

Hyun Gyu Park

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.

209
papers

6,256
citations

42
h-index

69
g-index

220
ext. papers

6,954
ext. citations

7.3
avg, IF

6.05
L-index

#	Paper	IF	Citations
209	Simple synthesis of functionalized superparamagnetic magnetite/silica core/shell nanoparticles and their application as magnetically separable high-performance biocatalysts. <i>Small</i> , 2008 , 4, 143-52	11	338
208	Black Phosphorus (BP) Nanodots for Potential Biomedical Applications. <i>Small</i> , 2016 , 12, 214-9	11	205
207	Simple synthesis of hierarchically ordered mesocellular mesoporous silica materials hosting crosslinked enzyme aggregates. <i>Small</i> , 2005 , 1, 744-53	11	179
206	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: a simple and effective method for enzyme stabilization. <i>Biotechnology and Bioengineering</i> , 2007 , 96, 210-8	4.9	173
205	"Illusionary" polymerase activity triggered by metal ions: use for molecular logic-gate operations. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 9757-60	16.4	138
204	Activated carbon-containing alginate adsorbent for the simultaneous removal of heavy metals and toxic organics. <i>Process Biochemistry</i> , 2007 , 42, 1371-1377	4.8	132
203	A label-free method for detecting biological thiols based on blocking of Hg ²⁺ -quenching of fluorescent gold nanoclusters. <i>Biosensors and Bioelectronics</i> , 2013 , 45, 65-9	11.8	130
202	Label-free colorimetric detection of nucleic acids based on target-induced shielding against the peroxidase-mimicking activity of magnetic nanoparticles. <i>Small</i> , 2011 , 7, 1521-5	11	130
201	A gold nanorod-based optical DNA biosensor for the diagnosis of pathogens. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 667-73	11.8	130
200	Erradiation-induced preparation of Ag and Au nanoparticles and their characterizations. <i>Materials Chemistry and Physics</i> , 2007 , 105, 325-330	4.4	125
199	Fabrication of nanoporous nanocomposites entrapping Fe ₃ O ₄ magnetic nanoparticles and oxidases for colorimetric biosensing. <i>Chemistry - A European Journal</i> , 2011 , 17, 10700-7	4.8	105
198	Circular dichroism study of chiral biomolecules conjugated with silver nanoparticles. <i>Nanotechnology</i> , 2004 , 15, S660-S663	3.4	103
197	Universal Colorimetric Detection of Nucleic Acids Based on Polydiacetylene (PDA) Liposomes. <i>Advanced Functional Materials</i> , 2008 , 18, 701-708	15.6	100
196	A magnetically separable, highly stable enzyme system based on nanocomposites of enzymes and magnetic nanoparticles shipped in hierarchically ordered, mesocellular, mesoporous silica. <i>Small</i> , 2005 , 1, 1203-7	11	99
195	Highly efficient colorimetric detection of target cancer cells utilizing superior catalytic activity of graphene oxide-magnetic-platinum nanohybrids. <i>Nanoscale</i> , 2014 , 6, 1529-36	7.7	98
194	High sensitive and selective electrochemical biosensor: Label-free detection of human norovirus using affinity peptide as molecular binder. <i>Biosensors and Bioelectronics</i> , 2017 , 87, 164-170	11.8	97
193	Photoluminescent carbon nanotags from harmful cyanobacteria for drug delivery and imaging in cancer cells. <i>Scientific Reports</i> , 2014 , 4, 4665	4.9	78

