Jonghoon Choi

List of Publications by Year
in descending order

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116 papers	4,759 citations	117453 34 h-index	106150 65 g-index
116 all docs	116 docs citations	116 times ranked	7789 citing authors

#	Article	IF	Citations
1	Mesoporous Silica-Coated Hollow Manganese Oxide Nanoparticles as Positive T₁ Contrast Agents for Labeling and MRI Tracking of Adipose-Derived Mesenchymal Stem Cells. Journal of the American Chemical Society, 2011, 133, 2955-2961.	6.6	491
2	An assessment of the toxicity of polypropylene microplastics in human derived cells. Science of the Total Environment, 2019, 684, 657-669.	3.9	359
3	Potential toxicity of polystyrene microplastic particles. Scientific Reports, 2020, 10, 7391.	1.6	303
4	Physicochemical Characterization and In Vitro Hemolysis Evaluation of Silver Nanoparticles. Toxicological Sciences, 2011, 123, 133-143.	1.4	248
5	Cell-surface sensors for real-time probing of cellular environments. Nature Nanotechnology, 2011, 6, 524-531.	15.6	201
6	Chemoresistance of Cancer Cells: Requirements of Tumor Microenvironment-mimicking In Vitro Models in Anti-Cancer Drug Development. Theranostics, 2018, 8, 5259-5275.	4.6	138
7	Stimuli-Responsive Nanomaterials for Application in Antitumor Therapy and Drug Delivery. Pharmaceutics, 2020, 12, 630.	2.0	106
8	Immuno-Hybridization Chain Reaction for Enhancing Detection of Individual Cytokine-Secreting Human Peripheral Mononuclear Cells. Analytical Chemistry, 2011, 83, 6890-6895.	3.2	105
9	Assessment of Size-Dependent Antimicrobial and Cytotoxic Properties of Silver Nanoparticles. Advances in Materials Science and Engineering, 2014, 2014, 1-6.	1.0	105
10	Comparison of cytotoxic and inflammatory responses of photoluminescent silicon nanoparticles with silicon micronâ€sized particles in RAW 264.7 macrophages. Journal of Applied Toxicology, 2009, 29, 52-60.	1.4	103
11	Conductive biomaterials for tissue engineering applications. Journal of Industrial and Engineering Chemistry, 2017, 51, 12-26.	2.9	98
12	Mesenchymal Stem Cellâ€Derived Exosomes for Effective Cartilage Tissue Repair and Treatment of Osteoarthritis. Biotechnology Journal, 2020, 15, e2000082.	1.8	90
13	Fast and sensitive detection of an anthrax biomarker using SERS-based solenoid microfluidic sensor. Biosensors and Bioelectronics, 2015, 72, 230-236.	5.3	84
14	Biomimetics: forecasting the future of science, engineering, and medicine. International Journal of Nanomedicine, 2015, 10, 5701.	3.3	83
15	In vitro toxicity from a physical perspective of polyethylene microplastics based on statistical curvature change analysis. Science of the Total Environment, 2021, 752, 142242.	3.9	82
16	In vitro blood cell viability profiling of polymers used in molecular assembly. Scientific Reports, 2017, 7, 9481.	1.6	76
17	Exosome-based photoacoustic imaging guided photodynamic and immunotherapy for the treatment of pancreatic cancer. Journal of Controlled Release, 2021, 330, 293-304.	4.8	66
18	Antibacterial activity and cytotoxicity of multi-walled carbon nanotubes decorated with silver nanoparticles. International Journal of Nanomedicine, 2014, 9, 4621.	3.3	61

