Moon Il Kim

List of Publications by Year
in descending order

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Version: 2024-02-01

106 papers	4,255 citations	116194 36 h-index	134545 62 g-index
109 all docs	109 docs citations	109 times ranked	5497 citing authors

#	Article	IF	Citations
1	Aptamer-functionalized and silver-coated polydopamine-copper hybrid nanoflower adsorbent embedded with magnetic nanoparticles for efficient mercury removal. Chemosphere, 2022, 288, 132584.	4.2	10
2	Nanoceria-based lateral flow immunoassay for hydrogen peroxide-free colorimetric biosensing for C-reactive protein. Analytical and Bioanalytical Chemistry, 2022, 414, 3257-3265.	1.9	11
3	High capacity and inexpensive multivalent cathode materials for aqueous rechargeable Zn-ion battery fabricated via in situ electrochemical oxidation of VO2 nanorods. Journal of Power Sources, 2022, 523, 231060.	4.0	22
4	Dual-Functional Peroxidase-Copper Phosphate Hybrid Nanoflowers for Sensitive Detection of Biological Thiols. International Journal of Molecular Sciences, 2022, 23, 366.	1.8	5
5	Rational Development of Coâ€Doped Mesoporous Ceria with High Peroxidaseâ€Mimicking Activity at Neutral pH for Paperâ€Based Colorimetric Detection of Multiple Biomarkers. Advanced Functional Materials, 2022, 32, .	7.8	39
6	Silver nanoparticle-coated polydopamine-copper hybrid nanoflowers as ultrasensitive surface-enhanced Raman spectroscopy probes for detecting thiol-containing molecules. Sensors and Actuators B: Chemical, 2022, 369, 132246.	4.0	6
7	Using Nanomaterials in Colorimetric Toxin Detection. Biochip Journal, 2021, 15, 123-134.	2.5	22
8	Highly Sensitive Fluorescent Detection of Acetylcholine Based on the Enhanced Peroxidase-Like Activity of Histidine Coated Magnetic Nanoparticles. Nanomaterials, 2021, 11, 1207.	1.9	9
9	DNA-copper hybrid nanoflowers as efficient laccase mimics for colorimetric detection of phenolic compounds in paper microfluidic devices. Biosensors and Bioelectronics, 2021, 182, 113187.	5.3	75
10	Investigation of the influence of TiO₂ distribution on HA/TiO₂ composite wetting ability using the dispersant SDBS, high-temperature annealing, and ultrasonication. Biomedical Materials (Bristol), 2021, 16, 045033.	1.7	0
11	Plausible Pnicogen Bonding of epi-Cinchonidine as a Chiral Scaffold in Catalysis. Frontiers in Chemistry, 2021, 9, 669515.	1.8	7
12	Effective Cryopreservation of a Bioluminescent Auxotrophic Escherichia coli-Based Amino Acid Array to Enable Long-Term Ready-to-Use Applications. Biosensors, 2021, 11, 252.	2.3	3
13	In SituBiosynthesis of a Metal Nanoparticle Encapsulated in Alginate Gel for Imageable Drug-Delivery System. ACS Applied Materials & Interfaces, 2021, 13, 36697-36708.	4.0	14
14	Research Progress and Prospects of Nanozyme-Based Glucose Biofuel Cells. Nanomaterials, 2021, 11, 2116.	1.9	18
15	UV-Light-Driven Enhancement of Peroxidase-Like Activity of Mg-Aminoclay-Based Fe3O4/TiO2 Hybrids for Colorimetric Detection of Phenolic Compounds. Chemosensors, 2021, 9, 219.	1.8	6
16	Colorimetric determination of phenolic compounds using peroxidase mimics based on biomolecule-free hybrid nanoflowers consisting of graphitic carbon nitride and copper. Mikrochimica Acta, 2021, 188, 293.	2.5	20
17	Nanozymes in Point-of-Care Diagnosis: An Emerging Futuristic Approach for Biosensing. Nano-Micro Letters, 2021, 13, 193.	14.4	85
18	Recent Advances in Research on Implantable Enzymatic Biofuel Cell. KSBB Journal, 2021, 36, 238-246.	0.1	0