192	Immobilization of <i>Mucor javanicus</i> lipase on effectively functionalized silica nanoparticles. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2006 , 39, 62-68		78
191	Simple and universal platform for logic gate operations based on molecular beacon probes. <i>Small</i> , 2012 , 8, 2203-12, 2129	11	75
190	Polydiacetylene (PDA)-based colorimetric detection of biotin-streptavidin interactions. <i>Biosensors and Bioelectronics</i> , 2006 , 21, 1536-44	11.8	75
189	HER2/neu antibody conjugated poly(amino acid)-coated iron oxide nanoparticles for breast cancer MR imaging. <i>Biomacromolecules</i> , 2010 , 11, 2866-72	6.9	74
188	Direct colorimetric diagnosis of pathogen infections by utilizing thiol-labeled PCR primers and unmodified gold nanoparticles. <i>Biosensors and Bioelectronics</i> , 2010 , 25, 1941-6	11.8	74
187	A Highly Efficient Electrochemical Biosensing Platform by Employing Conductive Nanocomposite Entrapping Magnetic Nanoparticles and Oxidase in Mesoporous Carbon Foam. <i>Advanced Functional Materials</i> , 2011 , 21, 2868-2875	15.6	72
186	Specific Colorimetric Detection of Proteins Using Bidentate Aptamer-Conjugated Polydiacetylene (PDA) Liposomes. <i>Advanced Functional Materials</i> , 2010 , 20, 3092-3097	15.6	71
185	DNAzyme molecular beacon probes for target-induced signal-amplifying colorimetric detection of nucleic acids. <i>Analytical Chemistry</i> , 2011 , 83, 494-500	7.8	68
184	Novel amine-functionalized iron trimesates with enhanced peroxidase-like activity and their applications for the fluorescent assay of choline and acetylcholine. <i>Biosensors and Bioelectronics</i> , 2018 , 100, 161-168	11.8	65
183	One-dimensional crosslinked enzyme aggregates in SBA-15: Superior catalytic behavior to conventional enzyme immobilization. <i>Microporous and Mesoporous Materials</i> , 2008 , 111, 18-23	5.3	65
182	Ultrafast colorimetric detection of nucleic acids based on the inhibition of the oxidase activity of cerium oxide nanoparticles. <i>Chemical Communications</i> , 2014 , 50, 9577-80	5.8	61
181	Novel type of alginate gel-based adsorbents for heavy metal removal. <i>Journal of Chemical Technology and Biotechnology</i> , 2004 , 79, 1080-1083	3.5	58
180	Enzyme-free and label-free miRNA detection based on target-triggered catalytic hairpin assembly and fluorescence enhancement of DNA-silver nanoclusters. <i>Sensors and Actuators B: Chemical</i> , 2018 , 260, 140-145	8.5	51
179	A fluorescent G-quadruplex probe for the assay of base excision repair enzyme activity. <i>Chemical Communications</i> , 2015 , 51, 13744-7	5.8	49
178	A highly efficient colorimetric immunoassay using a nanocomposite entrapping magnetic and platinum nanoparticles in ordered mesoporous carbon. <i>Advanced Healthcare Materials</i> , 2014 , 3, 36-41	10.1	49
177	Mismatched pyrrolo-dC-modified duplex DNA as a novel probe for sensitive detection of silver ions. <i>Chemical Communications</i> , 2012 , 48, 4549-51	5.8	48
176	Intrinsic peroxidase-like activity of sonochemically synthesized protein copper nanoflowers and its application for the sensitive detection of glucose. <i>Sensors and Actuators B: Chemical</i> , 2019 , 283, 749-754	8.5	47
175	A novel colorimetric immunoassay utilizing the peroxidase mimicking activity of magnetic nanoparticles. <i>International Journal of Molecular Sciences</i> , 2013 , 14, 9999-10014	6.3	46