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19	Separation of extracellular nanovesicles and apoptotic bodies from cancer cell culture broth using tunable microfluidic systems. Scientific Reports, 2017, 7, 9907.	1.6	61
20	Engineering copper nanoparticles synthesized on the surface of carbon nanotubes for anti-microbial and anti-biofilm applications. Nanoscale, 2018, 10, 15529-15544.	2.8	61
21	Multimodal imaging of sustained drug release from 3-D poly(propylene fumarate) (PPF) scaffolds. Journal of Controlled Release, 2011, 156, 239-245.	4.8	58
22	Microtools for single-cell analysis in biopharmaceutical development and manufacturing. Trends in Biotechnology, 2013, 31, 280-286.	4.9	58
23	Oxygen-Carrying Micro/Nanobubbles: Composition, Synthesis Techniques and Potential Prospects in Photo-Triggered Theranostics. Molecules, 2018, 23, 2210.	1.7	58
24	Photoassisted Tuning of Silicon Nanocrystal Photoluminescence. Langmuir, 2007, 23, 3388-3394.	1.6	54
25	Engineering oxygen nanobubbles for the effective reversal of hypoxia. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 318-327.	1.9	50
26	Conjugation of the Photoluminescent Silicon Nanoparticles to Streptavidin. Bioconjugate Chemistry, 2008, 19, 680-685.	1.8	49
27	Development of Antibiofilm Nanocomposites: Ag/Cu Bimetallic Nanoparticles Synthesized on the Surface of Graphene Oxide Nanosheets. ACS Applied Materials & Interfaces, 2020, 12, 35826-35834.	4.0	45
28	Nano-film coatings onto collagen hydrogels with desired drug release. Journal of Industrial and Engineering Chemistry, 2016, 36, 326-333.	2.9	43
29	The targeted delivery of the c-Src peptide complexed with schizophyllan to macrophages inhibits polymicrobial sepsis and ulcerative colitis in mice. Biomaterials, 2016, 89, 1-13.	5.7	42
30	Anti-Tumor Drug-Loaded Oxygen Nanobubbles for the Degradation of HIF-1Î± and the Upregulation of Reactive Oxygen Species in Tumor Cells. Cancers, 2019, 11, 1464.	1.7	41
31	Effective delivery of immunosuppressive drug molecules by silica coated iron oxide nanoparticles. Colloids and Surfaces B: Biointerfaces, 2016, 142, 290-296.	2.5	40
32	Exosome-mediated diagnosis of pancreatic cancer using lectin-conjugated nanoparticles bound to selective glycans. Biosensors and Bioelectronics, 2021, 177, 112980.	5.3	39
33	Pre/post-natal exposure to microplastic as a potential risk factor for autism spectrum disorder. Environment International, 2022, 161, 107121.	4.8	38
34	Micro 3D cell culture systems for cellular behavior studies: Culture matrices, devices, substrates, and inâ€situ sensing methods. Biotechnology Journal, 2015, 10, 1682-1688.	1.8	36
35	Facile Solvothermal Preparation of Monodisperse Gold Nanoparticles and Their Engineered Assembly of Ferritinâ€“Gold Nanoclusters. Langmuir, 2013, 29, 15698-15703.	1.6	35
36	Development of electrochemical biosensor for detection of pathogenic microorganism in Asian dust events. Chemosphere, 2017, 175, 269-274.	4.2	35