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19	Heme Cofactorâ€Resembling Feâ€“N Single Site Embedded Graphene as Nanozymes to Selectively Detect H₂O₂ with High Sensitivity. Advanced Functional Materials, 2020, 30, 1905410.	7.8	171
20	A Convenient Colorimetric Bacteria Detection Method Utilizing Chitosan-Coated Magnetic Nanoparticles. Nanomaterials, 2020, 10, 92.	1.9	48
21	Self color-changing ordered mesoporous ceria for reagent-free colorimetric biosensing. Nanoscale, 2020, 12, 1419-1424.	2.8	23
22	Glucose oxidase-copper hybrid nanoflowers embedded with magnetic nanoparticles as an effective antibacterial agent. International Journal of Biological Macromolecules, 2020, 155, 1520-1531.	3.6	50
23	Crowding and confinement effects on enzyme stability in mesoporous silicas. International Journal of Biological Macromolecules, 2020, 144, 118-126.	3.6	13
24	Reagent-Free Colorimetric Cholesterol Test Strip Based on Self Color-Changing Property of Nanoceria. Frontiers in Chemistry, 2020, 8, 798.	1.8	14
25	Nanomaterial-mediated paper-based biosensors for colorimetric pathogen detection. TrAC - Trends in Analytical Chemistry, 2020, 132, 116038.	5.8	128
26	In situ growth of hybrid nanoflowers on activated carbon fibers as electrodes for mediatorless enzymatic biofuel cells. Materials Letters, 2020, 281, 128662.	1.3	11
27	Poly-Î³-Glutamic Acid/Chitosan Hydrogel Nanoparticles Entrapping Glucose Oxidase and Magnetic Nanoparticles for Glucose Biosensing. Journal of Nanoscience and Nanotechnology, 2020, 20, 5333-5337.	0.9	16
28	N, S, and P-Co-doped Carbon Quantum Dots: Intrinsic Peroxidase Activity in a Wide pH Range and Its Antibacterial Applications. ACS Biomaterials Science and Engineering, 2020, 6, 5527-5537.	2.6	109
29	Reagent-Free Colorimetric Assay for Galactose Using Agarose Gel Entrapping Nanoceria and Galactose Oxidase. Nanomaterials, 2020, 10, 895.	1.9	9
30	Ultrarapid, size-controlled, high-crystalline plasma-mediated synthesis of ceria nanoparticles for reagent-free colorimetric glucose test strips. Sensors and Actuators B: Chemical, 2020, 320, 128404.	4.0	14
31	Rosette-shaped graphitic carbon nitride acts as a peroxidase mimic in a wide pH range for fluorescence-based determination of glucose with glucose oxidase. Mikrochimica Acta, 2020, 187, 286.	2.5	20
32	Hair Growth Promoting Effect of 4HGF Encapsulated with PGA Nanoparticles (PGA-4HGF) by Î²-Catenin Activation and Its Related Cell Cycle Molecules. International Journal of Molecular Sciences, 2019, 20, 3447.	1.8	7
33	Cerium Aminoclayâ€”A Potential Hybrid Biomaterial for Anticancer Therapy. ACS Biomaterials Science and Engineering, 2019, 5, 5857-5871.	2.6	5
34	Poly(Î³-Glutamic Acid)/Chitosan Hydrogel Nanoparticles For Effective Preservation And Delivery Of Fermented Herbal Extract For Enlarging Hair Bulb And Enhancing Hair Growth . International Journal of Nanomedicine, 2019, Volume 14, 8409-8419.	3.3	24
35	Co3O4/Au Hybrid Nanostructures as Efficient Peroxidase Mimics for Colorimetric Biosensing. Journal of Nanoscience and Nanotechnology, 2019, 19, 6696-6702.	0.9	8
36	Enzyme-Immobilized Chitosan Nanoparticles as Environmentally Friendly and Highly Effective Antimicrobial Agents. Biomacromolecules, 2019, 20, 2477-2485.	2.6	36

