystals and Liquid Crystals</i> , <b>1999</b> , 327, 267-270		1
12	Fuzzy control systems for the regulation of substrate feeding rate in the fed-batch cultivation of <i>Scutellaria baicalensis</i> G <b>1999</b> ,		1
11	Photoinduced electron transfer in a MIM device composed of ferrocene-flavin-viologen-TCNQ molecular heterojunctions. <i>Thin Solid Films</i> , <b>1998</b> , 327-329, 671-675	2.2	21
10	Fiber-optic biosensor for the detection of organophosphorus compounds using AChE-immobilized viologen LB films. <i>Thin Solid Films</i> , <b>1998</b> , 327-329, 676-680	2.2	16
9	Application of genetic algorithm to self-organizing fuzzy controller in fed-batch culture of <i>Scutellaria baicalensis</i> G. plant cell. <i>Korean Journal of Chemical Engineering</i> , <b>1998</b> , 15, 404-410	2.8	1
8	Fuzzy control of ethanol concentration for emulsan production in a fed-batch cultivation of <i>Acinetobacter Calcoaceticus</i> RAG-1. <i>Korean Journal of Chemical Engineering</i> , <b>1998</b> , 15, 310-316	2.8	1
7	Uv-Curable Polymer Electrolyte. <i>Molecular Crystals and Liquid Crystals</i> , <b>1997</b> , 294, 225-228		7
6	Signal analysis of fiber-optic biosensor for the detection of organophosphorus compounds in the contaminated water. <i>Korean Journal of Chemical Engineering</i> , <b>1997</b> , 14, 101-108	2.8	9
5	Kinetic model for effects of ethanol and phosphate on cell growth and emulsan production in <i>Acinetobacter calcoaceticus</i> RAG-1. <i>Korean Journal of Chemical Engineering</i> , <b>1996</b> , 13, 266-274	2.8	4
4	Molecular Photodiode Consisting of Flavin-Viologen Hetero-Langmuir-Blodgett Films. <i>Molecular Crystals and Liquid Crystals</i> , <b>1996</b> , 280, 367-372		16
3	Analysis of culture fluorescence by a fiber-optic sensor in <i>Nicotiana tabacum</i> plant cell culture. <i>Korean Journal of Chemical Engineering</i> , <b>1995</b> , 12, 528-534	2.8	5

2	DNA-Gold Nanoparticle Conjugates for Intracellular miRNA Detection Using Surface-Enhanced Raman Spectroscopy. <i>Biochip Journal</i> ,1	4	4
1	3D Neural Network Composed of Neurospheroid and Bionanohybrid on Microelectrode Array to Realize the Spatial Input Signal Recognition in Neurospheroid. <i>Small Methods</i> ,2200127	12.8	2