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37	Surface Pattern Analysis of Microplastics and Their Impact on Human-Derived Cells. ACS Applied Polymer Materials, 2020, 2, 4541-4550.	2.0	35
38	Methods of Analyzing Microsized Plastics in the Environment. Applied Sciences (Switzerland), 2021, 11, 10640.	1.3	35
39	Green synthesis of silver nanoparticles using Î²-glucan, and their incorporation into doxorubicin-loaded water-in-oil nanoemulsions for antitumor and antibacterial applications. Journal of Industrial and Engineering Chemistry, 2017, 47, 179-186.	2.9	34
40	Effective Delivery of Anti-Cancer Drug Molecules with Shape Transforming Liquid Metal Particles. Cancers, 2019, 11, 1666.	1.7	34
41	Measurement of Nanoparticle Concentration Using Quartz Crystal Microgravimetry. Journal of Physical Chemistry B, 2010, 114, 16112-16117.	1.2	33
42	Engineered chitosanâ€“xanthan gum biopolymers effectively adhere to cells and readily release incorporated antiseptic molecules in a sustained manner. Journal of Industrial and Engineering Chemistry, 2017, 46, 68-79.	2.9	33
43	Synthesis of Beta-glucan Nanoparticles for the Delivery of Single Strand DNA. Biotechnology and Bioprocess Engineering, 2018, 23, 144-149.	1.4	33
44	Synthesis and Functionalization of Î²-Glucan Particles for the Effective Delivery of Doxorubicin Molecules. ACS Omega, 2019, 4, 668-674.	1.6	32
45	DNA aptamer immobilized hydroxyapatite for enhancing angiogenesis and bone regeneration. Acta Biomaterialia, 2019, 99, 469-478.	4.1	31
46	Surface Composition and Preparation Method for Oxygen Nanobubbles for Drug Delivery and Ultrasound Imaging Applications. Nanomaterials, 2019, 9, 48.	1.9	30
47	Development of silver/graphene oxide nanocomposites for antibacterial and antibiofilm applications. Journal of Industrial and Engineering Chemistry, 2020, 83, 46-52.	2.9	29
48	Nanoparticles in Biomedical Applications and Their Safety Concerns. , 0, , .		27
49	Inhalable nanoparticles delivery targeting alveolar macrophages for the treatment of pulmonary tuberculosis. Journal of Bioscience and Bioengineering, 2021, 132, 543-551.	1.1	27
50	Small-angle neutron scattering measurement of silicon nanoparticle size. Nanotechnology, 2008, 19, 085715.	1.3	26
51	Use of Nanoscale Materials for the Effective Prevention and Extermination of Bacterial Biofilms. Biotechnology and Bioprocess Engineering, 2018, 23, 1-10.	1.4	26
52	Artificial cellular nano-environment composed of collagen-based nanofilm promotes osteogenic differentiation of mesenchymal stem cells. Acta Biomaterialia, 2019, 86, 247-256.	4.1	26
53	Functional silica nanoparticles conjugated with beta-glucan to deliver anti-tuberculosis drug molecules. Journal of Industrial and Engineering Chemistry, 2018, 58, 376-385.	2.9	25
54	Electrochemical Reduction Synthesis of Photoluminescent Silicon Nanocrystals. Langmuir, 2009, 25, 7097-7102.	1.6	24

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55	Vascularized Lung Cancer Model for Evaluating the Promoted Transport of Anticancer Drugs and Immune Cells in an Engineered Tumor Microenvironment. Advanced Healthcare Materials, 2022, 11, e2102581.	3.9	23
56	Sensitive detection of copper ions via ion-responsive fluorescence quenching of engineered porous silicon nanoparticles. Scientific Reports, 2016, 6, 35565.	1.6	22
57	Engineered nanoconstructs for the multiplexed and sensitive detection of high-risk pathogens. Nanoscale, 2016, 8, 1944-1951.	2.8	22
58	Enhanced Detection of Infectious Pancreatic Necrosis Virus via Lateral Flow Chip and Fluorometric Biosensors Based on Self-Assembled Protein Nanoprobes. ACS Sensors, 2019, 4, 2937-2944.	4.0	22
59	The solvothermal synthesis of magnetic iron oxide nanocrystals and the preparation of hybrid poly(l-lactide)â€“polyethyleneimine magnetic particles. Colloids and Surfaces B: Biointerfaces, 2013, 109, 236-243.	2.5	21
60	Optical Immunosensors for the Efficient Detection of Target Biomolecules. Biotechnology and Bioprocess Engineering, 2018, 23, 123-133.	1.4	21
61	Engineered collagen hydrogels for the sustained release of biomolecules and imaging agents: promoting the growth of human gingival cells. International Journal of Nanomedicine, 2014, 9, 5189.	3.3	20
62	Regulation of Electromagnetic Perceptive Gene Using Ferromagnetic Particles for the External Control of Calcium Ion Transport. Biomolecules, 2020, 10, 308.	1.8	19
63	Simple Preparation of Fluorescent Silicon Nanoparticles from Used Si Wafers. Industrial & Engineering Chemistry Research, 2015, 54, 5982-5989.	1.8	18
64	Synthesis and Characterization of Functional Nanofilm-Coated Live Immune Cells. ACS Applied Materials & Interfaces, 2018, 10, 17685-17692.	4.0	17
65	Stability of Engineered Micro or Nanobubbles for Biomedical Applications. Pharmaceutics, 2020, 12, 1089.	2.0	17
66	NIR Laser-Responsive PNIPAM and Gold Nanorod Composites for the Engineering of Thermally Reactive Drug Delivery Nanomedicine. Pharmaceutics, 2020, 12, 204.	2.0	17
67	Alginate-chitosan Hydrogel Patch with Beta-glucan Nanoemulsion for Antibacterial Applications. Biotechnology and Bioprocess Engineering, 2021, 26, 71-77.	1.4	17
68	Aptamer-conjugated live human immune cell based biosensors for the accurate detection of C-reactive protein. Scientific Reports, 2016, 6, 34778.	1.6	16
69	Femtosecond laser induced nano-textured micropatterning to regulate cell functions on implanted biomaterials. Acta Biomaterialia, 2020, 116, 138-148.	4.1	16
70	Surface conjugation of poly (dimethyl siloxane) with itaconic acid-based materials for antibacterial effects. Applied Surface Science, 2018, 437, 245-256.	3.1	15
71	Mechanisms of Salinity Control in Sea Bass. Biotechnology and Bioprocess Engineering, 2018, 23, 271-277.	1.4	13
72	Chlorhexidine-loaded xanthan gum-based biopolymers for targeted, sustained release of antiseptic agent. Journal of Industrial and Engineering Chemistry, 2015, 32, 44-48.	2.9	12

