Tae-Hyung Kim

List of Publications by Year
in descending order

Version: 2024-02-01

73 papers	2,087 citations	218592 26 h-index	276775 41 g-index
77 all docs	77 docs citations	77 times ranked	2754 citing authors

#	Article	IF	Citations
1	Fabrication of a surface-enhanced Raman spectroscopy-based analytical method consisting of multifunctional DNA three-way junction-conjugated porous gold nanoparticles and Au-Te nanoworm for C-reactive protein detection. Analytical and Bioanalytical Chemistry, 2022, 414, 3197-3204.	1.9	13
2	Graphene-Based Materials for Efficient Neurogenesis. Advances in Experimental Medicine and Biology, 2022, 1351, 43-64.	0.8	2
3	Fat Graft with Allograft Adipose Matrix and Magnesium Hydroxide-Incorporated PLGA Microspheres for Effective Soft Tissue Reconstruction. Tissue Engineering and Regenerative Medicine, 2022, 19, 553-563.	1.6	10
4	Recent Advances in Surface Plasmon Resonance Sensors for Sensitive Optical Detection of Pathogens. Biosensors, 2022, 12, 180.	2.3	45
5	Advances in Nanoparticles for Effective Delivery of RNA Therapeutics. Biochip Journal, 2022, 16, 128-145.	2.5	23
6	Receptorâ€Level Proximity and Fastening of Ligands Modulates Stem Cell Differentiation. Advanced Functional Materials, 2022, 32, .	7.8	11
7	Biomaterials as therapeutic drug carriers for inflammatory bowel disease treatment. Journal of Controlled Release, 2022, 345, 1-19.	4.8	31
8	Development of a stem cell spheroidâ€laden patch with high retention at skin wound site. Bioengineering and Translational Medicine, 2022, 7, .	3.9	7
9	Graphene foam/hydrogel scaffolds for regeneration of peripheral nerve using ADSCs in a diabetic mouse model. Nano Research, 2022, 15, 3434-3445.	5.8	9
10	Single metal-organic frameworkâ€“embedded nanopit arrays: A new way to control neural stem cell differentiation. Science Advances, 2022, 8, eabj7736.	4.7	28
11	Submolecular Ligand Size and Spacing for Cell Adhesion. Advanced Materials, 2022, 34, e2110340.	11.1	13
12	In Situ Detection of Kidney Organoid Generation From Stem Cells Using a Simple Electrochemical Method. Advanced Science, 2022, 9, e2200074.	5.6	12
13	Human Mesenchymal Stem Cell-Derived Extracellular Vesicles Promote Neural Differentiation of Neural Progenitor Cells. International Journal of Molecular Sciences, 2022, 23, 7047.	1.8	11
14	Hybrid Grapheneâ€Gold Nanoparticleâ€Based Nucleic Acid Conjugates for Cancerâ€Specific Multimodal Imaging and Combined Therapeutics. Advanced Functional Materials, 2021, 31, 2006918.	7.8	55
15	Long-acting nanoparticulate DNase-1 for effective suppression of SARS-CoV-2-mediated neutrophil activities and cytokine storm. Biomaterials, 2021, 267, 120389.	5.7	94
16	A Spheroidâ€Forming Hybrid Gold Nanostructure Platform That Electrochemically Detects Anticancer Effects of Curcumin in a Multicellular Brain Cancer Model. Small, 2021, 17, e2002436.	5.2	12
17	Fabrication of Electrochemical Influenza Virus (H1N1) Biosensor Composed of Multifunctional DNA Four-Way Junction and Molybdenum Disulfide Hybrid Material. Materials, 2021, 14, 343.	1.3	20
18	Fabrication of an electrochemical biosensor composed of multi-functional Ag ion intercalated DNA four-way junctions/rhodium nanoplate heterolayer on a micro-gap for C-reactive protein detection in human serum. Analyst, The, 2021, 146, 2131-2137.	1.7	17

