Hongsong Fan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9006475/publications.pdf

Version: 2024-02-01

		76294	128225
120	4,592	40	60
papers	citations	h-index	g-index

121	121	121	5664
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis and characterization of photocrosslinkable gelatin and silk fibroin interpenetrating polymer network hydrogels. Acta Biomaterialia, 2011, 7, 2384-2393.	4.1	251
2	The material and biological characteristics of osteoinductive calcium phosphate ceramics. International Journal of Energy Production and Management, 2018, 5, 43-59.	1.9	197
3	Fabrication, biological effects, and medical applications of calcium phosphate nanoceramics. Materials Science and Engineering Reports, 2010, 70, 225-242.	14.8	162
4	Preparation of collagenâ€“chondroitin sulfateâ€“hyaluronic acid hybrid hydrogel scaffolds and cell compatibility in vitro. Carbohydrate Polymers, 2011, 84, 118-125.	5.1	146
5	PPy@MIL-100 Nanoparticles as a pH- and Near-IR-Irradiation-Responsive Drug Carrier for Simultaneous Photothermal Therapy and Chemotherapy of Cancer Cells. ACS Applied Materials & Interfaces, 2016, 8, 34209-34217.	4.0	131
6	Photo-Cross-Linkable Methacrylated Gelatin and Hydroxyapatite Hybrid Hydrogel for Modularly Engineering Biomimetic Osteon. ACS Applied Materials & Interfaces, 2015, 7, 10386-10394.	4.0	121
7	Collagen hydrogel as an immunomodulatory scaffold in cartilage tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 337-344.	1.6	117
8	An improved complex gel of modified gellan gum and carboxymethyl chitosan for chondrocytes encapsulation. Carbohydrate Polymers, 2012, 88, 46-53.	5.1	91
9	Preparation of nano-hydroxyapatite particles with different morphology and their response to highly malignant melanoma cells in vitro. Applied Surface Science, 2008, 255, 357-360.	3.1	89
10	Cell-Laden Electroconductive Hydrogel Simulating Nerve Matrix To Deliver Electrical Cues and Promote Neurogenesis. ACS Applied Materials & Interfaces, 2019, 11, 22152-22163.	4.0	89
11	Probing intermediates of the induction period prior to nucleation and growth of semiconductor quantum dots. Nature Communications, 2017, 8, 15467.	5.8	87
12	Thermally-induced reversible structural isomerization in colloidal semiconductor CdS magic-size clusters. Nature Communications, 2018, 9, 2499.	5.8	79
13	Antitumor Effect by Hydroxyapatite Nanospheres: Activation of Mitochondria-Dependent Apoptosis and Negative Regulation of Phosphatidylinositol-3-Kinase/Protein Kinase B Pathway. ACS Nano, 2018, 12, 7838-7854.	7.3	79
14	Photoluminescence-tunable carbon dots from synergy effect of sulfur doping and water engineering. Chemical Engineering Journal, 2020, 388, 124199.	6.6	74
15	Microfluidic-based generation of functional microfibers for biomimetic complex tissue construction. Acta Biomaterialia, 2016, 38, 153-162.	4.1	73
16	Two-Step Nucleation of CdS Magic-Size Nanocluster MSCâ€“311. Chemistry of Materials, 2017, 29, 5727-5735.	3.2	68
17	Effects of Composition and Mechanical Property of Injectable Collagen I/II Composite Hydrogels on Chondrocyte Behaviors. Tissue Engineering - Part A, 2016, 22, 899-906.	1.6	66
18	A biocompatible hydrogel with improved stiffness and hydrophilicity for modular tissue engineering assembly. Journal of Materials Chemistry B, 2015, 3, 2753-2763.	2.9	63

#	Article	IF	Citations
19	Individual Pathways in the Formation of Magic-Size Clusters and Conventional Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 3660-3666.	2.1	62