174	A polydiacetylene microchip based on a biotin-streptavidin interaction for the diagnosis of pathogen infections. <i>Small</i> , 2008 , 4, 1778-84	11	46
173	Label-free DNA detection with a nanogap embedded complementary metal oxide semiconductor. <i>Nanotechnology</i> , 2011 , 22, 135502	3.4	45
172	A simple and eco-friendly one-pot synthesis of nuclease-resistant DNA-inorganic hybrid nanoflowers. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 2231-2234	7.3	44
171	Colorimetric quantification of galactose using a nanostructured multi-catalyst system entrapping galactose oxidase and magnetic nanoparticles as peroxidase mimetics. <i>Analyst, The</i> , 2012 , 137, 1137-43	5	44
170	On-chip colorimetric biosensor based on polydiacetylene (PDA) embedded in photopolymerized poly(ethylene glycol) diacrylate (PEG-DA) hydrogel. <i>Biochemical Engineering Journal</i> , 2006 , 29, 103-108	4.2	44
169	Diagnosis of HNF-1alpha mutations on a PNA zip-code microarray by single base extension. <i>Nucleic Acids Research</i> , 2005 , 33, e19	20.1	44
168	A New Sensing Metric to Reduce Data Fluctuations in a Nanogap-Embedded Field-Effect Transistor Biosensor. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 2825-2831	2.9	43
167	Gold nanoparticle embedded silicon nanowire biosensor for applications of label-free DNA detection. <i>Biosensors and Bioelectronics</i> , 2010 , 25, 2182-5	11.8	42
166	Nanoscale enzyme reactors in mesoporous carbon for improved performance and lifetime of biosensors and biofuel cells. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 655-60	11.8	42
165	Isothermal target and signaling probe amplification method, based on a combination of an isothermal chain amplification technique and a fluorescence resonance energy transfer cycling probe technology. <i>Analytical Chemistry</i> , 2010 , 82, 5937-43	7.8	41
164	Sequential feeding of glucose and valerate in a fed-batch culture of <i>Ralstonia eutropha</i> for production of poly(hydroxybutyrate-co-hydroxyvalerate) with high 3-hydroxyvalerate fraction. <i>Biotechnology Progress</i> , 2004 , 20, 140-4	2.8	41
163	Fluorescence-based assay formats and signal amplification strategies for DNA microarray analysis. <i>Chemical Engineering Science</i> , 2006 , 61, 954-965	4.4	40
162	Enzymatic Synthesis of Various Aromatic Polyesters in Anhydrous Organic Solvents. <i>Biocatalysis</i> , 1994 , 11, 263-271		40
161	An ultrasensitive DNAzyme-based colorimetric strategy for nucleic acid detection. <i>Chemical Communications</i> , 2009 , 5838-40	5.8	39
160	Low-blinking SERS substrate for switchable detection of kanamycin. <i>Sensors and Actuators B: Chemical</i> , 2019 , 282, 765-773	8.5	39
159	Regioselective enzymatic acylation of multi-hydroxyl compounds in organic synthesis. <i>Biotechnology and Bioprocess Engineering</i> , 2003 , 8, 1-8	3.1	38
158	Colorimetric detection of clinical DNA samples using an intercalator-conjugated polydiacetylene sensor. <i>Biosensors and Bioelectronics</i> , 2015 , 72, 127-32	11.8	37
157	Target-controlled formation of silver nanoclusters in abasic site-incorporated duplex DNA for label-free fluorescence detection of theophylline. <i>Nanoscale</i> , 2014 , 6, 9977-82	7.7	36

156	Technological applications arising from the interactions of DNA bases with metal ions. <i>Current Opinion in Biotechnology</i> , 2014 , 28, 17-24	11.4	35
155	Investigation of the signaling mechanism and verification of the performance of an electrochemical real-time PCR system based on the interaction of methylene blue with DNA. <i>Analyst, The</i> , 2011 , 136, 1573-9	5	34
154	Enzyme-catalyzed signal amplification for electrochemical DNA detection with a PNA-modified electrode. <i>Analyst, The</i> , 2008 , 133, 100-4	5	34
153	A label-free and enzyme-free signal amplification strategy for a sensitive RNase H activity assay. <i>Nanoscale</i> , 2017 , 9, 16149-16153	7.7	33
152	Effective peroxidase-like activity of a water-solubilized Fe-aminoclay for use in immunoassay. <i>Biosensors and Bioelectronics</i> , 2013 , 42, 373-8	11.8	32
151	A label-free fluorescent assay for deoxyribonuclease I activity based on DNA-templated silver nanocluster/graphene oxide nanocomposite. <i>Biosensors and Bioelectronics</i> , 2017 , 93, 293-297	11.8	32
150	Illusory Polymerase Activity Triggered by Metal Ions: Use for Molecular Logic-Gate Operations. <i>Angewandte Chemie</i> , 2010 , 122, 9951-9954	3.6	32
149	Multifunctional drug delivery system using starch-alginate beads for controlled release. <i>Biological and Pharmaceutical Bulletin</i> , 2005 , 28, 394-7	2.3	32
148	Colorimetric Detection of SARS-CoV-2 and Drug-Resistant pH1N1 Using CRISPR/dCas9. <i>ACS Sensors</i> , 2020 , 5, 4017-4026	9.2	32
147	A sensitive dual colorimetric and fluorescence system for assaying the activity of alkaline phosphatase that relies on pyrophosphate inhibition of the peroxidase activity of copper ions. <i>Analyst, The</i> , 2014 , 139, 4691-5	5	31
146	A DNA-templated silver nanocluster probe for label-free, turn-on fluorescence-based screening of homo-adenine binding molecules. <i>Biosensors and Bioelectronics</i> , 2015 , 64, 618-24	11.8	31
145	Highly sensitive biomolecule detection on a quartz crystal microbalance using gold nanoparticles as signal amplification probes. <i>Analytical Sciences</i> , 2007 , 23, 177-81	1.7	31
144	Biodistribution and clearance of aminoclay nanoparticles: implication for in vivo applicability as a tailor-made drug delivery carrier. <i>Journal of Materials Chemistry B</i> , 2014 , 2, 7567-7574	7.3	30
143	Reagentless colorimetric biosensing platform based on nanoceria within an agarose gel matrix. <i>Biosensors and Bioelectronics</i> , 2017 , 93, 226-233	11.8	30
142	Clustered Regularly Interspaced Short Palindromic Repeats-Mediated Surface-Enhanced Raman Scattering Assay for Multidrug-Resistant Bacteria. <i>ACS Nano</i> , 2020 ,	16.7	30
141	Rapid and ultrasensitive detection of microRNA by target-assisted isothermal exponential amplification coupled with poly (thymine)-templated fluorescent copper nanoparticles. <i>Nanotechnology</i> , 2016 , 27, 425502	3.4	29
140	An ultrasensitive peroxidase DNAzyme-associated aptasensor that utilizes a target-triggered enzymatic signal amplification strategy. <i>Chemical Communications</i> , 2011 , 47, 9876-8	5.8	29
139	Metal ion triggers for reversible switching of DNA polymerase. <i>Chemical Communications</i> , 2016 , 52, 4868-71	3.1	28