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73	Biological Responses of Onion-Shaped Carbon Nanoparticles. Nanomaterials, 2019, 9, 1016.	1.9	11
74	Array-Based Screening of Silver Nanoparticle Mineralization Peptides. International Journal of Molecular Sciences, 2020, 21, 2377.	1.8	11
75	A novel nanoprobe for the sensitive detection of Francisella tularensis. Journal of Hazardous Materials, 2015, 298, 188-194.	6.5	10
76	A Microfluidic Approach to Investigating a Synergistic Effect of Tobramycin and Sodium Dodecyl Sulfate on Pseudomonas aeruginosa Biofilms. Analytical Sciences, 2016, 32, 67-73.	0.8	10
77	Multicomponent High-throughput Drug Screening via Inkjet Printing to Verify the Effect of Immunosuppressive Drugs on Immune T Lymphocytes. Scientific Reports, 2017, 7, 6318.	1.6	10
78	Engineered nanomaterials for their applications in theragnostics. Journal of Industrial and Engineering Chemistry, 2018, 66, 20-28.	2.9	10
79	Current Immunotherapy Approaches for Malignant Melanoma. Biochip Journal, 2019, 13, 105-114.	2.5	10
80	Surface glycan targeting for cancer nano-immunotherapy. Journal of Controlled Release, 2022, 342, 321-336.	4.8	10
81	Harnessing immunomagnetic separation and quantum dot-based quantification capacities for the enumeration of absolute levels of biomarker. Nanotechnology, 2013, 24, 285103.	1.3	9
82	Effective delivery of mycophenolic acid by oxygen nanobubbles for modulating immunosuppression. Theranostics, 2020, 10, 3892-3904.	4.6	9
83	Electrochemical Synthesis of Red Fluorescent Silicon Nanoparticles. Bulletin of the Korean Chemical Society, 2014, 35, 35-38.	1.0	9
84	A fully textile-based skin pH sensor. Journal of Industrial Textiles, 2022, 51, 441S-457S.	1.1	9
85	Eco-Friendly Dye-Sensitized Solar Cells Based on Water-Electrolytes and Chlorophyll. Materials, 2021, 14, 2150.	1.3	8
86	Sensitive and specific capture of polystyrene and polypropylene microplastics using engineered peptide biosensors. RSC Advances, 2022, 12, 7680-7688.	1.7	8
87	Study and Evaluation of the Potential of Lipid Nanocarriers for Transdermal Delivery of siRNA. Biotechnology Journal, 2020, 15, e2000079.	1.8	7
88	Synthesis of near-infrared absorbing triangular Au nanoplates using biomineralisation peptides. Acta Biomaterialia, 2021, 131, 519-531.	4.1	7
89	Peptide Specific Nanoplastic Detection Based on Sandwich Typed Localized Surface Plasmon Resonance. Nanomaterials, 2021, 11, 2887.	1.9	7
90	A glimpse into the interactions of cells in a microenvironment: the modulation of T cells by mesenchymal stem cells. International Journal of Nanomedicine, 2014, 9 Suppl 1, 127.	3.3	6