20	Continuous Fabrication and Assembly of Spatial Cell-Laden Fibers for a Tissue-Like Construct via a Photolithographic-Based Microfluidic Chip. ACS Applied Materials & Interfaces, 2017, 9, 14606-14617.	4.0	61
21	Magnetoelectric Nanoparticles Incorporated Biomimetic Matrix for Wireless Electrical Stimulation and Nerve Regeneration. Advanced Healthcare Materials, 2021, 10, e2100695.	3.9	59
22	Interpreting the Ultraviolet Absorption in the Spectrum of 415 nm-Bandgap CdSe Magic-Size Clusters. Journal of Physical Chemistry Letters, 2018, 9, 2818-2824.	2.1	57
23	Temperature triggered high-performance carbon dots with robust solvatochromic effect and self-quenching-resistant deep red solid state fluorescence for specific lipid droplet imaging. Chemical Engineering Journal, 2021, 415, 128984.	6.6	57
24	Precursor Selfâ€Assembly Identified as a General Pathway for Colloidal Semiconductor Magicâ€Size Clusters. Advanced Science, 2018, 5, 1800632.	5.6	56
25	A spatial patternable macroporous hydrogel with cell-affinity domains to enhance cell spreading and differentiation. Biomaterials, 2014, 35, 4759-4768.	5.7	55
26	Fabrication and characterization of collagen-based injectable and self-crosslinkable hydrogels for cell encapsulation. Colloids and Surfaces B: Biointerfaces, 2018, 167, 448-456.	2.5	55
27	Bioactive MOFs Based Theranostic Agent for Highly Effective Combination of Multimodal Imaging and Chemoâ€Phototherapy. Advanced Healthcare Materials, 2020, 9, e2000205.	3.9	53
28	Exploring of multicolor emissive carbon dots with novel double emission mechanism. Sensors and Actuators B: Chemical, 2018, 277, 373-380.	4.0	52
29	In VivoCartilage Engineering with Collagen Hydrogel and Allogenous Chondrocytes After Diffusion Chamber Implantation in Immunocompetent Host. Tissue Engineering - Part A, 2009, 15, 2145-2153.	1.6	51
30	Porous hydroxyapatite and biphasic calcium phosphate ceramics promote ectopic osteoblast differentiation from mesenchymal stem cells. Science and Technology of Advanced Materials, 2009, 10, 025003.	2.8	51
31	Biomimetic interpenetrating polymer network hydrogels based on methacrylated alginate and collagen for 3D pre-osteoblast spreading and osteogenic differentiation. Soft Matter, 2012, 8, 2398.	1.2	50
32	Formation of colloidal alloy semiconductor CdTeSe magic-size clusters at room temperature. Nature Communications, 2019, 10, 1674.	5.8	49
33	Evaluation of novelin situsynthesized nano-hydroxyapatite/collagen/alginate hydrogels for osteochondral tissue engineering. Biomedical Materials (Bristol), 2014, 9, 065004.	1.7	48
34	Modulation of immunological properties of allogeneic mesenchymal stem cells by collagen scaffolds in cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2011, 98A, 332-341.	2.1	47
35	Osteoinduction of porous titanium: A comparative study between acidâ€alkali and chemicalâ€thermal treatments. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 95B, 387-396.	1.6	46
36	Photo-crosslinked mono-component type II collagen hydrogel as a matrix to induce chondrogenic differentiation of bone marrow mesenchymal stem cells. Journal of Materials Chemistry B, 2017, 5, 8707-8718.	2.9	46

#	Article	IF	Citations
37	Evolution of Two Types of CdTe Magic-Size Clusters from a Single Induction Period Sample. Journal of Physical Chemistry Letters, 2018, 9, 5288-5295.	2.1	46
38	Bio-Functional Design, Application and Trends in Metallic Biomaterials. International Journal of Molecular Sciences, 2018, 19, 24.	1.8	46
39	Four Types of CdTe Magic-Size Clusters from One Prenucleation Stage Sample at Room Temperature. Journal of Physical Chemistry Letters, 2019, 10, 4345-4353.	2.1	44