138	Pyrrolo-dC based fluorescent aptasensors for the molecular recognition of targets. <i>Chemical Communications</i> , 2010 , 46, 3271-3	5.8	28
137	An electrochemical one-step system for assaying methyltransferase activity based on transport of a quantum dot signaling tracer. <i>Biosensors and Bioelectronics</i> , 2013 , 49, 542-6	11.8	27
136	Real-time colorimetric detection of target DNA using isothermal target and signaling probe amplification and gold nanoparticle cross-linking assay. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 1953-8	11.8	27
135	Advanced carbon dots via plasma-induced surface functionalization for fluorescent and bio-medical applications. <i>Nanoscale</i> , 2017 , 9, 9210-9217	7.7	26
134	Array-based mutation detection of BRCA1 using direct probe/target hybridization. <i>Analytical Biochemistry</i> , 2005 , 337, 332-7	3.1	26
133	Au@ZIF-8 SERS paper for food spoilage detection. <i>Biosensors and Bioelectronics</i> , 2021 , 179, 113063	11.8	25
132	Target DNA induced switches of DNA polymerase activity. <i>Chemical Communications</i> , 2015 , 51, 9942-5	5.8	24
131	An anisotropic snowflake-like structural assembly of polymer-capped gold nanoparticles. <i>Journal of Nanoparticle Research</i> , 2011 , 13, 2173-2180	2.3	24
130	A DNA intercalation-based electrochemical method for detection of Chlamydia trachomatis utilizing peroxidase-catalyzed signal amplification. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 665-9	11.8	24
129	Barcode DNA-Mediated Signal Amplifying Strategy for Ultrasensitive Biomolecular Detection on Matrix-Assisted Laser Desorption Ionization Time of Flight (MALDI-TOF) Mass Spectrometry. <i>Analytical Chemistry</i> , 2017 , 89, 8966-8973	7.8	23
128	Colorimetric SNP genotyping based on allele-specific PCR by using a thiol-labeled primer. <i>ChemBioChem</i> , 2011 , 12, 1387-90	3.8	23
127	Surface-enhanced Raman scattering (SERS) spectra of sodium benzoate and 4-picoline in Ag colloids prepared by irradiation. <i>Applied Surface Science</i> , 2005 , 243, 76-81	6.7	23
126	Aptamer-based cell imaging reagents capable of fluorescence switching. <i>Chemical Communications</i> , 2014 , 50, 12329-32	5.8	22
125	Direct and nondestructive verification of PNA immobilization using click chemistry. <i>Biochemical and Biophysical Research Communications</i> , 2008 , 376, 633-6	3.4	22
124	A new s-adenosylhomocysteine hydrolase-linked method for adenosine detection based on DNA-templated fluorescent Cu/Ag nanoclusters. <i>Biosensors and Bioelectronics</i> , 2017 , 93, 330-334	11.8	20
123	Rapid and label-free, electrochemical DNA detection utilizing the oxidase-mimicking activity of cerium oxide nanoparticles. <i>Electrochemistry Communications</i> , 2019 , 99, 5-10	5.1	20
122	A mass spectrometry-based multiplex SNP genotyping by utilizing allele-specific ligation and strand displacement amplification. <i>Biosensors and Bioelectronics</i> , 2017 , 91, 122-127	11.8	19
121	Universal, colorimetric microRNA detection strategy based on target-catalyzed toehold-mediated strand displacement reaction. <i>Nanotechnology</i> , 2018 , 29, 085501	3.4	19