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91	Probing characteristics of cancer cells cultured on engineered platforms simulating different microenvironments. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 1170-1179.	1.9	6
92	Quantification of Unknown Nanoscale Biomolecules Using the Average-Weight-Difference Method. Applied Sciences (Switzerland), 2019, 9, 130.	1.3	6
93	Self-Assembling Î²-Glucan Nanomedicine for the Delivery of siRNA. Biomedicines, 2020, 8, 497.	1.4	6
94	Nanomaterials for Biomedical Applications. Biotechnology Journal, 2020, 15, e2000574.	1.8	6
95	Enhanced detection of single-cell-secreted proteins using a fluorescent immunoassay on the protein-G-terminated glass substrate. International Journal of Nanomedicine, 2015, 10, 7197.	3.3	5
96	Engineered self-expander hydrogel for sustained release of drug molecules. Journal of Industrial and Engineering Chemistry, 2016, 42, 121-125.	2.9	5
97	Methods and Applications of Biomolecular Surface Coatings on Individual Cells. ACS Applied Bio Materials, 2020, 3, 6556-6570.	2.3	5
98	Oxygen transport to mammalian cell and bacteria using nano-sized liposomes encapsulating oxygen molecules. Journal of Bioscience and Bioengineering, 2021, 132, 657-665.	1.1	5
99	Monitoring Wound Healing with Topically Applied Optical NanoFlare mRNA Nanosensors. Advanced Science, 2022, 9, e2104835.	5.6	5
100	Technology Advancement for Integrative Stem Cell Analyses. Tissue Engineering - Part B: Reviews, 2014, 20, 669-682.	2.5	4
101	Perspectives on the nanotechnology applications of for the analytical detection of heavy metals in marine organisms. Biotechnology and Bioprocess Engineering, 2016, 21, 191-198.	1.4	4
102	Strategies for the optimization of bead-immunoassays for the effective detection of target biomolecules. Korean Journal of Chemical Engineering, 2018, 35, 805-811.	1.2	4
103	Facile fabrication of polyaniline films with hierarchical porous networks for enhanced electrochemical activity. Journal of Industrial and Engineering Chemistry, 2020, 86, 81-89.	2.9	4
104	Overview of current standpoints in profiling of circulating tumor cells. Archives of Pharmacal Research, 2014, 37, 88-95.	2.7	3
105	Synthesis of Multi-walled Carbon Nanotubes Modified with Silver Nanoparticles and Evaluation of Their Antibacterial Activities and Cytotoxic Properties. Journal of Visualized Experiments, 2018, , .	0.2	3
106	Dielectrophoretic Manipulation of Janus Particle in Conductive Media for Biomedical Applications. Biotechnology Journal, 2020, 15, e2000343.	1.8	3
107	Hypoxia-Responsive Oxygen Nanobubbles for Tissues-Targeted Delivery in Developing Tooth Germs. Frontiers in Cell and Developmental Biology, 2021, 9, 626224.	1.8	3
108	Single-step acid-catalyzed synthesis of luminescent colloidal organosilica nanobeads. Nano Convergence, 2022, 9, 12.	6.3	3

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109	Engineering of alkyl-terminated silicon nanoparticles for the selective filtration of copper ions. Journal of Industrial and Engineering Chemistry, 2020, 82, 197-204.	2.9	2
110	Sustained Release of Bone Morphogenetic Protein-2 through Alginate Microbeads Enhances Bone Regeneration in Rabbit Tibial Metaphyseal Defect Model. Materials, 2021, 14, 2600.	1.3	2
111	Gravity Applied Particle Separation in Nanoliter Volume Fluid System Toward Complexed Biosample Sorting. Journal of Nanoscience and Nanotechnology, 2016, 16, 11892-11895.	0.9	2
112	Cytotoxicity of the photoluminescent silicon nanocrystals. Proceedings of SPIE, 2007, , .	0.8	1
113	Interactions between mesenchymal stem cells and T cells on a single cell level a nanowell array. , 2012, , .		1
114	Covalent attachment of photoluminescent silicon nanoparticles to streptavidin. , 2007, , .		0
115	An Environmentally-Conscious Approach to the Synthesis and Separation of Ultrasmall Si Nanoparticles. Journal of Nanoscience and Nanotechnology, 2016, 16, 7091-7095.	0.9	0
116	Recent Patents of Nanodevices for Single Cell Immunological Assays. Recent Patents on Nanotechnology, 2011, 5, 178-187.	0.7	0