#	Article	IF	Citations
19	Precise Electrical Detection of Curcumin Cytotoxicity in Human Liver Cancer Cells. Biochip Journal, 2021, 15, 52-60.	2.5	4
20	Autofluorescence-Raman Mapping Integration analysis for ultra-fast label-free monitoring of adipogenic differentiation of stem cells. Biosensors and Bioelectronics, 2021, 178, 113018.	5.3	10
21	Noble Metal Nanomaterial-Based Biosensors for Electrochemical and Optical Detection of Viruses Causing Respiratory Illnesses. Frontiers in Chemistry, 2021, 9, 672739.	1.8	27
22	Raman Spectroscopy-Based 3D Analysis of Odontogenic Differentiation of Human Dental Pulp Stem Cell Spheroids. Analytical Chemistry, 2021, 93, 9995-10004.	3.2	14
23	Promotion of Bone Regeneration Using Bioinspired PLGA/MH/ECM Scaffold Combined with Bioactive PDRN. Materials, 2021, 14, 4149.	1.3	20
24	Enhancing osteogenesis of adipose-derived mesenchymal stem cells using gold nanostructure/peptide-nanopatterned graphene oxide. Colloids and Surfaces B: Biointerfaces, 2021, 204, 111807.	2.5	11
25	Impact of the conjugation of antibodies to the surfaces of polymer nanoparticles on the immune cell targeting abilities. Nano Convergence, 2021, 8, 24.	6.3	17
26	Extremely Uniform Graphene Oxide Thin Film as a Universal Platform for Oneâ€Step Biomaterial Patterning. Small, 2021, 17, e2103596.	5.2	4
27	Recent Advances in Electrochemical Sensors for the Detection of Biomolecules and Whole Cells. Biomedicines, 2021, 9, 15.	1.4	42
28	Recent Advances in Multicellular Tumor Spheroid Generation for Drug Screening. Biosensors, 2021, 11, 445.	2.3	36
29	Nano-sized graphene oxide coated nanopillars on microgroove polymer arrays that enhance skeletal muscle cell differentiation. Nano Convergence, 2021, 8, 40.	6.3	18
30	Recent Developments in Surface Topography-Modulated Neurogenesis. Biochip Journal, 2021, 15, 334-347.	2.5	2
31	Advanced PLGA hybrid scaffold with a bioactive PDRN/BMP2 nanocomplex for angiogenesis and bone regeneration using human fetal MSCs. Science Advances, 2021, 7, eabj1083.	4.7	47
32	Enhancing Neurogenesis of Neural Stem Cells Using Homogeneous Nanohole Pattern-Modified Conductive Platform. International Journal of Molecular Sciences, 2020, 21, 191.	1.8	15
33	A fibronectin-coated gold nanostructure composite for electrochemical detection of effects of curcumin-carrying nanoliposomes on human stomach cancer cells. Analyst, The, 2020, 145, 675-684.	1.7	20
34	In Situ Detection of Neurotransmitters from Stem Cell-Derived Neural Interface at the Single-Cell Level via Graphene-Hybrid SERS Nanobiosensing. Nano Letters, 2020, 20, 7670-7679.	4.5	46
35	Graphene Hybrid Materials for Controlling Cellular Microenvironments. Materials, 2020, 13, 4008.	1.3	2
36	Vertically Coated Graphene Oxide Microâ€Well Arrays for Highly Efficient Cancer Spheroid Formation and Drug Screening. Advanced Healthcare Materials, 2020, 9, e1901751.	3.9	20

#	Article	IF	Citations
37	Recent advances in nanomaterial-modified electrical platforms for the detection of dopamine in living cells. Nano Convergence, 2020, 7, 40.	6.3	30
38	Enhancing the Wound Healing Effect of Conditioned Medium Collected from Mesenchymal Stem Cells with High Passage Number Using Bioreducible Nanoparticles. International Journal of Molecular Sciences, 2019, 20, 4835.	1.8	18
39	Tumor Homing Reactive Oxygen Species Nanoparticle for Enhanced Cancer Therapy. ACS Applied Materials & Interfaces, 2019, 11, 23909-23918.	4.0	27
40	High density gold nanostructure composites for precise electrochemical detection of human embryonic stem cells in cell mixture. Colloids and Surfaces B: Biointerfaces, 2019, 180, 384-392.	2.5	19
41	Nanomaterial-modified Hybrid Platforms for Precise Electrochemical Detection of Dopamine. Biochip Journal, 2019, 13, 20-29.	2.5	33
42	Development of the Troponin Detection System Based on the Nanostructure. Micromachines, 2019, 10, 203.	1.4	17
43	Rapid and sensitive electrochemical detection of anticancer effects of curcumin on human glioblastoma cells. Sensors and Actuators B: Chemical, 2019, 288, 527-534.	4.0	32
44	Two-dimensional material-based bionano platforms to control mesenchymal stem cell differentiation. Biomaterials Research, 2018, 22, 10.	3.2	25
45	In situ label-free monitoring of human adipose-derived mesenchymal stem cell differentiation into multiple lineages. Biomaterials, 2018, 154, 223-233.	5.7	44
46	Recent Advances in AIV Biosensors Composed of Nanobio Hybrid Material. Micromachines, 2018, 9, 651.	1.4	31
47	Electrochemical detection of dopamine using periodic cylindrical gold nanoelectrode arrays. Scientific Reports, 2018, 8, 14049.	1.6	115
48	Nanobiosensing Platforms for Real-time and Non-Invasive Monitoring of Stem Cell Pluripotency and Differentiation. Sensors, 2018, 18, 2755.	2.1	23
49	Three-Dimensional Grapheneâ€“RGD Peptide Nanoisland Composites That Enhance the Osteogenesis of Human Adipose-Derived Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2018, 19, 669.	1.8	23
50	Size-dependent effects of graphene oxide on the osteogenesis of human adipose-derived mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2018, 169, 20-29.	2.5	33
51	Guiding osteogenesis of mesenchymal stem cells using carbon-based nanomaterials. Nano Convergence, 2017, 4, 2.	6.3	61
52	Live cell biosensing platforms using graphene-based hybrid nanomaterials. Biosensors and Bioelectronics, 2017, 94, 485-499.	5.3	50
53	Effects of two-dimensional materials on human mesenchymal stem cell behaviors. Biochemical and Biophysical Research Communications, 2017, 493, 578-584.	1.0	33
54	Conductive hybrid matrigel layer to enhance electrochemical signals of human embryonic stem cells. Sensors and Actuators B: Chemical, 2017, 242, 224-230.	4.0	20