120	Label-free colorimetric detection of biological thiols based on target-triggered inhibition of photoinduced formation of AuNPs. <i>Nanotechnology</i> , 2016 , 27, 055501	3.4	19
119	A convenient alcohol sensor using one-pot nanocomposite entrapping alcohol oxidase and magnetic nanoparticles as peroxidase mimetics. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 5914-9	1.3	19
118	Poly(dimethyl siloxane)-based protein chip for simultaneous detection of multiple samples: use of glycidyl methacrylate photopolymer for site-specific protein immobilization. <i>Biosensors and Bioelectronics</i> , 2006 , 22, 613-20	11.8	19
117	Ultrasensitive DNA detection based on target-triggered rolling circle amplification and fluorescent poly(thymine)-templated copper nanoparticles.. <i>RSC Advances</i> , 2018 , 8, 1958-1962	3.7	18
116	A one-step electrochemical method for DNA detection that utilizes a peroxidase-mimicking DNAzyme amplified through PCR of target DNA. <i>Biosensors and Bioelectronics</i> , 2011 , 30, 73-7	11.8	18
115	Oligonucleotide chip for the diagnosis of HNF-1 alpha mutations. <i>Biosensors and Bioelectronics</i> , 2005 , 21, 637-44	11.8	18
114	Two zinc-aminoclays' in-vitro cytotoxicity assessment in HeLa cells and in-vivo embryotoxicity assay in zebrafish. <i>Ecotoxicology and Environmental Safety</i> , 2017 , 137, 103-112	7	17
113	SNPs detection by a single-strand specific nuclease on a PNA zip-code microarray. <i>Biosensors and Bioelectronics</i> , 2009 , 24, 1706-11	11.8	17
112	Size-dependent flocculation behavior of colloidal Au nanoparticles modified with various biomolecules. <i>Ultramicroscopy</i> , 2008 , 108, 1273-7	3.1	17
111	Enzymatic transesterification of monosaccharides and amino acid esters in organic solvents. <i>Biotechnology Letters</i> , 1996 , 18, 473-478	3	17
110	A Personal Glucose Meter for Label-Free and Washing-Free Biomolecular Detection. <i>Analytical Chemistry</i> , 2018 , 90, 11340-11343	7.8	17
109	Label-free fluorescent detection of alkaline phosphatase with vegetable waste-derived green carbon probes. <i>Sensors and Actuators B: Chemical</i> , 2018 , 262, 469-476	8.5	16
108	Pyrrolo-dC modified duplex DNA as a novel probe for the sensitive assay of base excision repair enzyme activity. <i>Biosensors and Bioelectronics</i> , 2017 , 98, 210-214	11.8	16
107	Direct detection of unamplified genomic DNA based on photo-induced silver ion reduction by DNA molecules. <i>Chemical Communications</i> , 2013 , 49, 2350-2	5.8	16
106	Electrochemical detection of DNA mutations on a PNA-modified electrode utilizing a single-stranded DNA specific endonuclease. <i>Chemical Communications</i> , 2011 , 47, 6611-3	5.8	16
105	Detection of DNA immobilization and hybridization on gold/silver nanostructures using localized surface plasmon resonance. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 1374-8	1.3	16
104	A touchscreen as a biomolecule detection platform. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 748-51	16.4	15
103	Aptamer-mediated universal enzyme assay based on target-triggered DNA polymerase activity. <i>Biosensors and Bioelectronics</i> , 2017 , 88, 48-54	11.8	15