40	Surface Structural Biomimetics and the Osteoinduction of Calcium Phosphate Biomaterials. Journal of Nanoscience and Nanotechnology, 2007, 7, 808-813.	0.9	43
41	Novel Tumor-Microenvironment-Based Sequential Catalytic Therapy by Fe(II)-Engineered Polydopamine Nanoparticles. ACS Applied Materials & Interfaces, 2019, 11, 43018-43030.	4.0	41
42	An efficient method to synthesize carbonated nano hydroxyapatite assisted by poly(ethylene glycol). Materials Letters, 2012, 75, 26-28.	1.3	40
43	A Gd-doped polydopamine (PDA)-based theranostic nanoplatform as a strong MR/PA dual-modal imaging agent for PTT/PDT synergistic therapy. Journal of Materials Chemistry B, 2021, 9, 1846-1857.	2.9	40
44	Antioxidative and Conductive Nanoparticles-Embedded Cell Niche for Neural Differentiation and Spinal Cord Injury Repair. ACS Applied Materials & Interfaces, 2021, 13, 52346-52361.	4.0	35
45	NIR-responsive multi-healing HMPAM/dextran/AgNWs hydrogel sensor with recoverable mechanics and conductivity for human-machine interaction. Carbohydrate Polymers, 2020, 247, 116686.	5.1	34
46	Methacrylamide-modified collagen hydrogel with improved anti-actin-mediated matrix contraction behavior. Journal of Materials Chemistry B, 2018, 6, 7543-7555.	2.9	33
47	Fragmentation of Magicâ€Size Cluster Precursor Compounds into Ultrasmall CdS Quantum Dots with Enhanced Particle Yield at Low Temperatures. Angewandte Chemie - International Edition, 2020, 59, 12013-12021.	7.2	33
48	Repair of large osteochondral defects in a beagle model with a novel type I collagen/glycosaminoglycan-porous titanium biphasic scaffold. Materials Science and Engineering C, 2013, 33, 3951-3957.	3.8	32
49	Colloidal CdSe 0-Dimension Nanocrystals and Their Self-Assembled 2-Dimension Structures. Chemistry of Materials, 2018, 30, 1575-1584.	3.2	32
50	Transformation of ZnS Precursor Compounds to Magic-Size Clusters Exhibiting Optical Absorption Peaking at 269 nm. Journal of Physical Chemistry Letters, 2020, 11, 75-82.	2.1	32
51	Wet-spinning fabrication of shear-patterned alginate hydrogel microfibers and the guidance of cell alignment. International Journal of Energy Production and Management, 2017, 4, 299-307.	1.9	31
52	Addition of sodium hyaluronate and the effect on performance of the injectable calcium phosphate cement. Journal of Materials Science: Materials in Medicine, 2009, 20, 1595-1602.	1.7	30
53	NIR-to-Red Upconversion Nanoparticles with Minimized Heating Effect for Synchronous Multidrug Resistance Tumor Imaging and Therapy. ACS Applied Materials & Interfaces, 2018, 10, 14378-14388.	4.0	30
54	Mechanics-Controlled Dynamic Cell Niches Guided Osteogenic Differentiation of Stem Cells via Preserved Cellular Mechanical Memory. ACS Applied Materials & Interfaces, 2020, 12, 260-274.	4.0	30

#	Article	IF	Citations
55	The effects of chemical crosslinking manners on the physical properties and biocompatibility of collagen type I/hyaluronic acid composite hydrogels. International Journal of Biological Macromolecules, 2020, 160, 1201-1211.	3.6	30
56	Biomineralized Hydrogel with Enhanced Toughness by Chemical Bonding of Alkaline Phosphatase and Vinylphosphonic Acid in Collagen Framework. ACS Biomaterials Science and Engineering, 2019, 5, 1405-1415.	2.6	28
57	The development of cell-initiated degradable hydrogel based on methacrylated alginate applicable to multiple microfabrication technologies. Journal of Materials Chemistry B, 2017, 5, 8060-8069.	2.9	27
58	A one-pot synthesis of multifunctional Bi₂S₃ nanoparticles and the construction of coreâ€“shell Bi₂S₃@Ce6â€“CeO₂ nanocomposites for NIR-triggered phototherapy. Journal of Materials Chemistry B, 2020, 8, 4093-4105.	2.9	27