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37	Magnetic Nanoparticlesâ€Embedded Enzymeâ€Inorganic Hybrid Nanoflowers with Enhanced Peroxidaseâ€Like Activity and Substrate Channeling for Glucose Biosensing. Advanced Healthcare Materials, 2019, 8, e1801507.	3.9	77
38	N- and B-Codoped Graphene: A Strong Candidate To Replace Natural Peroxidase in Sensitive and Selective Bioassays. ACS Nano, 2019, 13, 4312-4321.	7.3	153
39	Rapid and label-free, electrochemical DNA detection utilizing the oxidase-mimicking activity of cerium oxide nanoparticles. Electrochemistry Communications, 2019, 99, 5-10.	2.3	29
40	Intrinsic peroxidase-like activity of sonochemically synthesized protein copper nanoflowers and its application for the sensitive detection of glucose. Sensors and Actuators B: Chemical, 2019, 283, 749-754.	4.0	60
41	Colorimetric Detection of MPT64 Antibody Based on an Aptamer Adsorbed Magnetic Nanoparticles for Diagnosis of Tuberculosis. Journal of Nanoscience and Nanotechnology, 2019, 19, 622-626.	0.9	10
42	Label-free fluorescent detection of alkaline phosphatase with vegetable waste-derived green carbon probes. Sensors and Actuators B: Chemical, 2018, 262, 469-476.	4.0	24
43	Highly sensitive colorimetric detection of allergies based on an immunoassay using peroxidase-mimicking nanozymes. Analyst, The, 2018, 143, 1182-1187.	1.7	15
44	Ultrarapid sonochemical synthesis of enzyme-incorporated copper nanoflowers and their application to mediatorless glucose biofuel cell. Applied Surface Science, 2018, 429, 203-209.	3.1	63
45	Novel amine-functionalized iron trimesates with enhanced peroxidase-like activity and their applications for the fluorescent assay of choline and acetylcholine. Biosensors and Bioelectronics, 2018, 100, 161-168.	5.3	93
46	Organic-Inorganic Hybrid Nanoflowers as Potent Materials for Biosensing and Biocatalytic Applications. Biochip Journal, 2018, 12, 268-279.	2.5	46
47	Pediococcus pentosaceus-Fermented Cordyceps militaris Inhibits Inflammatory Reactions and Alleviates Contact Dermatitis. International Journal of Molecular Sciences, 2018, 19, 3504.	1.8	22
48	Effective Peroxidase-Like Activity of Co-Aminoclay [CoAC] and Its Application for Glucose Detection. Sensors, 2018, 18, 457.	2.1	12
49	Convenient Colorimetric Detection of Cholesterol Using Multi-Enzyme Co-Incorporated Organicâ€“Inorganic Hybrid Nanoflowers. Journal of Nanoscience and Nanotechnology, 2018, 18, 6555-6561.	0.9	36
50	Convenient Colorimetric Detection of Thrombin via Aptamer-Mediated Inhibition and Restoration of the Oxidase Activity of Nanoceria. Journal of Nanoscience and Nanotechnology, 2018, 18, 6570-6574.	0.9	8
51	Highly Efficient Electrochemical Detection of Phenolic Compounds Utilizing Superior Catalytic Activity of Nanohybrids Consisting of Magnetic Nanoparticles and Gold Nanoclusters. Journal of Nanoscience and Nanotechnology, 2018, 18, 1246-1250.	0.9	6
52	Nanohybrids consisting of magnetic nanoparticles and gold nanoclusters as effective peroxidase mimics and their application for colorimetric detection of glucose. Biointerphases, 2017, 12, 01A401.	0.6	21
53	A simple and eco-friendly one-pot synthesis of nuclease-resistant DNAâ€“inorganic hybrid nanoflowers. Journal of Materials Chemistry B, 2017, 5, 2231-2234.	2.9	55
54	Preparation of glutaraldehyde-treated lipase-inorganic hybrid nanoflowers and their catalytic performance as immobilized enzymes. Enzyme and Microbial Technology, 2017, 105, 24-29.	1.6	69