102	Size and morphology controllable core cross-linked self-aggregates from poly(ethylene glycol-b-succinimide) copolymers. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 203-210	2.5	15
101	Mismatch DNA-specific enzymatic cleavage employed in a new method for the electrochemical detection of genetic mutations. <i>Chemical Communications</i> , 2009 , 4230-2	5.8	15
100	A color display system based on thermochromic conjugated polydiacetylene supramolecules. <i>Macromolecular Research</i> , 2010 , 18, 404-407	1.9	15
99	Mixed self-assembly of polydiacetylenes for highly specific and sensitive strip biosensors. <i>Biosensors and Bioelectronics</i> , 2008 , 24, 480-4	11.8	15
98	Determination of RNase H activity via real-time monitoring of target-triggered rolling circle amplification. <i>Mikrochimica Acta</i> , 2017 , 185, 53	5.8	15
97	A simple, sensitive, and label-free assay for alkaline phosphatase activity based on target-promoted exponential strand displacement amplification. <i>Sensors and Actuators B: Chemical</i> , 2018 , 262, 1001-1005	8.5	14
96	Development of a rapid and simple tetracycline detection system based on metal-enhanced fluorescence by europium-doped AgNP@SiO core-shell nanoparticles.. <i>RSC Advances</i> , 2018 , 8, 24322-24327	3.7	14
95	High-throughput nanoscale lipid vesicle synthesis in a semicircular contraction-expansion array microchannel. <i>Biochip Journal</i> , 2013 , 7, 210-217	4	14
94	Colorimetric Quantification of Glucose and Cholesterol in Human Blood Using a Nanocomposite Entrapping Magnetic Nanoparticles and Oxidases. <i>Journal of Nanoscience and Nanotechnology</i> , 2015 , 15, 7955-61	1.3	14
93	A novel electrochemical method to detect theophylline utilizing silver ions captured within a basic site-incorporated duplex DNA. <i>Biosensors and Bioelectronics</i> , 2015 , 67, 590-4	11.8	14
92	Multiplexed amino acid array utilizing bioluminescent Escherichia coli auxotrophs. <i>Analytical Chemistry</i> , 2010 , 82, 4072-7	7.8	14
91	Enzyme-Free Colorimetric Detection of Cu by Utilizing Target-Triggered DNAzymes and Toehold-Mediated DNA Strand Displacement Events. <i>Chemistry - A European Journal</i> , 2017 , 23, 17379-17383	4.8	13
90	A one-step and label-free, electrochemical DNA detection using metal ion-mediated molecular beacon probe. <i>Electrochemistry Communications</i> , 2019 , 100, 64-69	5.1	13
89	An impedimetric determination of alkaline phosphatase activity based on the oxidation reaction mediated by Cu bound to poly-thymine DNA.. <i>RSC Advances</i> , 2018 , 8, 11241-11246	3.7	13
88	Ultrafast sonochemical synthesis of protein-inorganic nanoflowers. <i>International Journal of Nanomedicine</i> , 2015 , 10 Spec Iss, 137-42	7.3	13
87	Colorimetric polydiacetylene (PDA) liposome-based assay for rapid and simple detection of GST-fusion protein. <i>Sensors and Actuators B: Chemical</i> , 2019 , 278, 190-195	8.5	13
86	Three-way junction-induced isothermal amplification for nucleic acid detection. <i>Biosensors and Bioelectronics</i> , 2020 , 147, 111762	11.8	13
85	Flap endonuclease-initiated enzymatic repairing amplification for ultrasensitive detection of target nucleic acids. <i>Nanoscale</i> , 2019 , 11, 3633-3638	7.7	12