59	Bottom-up approach to build osteon-like structure by cell-laden photocrosslinkable hydrogel. Chemical Communications, 2012, 48, 3170.	2.2	26
60	One-step synthesis of ultrabright amphiphilic carbon dots for rapid and precise tracking lipid droplets dynamics in biosystems. Biosensors and Bioelectronics, 2022, 200, 113928.	5.3	26
61	Construction and evaluation of fibrillar composite hydrogel of collagen/konjac glucomannan for potential biomedical applications. International Journal of Energy Production and Management, 2018, 5, 239-250.	1.9	25
62	One-Step Approach to Single-Ensemble CdS Magic-Size Clusters with Enhanced Production Yields. Journal of Physical Chemistry Letters, 2019, 10, 2725-2732.	2.1	25
63	Carbonated Nano Hydroxyapatite Crystal Growth Modulated by Poly(ethylene glycol) with Different Molecular Weights. Crystal Growth and Design, 2012, 12, 2204-2212.	1.4	24
64	Photoluminescent Colloidal Nanohelices Self-Assembled from CdSe Magic-Size Clusters via Nanoplatelets. Journal of Physical Chemistry Letters, 2019, 10, 2794-2801.	2.1	24
65	Vascularization in Engineered Tissue Construct by Assembly of Cellular Patterned Micromodules and Degradable Microspheres. ACS Applied Materials & Interfaces, 2017, 9, 3524-3534.	4.0	23
66	Cell alignment guided by nano/micro oriented collagen fibers and the synergistic vascularization for nervous cell functional expression. Materials Today Chemistry, 2018, 8, 85-95.	1.7	23
67	Biomimetic mineralizable collagen hydrogels for dynamic bone matrix formation to promote osteogenesis. Journal of Materials Chemistry B, 2020, 8, 3064-3075.	2.9	23
68	Staticâ€“Dynamic Profited Viscoelastic Hydrogels for Motor-Clutch-Regulated Neurogenesis. ACS Applied Materials & Interfaces, 2021, 13, 24463-24476.	4.0	23
69	Cellular internalization of rod-like nano hydroxyapatite particles and their size and dose-dependent effects on pre-osteoblasts. Journal of Materials Chemistry B, 2017, 5, 1205-1217.	2.9	22
70	Effect of Small Molecule Additives in the Prenucleation Stage of Semiconductor CdSe Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 6356-6363.	2.1	22
71	Injectable and self-crosslinkable hydrogels based on collagen type II and activated chondroitin sulfate for cell delivery. International Journal of Biological Macromolecules, 2018, 118, 2014-2020.	3.6	22
72	Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters. Angewandte Chemie - International Edition, 2020, 59, 16943-16952.	7.2	22

#	Article	IF	Citations
73	Biofabrication of nerve fibers with mimetic myelin sheath-like structure and aligned fibrous niche. Biofabrication, 2020, 12, 035013.	3.7	22
74	Chondrogenic differentiation and immunological properties of mesenchymal stem cells in collagen type I hydrogel. Biotechnology Progress, 2010, 26, 1749-1758.	1.3	21
75	Degradation regulated bioactive hydrogel as the bioink with desirable moldability for microfluidic biofabrication. Carbohydrate Polymers, 2017, 178, 8-17.	5.1	21
76	Combining Electrospinning and Electrospraying to Prepare a Biomimetic Neural Scaffold with Synergistic Cues of Topography and Electrotransduction. ACS Applied Bio Materials, 2020, 3, 5148-5159.	2.3	21
77	Room-temperature formation of CdS magic-size clusters in aqueous solutions assisted by primary amines. Nature Communications, 2020, 11, 4199.	5.8	21
78	Evolution of CdTe Magic-Size Clusters with Single Absorption Doublet Assisted by Adding Small Molecules during Prenucleation. Journal of Physical Chemistry Letters, 2020, 11, 2230-2240.	2.1	21