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55	Visual determination of hydrogen peroxide and glucose by exploiting the peroxidase-like activity of magnetic nanoparticles functionalized with a poly(ethylene glycol) derivative. Mikrochimica Acta, 2017, 184, 2115-2122.	2.5	35
56	Pt-Decorated Magnetic Nanozymes for Facile and Sensitive Point-of-Care Bioassay. ACS Applied Materials & Interfaces, 2017, 9, 35133-35140.	4.0	113
57	Reagentless colorimetric biosensing platform based on nanoceria within an agarose gel matrix. Biosensors and Bioelectronics, 2017, 93, 226-233.	5.3	38
58	Enzyme-Free Colorimetric Detection of Glucose Using a Composite Entrapping Gold and Magnetic Nanoparticles Within an Agarose Gel Matrix. Journal of Nanoscience and Nanotechnology, 2017, 17, 7971-7977.	0.9	12
59	A Whole-Cell Surface Plasmon Resonance Sensor Based on a Leucine Auxotroph of Escherichia coli Displaying a Gold-Binding Protein: Usefulness for Diagnosis of Maple Syrup Urine Disease. Analytical Chemistry, 2016, 88, 2871-2876.	3.2	7
60	Label-free colorimetric detection of biological thiols based on target-triggered inhibition of photoinduced formation of AuNPs. Nanotechnology, 2016, 27, 055501.	1.3	21
61	Effect of functional group on activity and stability of lipase immobilized on silica-coated magnetite nanoparticles with different functional group. Analytical Science and Technology, 2016, 29, 105-113.	0.3	2
62	Organicâ€“inorganic hybrid nanoflowers: types, characteristics, and future prospects. Journal of Nanobiotechnology, 2015, 13, 54.	4.2	134
63	In-vitro cytotoxicity assessment of carbon-nanodot-conjugated Fe-aminoclay (CD-FeAC) and its bio-imaging applications. Journal of Nanobiotechnology, 2015, 13, 88.	4.2	13
64	Spotlight on nano-theranostics in South Korea: applications in diagnostics and treatment of diseases. International Journal of Nanomedicine, 2015, 10 Spec Iss, 3.	3.3	4
65	Ultrafast sonochemical synthesis of protein-inorganic nanoflowers. International Journal of Nanomedicine, 2015, 10 Spec Iss, 137.	3.3	23
66	Recent Research Trends and Future Prospects in Nanozymes. Journal of Nanomaterials, 2015, 2015, 1-11.	1.5	52
67	Colorimetric Detection System forSalmonella typhimuriumBased on Peroxidase-Like Activity of Magnetic Nanoparticles with DNA Aptamers. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	27
68	Recent Advances in Genetic Technique of Microbial Report Cells and Their Applications in Cell Arrays. BioMed Research International, 2015, 2015, 1-8.	0.9	4
69	Nanotechnologies for Biosensor and Biochip. Journal of Nanomaterials, 2015, 2015, 1-2.	1.5	15
70	Colorimetric Quantification of Glucose and Cholesterol in Human Blood Using a Nanocomposite Entrapping Magnetic Nanoparticles and Oxidases. Journal of Nanoscience and Nanotechnology, 2015, 15, 7955-7961.	0.9	20
71	Simple and Sensitive Pointâ€ofâ€Care Bioassay System Based on Hierarchically Structured Enzymeâ€Mimetic Nanoparticles. Advanced Healthcare Materials, 2015, 4, 1311-1316.	3.9	44
72	Fe-aminoclay-entrapping electrospun polyacrylonitrile nanofibers (FeAC-PAN NFs) for environmental engineering applications. Korean Journal of Chemical Engineering, 2015, 32, 1727-1732.	1.2	4

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73	Fabrication of conductive oxidase-entrapping nanocomposite of mesoporous ceriaâ€“carbon for efficient electrochemical biosensor. RSC Advances, 2015, 5, 78747-78753.	1.7	7
74	A Highly Efficient Colorimetric Immunoassay Using a Nanocomposite Entrapping Magnetic and Platinum Nanoparticles in Ordered Mesoporous Carbon. Advanced Healthcare Materials, 2014, 3, 36-41.	3.9	58
75	Highly efficient colorimetric detection of target cancer cells utilizing superior catalytic activity of graphene oxideâ€“magnetic-platinum nanohybrids. Nanoscale, 2014, 6, 1529-1536.	2.8	103
76	Biodistribution and clearance of aminoclay nanoparticles: implication for in vivo applicability as a tailor-made drug delivery carrier. Journal of Materials Chemistry B, 2014, 2, 7567-7574.	2.9	34
77	Ultrafast colorimetric detection of nucleic acids based on the inhibition of the oxidase activity of cerium oxide nanoparticles. Chemical Communications, 2014, 50, 9577-9580.	2.2	74
78	Cell-Based Method Utilizing Fluorescent Escherichia coli Auxotrophs for Quantification of Multiple Amino Acids. Analytical Chemistry, 2014, 86, 2489-2496.	3.2	13
79	Photoluminescent carbon nanotags from harmful cyanobacteria for drug delivery and imaging in cancer cells. Scientific Reports, 2014, 4, 4665.	1.6	93
80	Cell-Based Galactosemia Diagnosis System Based on a Galactose Assay Using a Bioluminescent Escherichia coli Array. Analytical Chemistry, 2013, 85, 11083-11089.	3.2	11
81	A label-free method for detecting biological thiols based on blocking of Hg2+-quenching of fluorescent gold nanoclusters. Biosensors and Bioelectronics, 2013, 45, 65-69.	5.3	136
82	Effective peroxidase-like activity of a water-solubilized Fe-aminoclay for use inimmunoassay. Biosensors and Bioelectronics, 2013, 42, 373-378.	5.3	35
83	Direct detection of unamplified genomic DNA based on photo-induced silver ion reduction by DNA molecules. Chemical Communications, 2013, 49, 2350.	2.2	19
84	A Novel Colorimetric Immunoassay Utilizing the Peroxidase Mimicking Activity of Magnetic Nanoparticles. International Journal of Molecular Sciences, 2013, 14, 9999-10014.	1.8	61
85	A Convenient Alcohol Sensor Using One-Pot Nanocomposite Entrapping Alcohol Oxidase and Magnetic Nanoparticles as Peroxidase Mimetics. Journal of Nanoscience and Nanotechnology, 2012, 12, 5914-5919.	0.9	26
86	Colorimetric quantification of galactose using a nanostructured multi-catalyst system entrapping galactose oxidase and magnetic nanoparticles as peroxidase mimetics. Analyst, The, 2012, 137, 1137.	1.7	50
87	Cell-Based Quantification of Homocysteine Utilizing Bioluminescent Escherichia coli Auxotrophs. Analytical Chemistry, 2011, 83, 3089-3095.	3.2	9
88	Labelâ€Free Colorimetric Detection of Nucleic Acids Based on Targetâ€Induced Shielding Against the Peroxidaseâ€Mimicking Activity of Magnetic Nanoparticles. Small, 2011, 7, 1521-1525.	5.2	145
89	A Highly Efficient Electrochemical Biosensing Platform by Employing Conductive Nanocomposite Entrapping Magnetic Nanoparticles and Oxidase in Mesoporous Carbon Foam. Advanced Functional Materials, 2011, 21, 2868-2875.	7.8	75
90	Fabrication of Nanoporous Nanocomposites Entrapping Fe 3 O 4 Magnetic Nanoparticles and Oxidases for Colorimetric Biosensing. Chemistry - A European Journal, 2011, 17, 10700-10707.	1.7	114