84	Glucose oxidase-like activity of cerium oxide nanoparticles: use for personal glucose meter-based label-free target DNA detection. <i>Theranostics</i> , 2020 , 10, 4507-4514	12.1	12
83	A simple and sensitive detection of small molecule-protein interactions based on terminal protection-mediated exponential strand displacement amplification. <i>Analyst, The</i> , 2018 , 143, 2023-2028 ⁵		12
82	Enzyme precipitate coatings of glucose oxidase onto carbon paper for biofuel cell applications. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 318-24	4.9	12
81	In-vitro cytotoxicity assessment of carbon-nanodot-conjugated Fe-aminoclay (CD-FeAC) and its bio-imaging applications. <i>Journal of Nanobiotechnology</i> , 2015 , 13, 88	9.4	12
80	PCR-free mutation detection of BRCA1 on a zip-code microarray using ligase chain reaction. <i>Journal of Proteomics</i> , 2008 , 70, 897-902		12
79	Photopatterned Polydiacetylene Images Using a DNA Bio-Photomask. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 15684-90	9.5	11
78	An electrochemically reversible DNA switch. <i>Electrochemistry Communications</i> , 2013 , 27, 100-103	5.1	11
77	Nanoscope observation of a gold nanoparticle-conjugated protein using near-field scanning optical microscopy. <i>Ultramicroscopy</i> , 2008 , 108, 1115-9	3.1	11
76	Nanoparticle-based detection technology for DNA analysis. <i>Biotechnology and Bioprocess Engineering</i> , 2003 , 8, 221-226	3.1	11
75	Cell-based method utilizing fluorescent <i>Escherichia coli</i> auxotrophs for quantification of multiple amino acids. <i>Analytical Chemistry</i> , 2014 , 86, 2489-96	7.8	10
74	Cell-based galactosemia diagnosis system based on a galactose assay using a bioluminescent <i>Escherichia coli</i> array. <i>Analytical Chemistry</i> , 2013 , 85, 11083-9	7.8	10
73	Nucleic acid-based fluorescent methods for the determination of DNA repair enzyme activities: A review. <i>Analytica Chimica Acta</i> , 2019 , 1060, 30-44	6.6	9
72	Label-free and washing-free alkaline phosphatase assay using a personal glucose meter. <i>Journal of Biological Engineering</i> , 2019 , 13, 51	6.3	9
71	Electrochemical Activity Studies of Glucose Oxidase (GOx)-Based and Pyranose Oxidase (POx)-Based Electrodes in Mesoporous Carbon: Toward Biosensor and Biofuel Cell Applications. <i>Electroanalysis</i> , 2014 , 26, 2075-2079	3	9
70	Application of the ASLP technology to a novel platform for rapid and noise-free multiplexed SNP genotyping. <i>Biosensors and Bioelectronics</i> , 2014 , 54, 687-94	11.8	9
69	A Sexually Transmitted Disease (STD) DNA chip for the diagnosis of genitourinary infections. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 4314-9	11.8	9
68	Economic evaluation of off-gas recycle pressure swing adsorption (PSA) in industrial scale poly(3-hydroxybutyrate) fermentation. <i>Biotechnology and Bioprocess Engineering</i> , 2010 , 15, 905-910	3.1	9
67	Radiolytic synthesis of Ag-loaded polystyrene (Ag-PS) nanoparticles and their antimicrobial efficiency against <i>Staphylococcus aureus</i> and <i>Klebsiella pneumoniae</i> . <i>Macromolecular Research</i> , 2007 , 15, 285-290	1.9	9

66	DNA metallization for high performance Li-ion battery anodes. <i>Nano Energy</i> , 2014 , 8, 17-24	17.1	8
65	Cell-based quantification of homocysteine utilizing bioluminescent <i>Escherichia coli</i> auxotrophs. <i>Analytical Chemistry</i> , 2011 , 83, 3089-95	7.8	8
64	A simple gold nanoparticle-mediated immobilization method to fabricate highly homogeneous DNA microarrays having higher capacities than those prepared by using conventional techniques. <i>Nanotechnology</i> , 2009 , 20, 035607	3.4	8
63	Microarray-based detection of Korean-specific BRCA1 mutations. <i>Analytical and Bioanalytical Chemistry</i> , 2008 , 391, 405-13	4.4	8
62	Urinary exosomal mRNA detection using novel isothermal gene amplification method based on three-way junction. <i>Biosensors and Bioelectronics</i> , 2020 , 167, 112474	11.8	8
61	Ultrasensitive version of nucleic acid sequence-based amplification (NASBA) utilizing a nicking and extension chain reaction system. <i>Nanoscale</i> , 2021 , 13, 10785-10791	7.7	8
60	Abasic Site-Assisted Inhibition of Nicking Endonuclease Activity for the Sensitive Determination of Uracil DNA Glycosylase. <i>Biotechnology Journal</i> , 2018 , 13, e1700603	5.6	8
59	Sensitive detection of DNA from <i>Chlamydia trachomatis</i> by using flap endonuclease-assisted amplification and graphene oxide-based fluorescence signaling. <i>Mikrochimica Acta</i> , 2019 , 186, 330	5.8	7
58	Fabrication of conductive oxidase-entrapping nanocomposite of mesoporous ceria/carbon for efficient electrochemical biosensor. <i>RSC Advances</i> , 2015 , 5, 78747-78753	3.7	7
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