79	The effect of collagen hydrogels on chondrocyte behaviors through restricting the contraction of cell/hydrogel constructs. International Journal of Energy Production and Management, 2021, 8, rbab030.	1.9	21
80	Automated fabrication of hydrogel microfibers with tunable diameters for controlled cell alignment. Biofabrication, 2017, 9, 045009.	3.7	20
81	Tunable Fast Relaxation in Imine-Based Nanofibrillar Hydrogels Stimulates Cell Response through TRPV4 Activation. Biomacromolecules, 2020, 21, 3745-3755.	2.6	20
82	An efficient two-step preparation of photocrosslinked gelatin microspheres as cell carriers to support MC3T3-E1 cells osteogenic performance. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110798.	2.5	20
83	Biomimetic mineralized microenvironment stiffness regulated BMSCs osteogenic differentiation through cytoskeleton mediated mechanical signaling transduction. Materials Science and Engineering C, 2021, 119, 111613.	3.8	20
84	Preparation of porous PLGA/Ti biphasic scaffold and osteochondral defect repair. Biomaterials Science, 2013, 1, 703.	2.6	19
85	Establishing a cell-affinitive interface and spreading space in a 3D hydrogel by introduction of microcarriers and an enzyme. Journal of Materials Chemistry B, 2014, 2, 6601-6610.	2.9	19
86	Semiconvertible Hyaluronic Hydrogel Enabled Red-Light-Responsive Reversible Mechanics, Adhesion, and Self-Healing. Biomacromolecules, 2022, 23, 1030-1040.	2.6	19
87	A mechanically adaptive hydrogel neural interface based on silk fibroin for high-efficiency neural activity recording. Materials Horizons, 2022, 9, 2215-2225.	6.4	19
88	Activated hyaluronic acid/collagen composite hydrogel with tunable physical properties and improved biological properties. International Journal of Biological Macromolecules, 2020, 164, 2186-2196.	3.6	18
89	Investigation of luminescent mechanism: N-rich carbon dots as luminescence centers in fluorescent hydroxyapatite prepared using a typical hydrothermal process. Journal of Materials Chemistry B, 2017, 5, 3749-3757.	2.9	17
90	The effect of stress and tissue fluid microenvironment on allogeneic chondrocytes inÂvivo and the immunological properties of engineered cartilage. Biomaterials, 2011, 32, 6017-6024.	5.7	16

#	Article	IF	Citations
91	Theranostic system based on NaY(Mn)F₄:Yb/Er upconversion nanoparticles with multi-drug resistance reversing ability. Journal of Materials Chemistry B, 2018, 6, 3586-3599.	2.9	14
92	Preparation and cytocompatibility of chitosanâ€modified polylactide. Journal of Applied Polymer Science, 2008, 110, 408-412.	1.3	13
93	Fragmentation of Magicâ€Size Cluster Precursor Compounds into Ultrasmall CdS Quantum Dots with Enhanced Particle Yield at Low Temperatures. Angewandte Chemie, 2020, 132, 12111-12119.	1.6	13
94	Bioactivity of porous titanium with hydrogen peroxide solution with or without tantalum chloride treatment at a low temperature. Biomedical Materials (Bristol), 2013, 8, 025006.	1.7	12
95	Fabrication and assembly of porous micropatterned scaffolds for modular tissue engineering. Materials Letters, 2018, 228, 360-364.	1.3	11
96	Material-induced chondrogenic differentiation of mesenchymal stem cells is material-dependent. Experimental and Therapeutic Medicine, 2014, 7, 1147-1150.	0.8	10
97	Facile synthesis of nano-sized CuFe2S3: morphology and diverse functional tuning and crystal growth mechanism exploring. International Journal of Energy Production and Management, 2017, 4, 223-231.	1.9	10
98	Dynamically Modulated Coreâ€“Shell Microfibers to Study the Effect of Depth Sensing of Matrix Stiffness on Stem Cell Fate. ACS Applied Materials & Interfaces, 2021, 13, 37997-38006.	4.0	10