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91	On-site removal of H2S from biogas produced by food waste using an aerobic sludge biofilter for steam reforming processing. Biotechnology and Bioprocess Engineering, 2010, 15, 505-511.	1.4	22
92	Economic evaluation of off-gas recycle pressure swing adsorption (PSA) in industrial scale poly(3-hydroxybutyrate) fermentation. Biotechnology and Bioprocess Engineering, 2010, 15, 905-910.	1.4	9
93	Unnatural Polyketide Analogues Selectively Target the HER Signaling Pathway in Human Breast Cancer Cells. ChemBioChem, 2010, 11, 573-580.	1.3	10
94	Inside Cover: Unnatural Polyketide Analogues Selectively Target the HER Signaling Pathway in Human Breast Cancer Cells (ChemBioChem 4/2010). ChemBioChem, 2010, 11, 442-442.	1.3	0
95	HER2/neu Antibody Conjugated Poly(amino acid)-Coated Iron Oxide Nanoparticles for Breast Cancer MR Imaging. Biomacromolecules, 2010, 11, 2866-2872.	2.6	82
96	Multiplexed Amino Acid Array Utilizing Bioluminescent Escherichia coli Auxotrophs. Analytical Chemistry, 2010, 82, 4072-4077.	3.2	16
97	Enhanced Production of Human Serum Albumin by Fed-Batch Culture of Hansenula polymorpha with High-Purity Oxygen. Journal of Microbiology and Biotechnology, 2010, 20, 1534-1538.	0.9	12
98	In Vitro Precursor-Directed Synthesis of Polyketide Analogues with Coenzyme A Regeneration for the Development of Antiangiogenic Agents. Organic Letters, 2009, 11, 3806-3809.	2.4	26
99	Continuous Production of Succinic Acid Using an External Membrane Cell Recycle System. Journal of Microbiology and Biotechnology, 2009, 19, 1369-1373.	0.9	33
100	Continuous production of succinic acid using an external membrane cell recycle system. Journal of Microbiology and Biotechnology, 2009, 19, 1369-73.	0.9	5
101	One-dimensional crosslinked enzyme aggregates in SBA-15: Superior catalytic behavior to conventional enzyme immobilization. Microporous and Mesoporous Materials, 2008, 111, 18-23.	2.2	69
102	Crosslinked enzyme aggregates in hierarchically-ordered mesoporous silica: A simple and effective method for enzyme stabilization. Biotechnology and Bioengineering, 2007, 96, 210-218.	1.7	187
103	Modeling of poly(3-hydroxybutyrate) production by high cell density fed-batch culture of Ralstonia eutropha. Biotechnology and Bioprocess Engineering, 2007, 12, 417-423.	1.4	14
104	Radiolytic synthesis of Ag-loaded polystyrene (Ag-PS) nanoparticles and their antimicrobial efficiency againststaphylococcus aureus andklebsiella pneumoniase. Macromolecular Research, 2007, 15, 285-290.	1.0	9
105	Immobilization of Mucor javanicus lipase on effectively functionalized silica nanoparticles. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 62-68.	1.8	89
106	Simple Synthesis of Hierarchically Ordered Mesocellular Mesoporous Silica Materials Hosting Crosslinked Enzyme Aggregates. Small, 2005, 1, 744-753.	5.2	184