#	Article	IF	Citations
55	Magnetic Force-Driven Graphene Patterns to Direct Synaptogenesis of Human Neuronal Cells. Materials, 2017, 10, 1151.	1.3	15
56	Electrochemical Detection of Dopamine Using 3D Porous Graphene Oxide/Gold Nanoparticle Composites. Sensors, 2017, 17, 861.	2.1	72
57	Investigation of Hemoglobin/Gold Nanoparticle Heterolayer on Micro-Gap for Electrochemical Biosensor Application. Sensors, 2016, 16, 660.	2.1	9
58	Nanoelectrodes: Large-Scale Nanoelectrode Arrays to Monitor the Dopaminergic Differentiation of Human Neural Stem Cells (Adv. Mater. 41/2015). Advanced Materials, 2015, 27, 6306-6306.	11.1	2
59	Largeâ€Scale Nanoelectrode Arrays to Monitor the Dopaminergic Differentiation of Human Neural Stem Cells. Advanced Materials, 2015, 27, 6356-6362.	11.1	63
60	Graphene-Based Materials for Stem Cell Applications. Materials, 2015, 8, 8674-8690.	1.3	59
61	Controlling Differentiation of Adipose-Derived Stem Cells Using Combinatorial Graphene Hybrid-Pattern Arrays. ACS Nano, 2015, 9, 3780-3790.	7.3	139
62	Fabrication of new single cell chip to monitor intracellular and extracellular redox state based on spectroelectrochemical method. Biomaterials, 2015, 40, 80-87.	5.7	33
63	Electrically Controlled Delivery of Cargo into Single Human Neural Stem Cell. ACS Applied Materials & Interfaces, 2014, 6, 20709-20716.	4.0	3
64	ITO/gold nanoparticle/RGD peptide composites to enhance electrochemical signals and proliferation of human neural stem cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 336-344.	1.7	40
65	Cell chip with a thiolated chitosan self-assembled monolayer to detect the effects of anticancer drugs on breast normal and cancer cells. Colloids and Surfaces B: Biointerfaces, 2013, 112, 387-392.	2.5	15
66	3D graphene oxide-encapsulated gold nanoparticles to detect neural stem cell differentiation. Biomaterials, 2013, 34, 8660-8670.	5.7	129
67	Nanoscale Film Fabrication of Various Peptides on Neural Stem Cell Chip. Journal of Biomedical Nanotechnology, 2013, 9, 307-311.	0.5	3
68	Current perspectives of biodegradable drug-eluting stents for improved safety. Biotechnology and Bioprocess Engineering, 2012, 17, 912-924.	1.4	7
69	Highly sensitive electrochemical detection of potential cytotoxicity of CdSe/ZnS quantum dots using neural cell chip. Biosensors and Bioelectronics, 2012, 32, 266-272.	5.3	27
70	Fabrication of Cell Chip for Detection of Cell Cycle Progression Based on Electrochemical Method. Analytical Chemistry, 2011, 83, 2104-2111.	3.2	26
71	Effects of nanopatterned RGD peptide layer on electrochemical detection of neural cell chip. Biosensors and Bioelectronics, 2010, 26, 1359-1365.	5.3	31
72	Electrochemical Detection of Bisphenol A â€“ Induced Neuronal Toxicity Using RGD Peptide Modified ITO Electrode Cell Chip. Molecular Crystals and Liquid Crystals, 2010, 519, 36-42.	0.4	9

#	Article	IF	Citations
73	Recent advances and challenges in organoid-on-a-chip technology. Organoid, 0, 2, e4.	0.0	3