99	Fabrication of gelatin-micropatterned surface and its effect on osteogenic differentiation of hMSCs. Journal of Materials Chemistry B, 2018, 6, 1018-1025.	2.9	9
100	Synthesis of photo-reactive poly (vinyl alcohol) and construction of scaffold-free cartilage like pellets in vitro. International Journal of Energy Production and Management, 2018, 5, 159-166.	1.9	9
101	CdS magic-size clusters exhibiting one sharp ultraviolet absorption singlet peaking at 361 nm. Nano Research, 2019, 12, 1437-1444.	5.8	9
102	Aldehyde-methacrylate-hyaluronan profited hydrogel system integrating aligned and viscoelastic cues for neurogenesis. Carbohydrate Polymers, 2022, 278, 118961.	5.1	9
103	Spatiotemporal regulation of dynamic cell microenvironment signals based on an azobenzene photoswitch. Journal of Materials Chemistry B, 2020, 8, 9212-9226.	2.9	8
104	Dual functional modification of gellan gum hydrogel by introduction of methyl methacrylate and RGD contained polypeptide. Materials Letters, 2020, 264, 127341.	1.3	8
105	Effect of adipic dihydrazide modification on the performance of collagen/hyaluronic acid scaffold. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 92B, 307-316.	1.6	7
106	A facile green approach for fabricating bacterial cellulose scaffold with macroporous structure and cell affinity. Journal of Bioactive and Compatible Polymers, 2019, 34, 442-452.	0.8	7
107	Effect of flowing speed on bone-like apatite formation in porous calcium phosphate in dynamic RSBF. Journal of Materials Science, 2005, 40, 1809-1812.	1.7	6
108	Experimental observation of twoâ€layer TiO₂ nanotube arrays prepared by steppingâ€voltage anodization. Physica Status Solidi - Rapid Research Letters, 2012, 6, 166-168.	1.2	6

#	Article	IF	Citations
109	Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters. Angewandte Chemie, 2020, 132, 17091-17100.	1.6	6
110	Evolution of Two Types of ZnTe Magic-Size Clusters Displaying Sharp Doublets in Optical Absorption. Journal of Physical Chemistry Letters, 2021, 12, 4762-4768.	2.1	6
111	A photoelectric effect integrated scaffold for the wireless regulation of nerve cellular behavior. Journal of Materials Chemistry B, 2022, 10, 1601-1611.	2.9	5
112	In vivo immunological properties research on mesenchymal stem cells based engineering cartilage by a dialyzer pocket model. Journal of Materials Science: Materials in Medicine, 2017, 28, 150.	1.7	4
113	Identifying Clusters and/or Small-Size Quantum Dots in Colloidal CdSe Ensembles with Optical Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 6399-6408.	2.1	4
114	A facile approach for engineering tissue constructs with vessel-like channels by cell-laden hydrogel fibers. Materials Science and Engineering C, 2019, 101, 370-379.	3.8	4
115	Effect of the crystallinity of calcium phosphate ceramics on osteoblast proliferation in vitro. Journal of Materials Science Letters, 2001, 20, 331-332.	0.5	2
116	Tissue engineered artificial liver model based on viscoelastic hyaluronan-collagen hydrogel and the effect of EGCG intervention on ALD. Colloids and Surfaces B: Biointerfaces, 2021, 206, 111980.	2.5	2
117	Sandwich-interface inspired strategy for controlled formation of nanoparticles. Nanoscale, 2018, 10, 11624-11632.	2.8	1
118	Porous titanium coating with sub-micro structure from anodic oxidation. , 2010, , .		0
119	Addition of PEG and the effect on carbonated nano-hydroxyapatite synthesis. , 2010, , .		0
120	Innentitelbild: Roomâ€Temperature Formation Pathway for CdTeSe Alloy Magicâ€Size Clusters (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10	1.6	0