Hongxu Lu

List of Publications by Year
in descending order

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86 papers	4,462 citations	81839 39 h-index	110317 64 g-index
89 all docs	89 docs citations	89 times ranked	6710 citing authors

#	Article	IF	Citations
1	Pore size effect of collagen scaffolds on cartilage regeneration. Acta Biomaterialia, 2014, 10, 2005-2013.	4.1	263
2	Decellularized matrices for tissue engineering. Expert Opinion on Biological Therapy, 2010, 10, 1717-1728.	1.4	257
3	Silicate bioceramics induce angiogenesis during bone regeneration. Acta Biomaterialia, 2012, 8, 341-349.	4.1	240
4	Cultured cell-derived extracellular matrix scaffolds for tissue engineering. Biomaterials, 2011, 32, 9658-9666.	5.7	198
5	Stimulatory effects of the ionic products from Caâ€“Mgâ€“Si bioceramics on both osteogenesis and angiogenesis in vitro. Acta Biomaterialia, 2013, 9, 8004-8014.	4.1	192
6	Autologous extracellular matrix scaffolds for tissue engineering. Biomaterials, 2011, 32, 2489-2499.	5.7	174
7	Multicellular Tumor Spheroids (MCTS) as a 3D In Vitro Evaluation Tool of Nanoparticles. Small, 2018, 14, e1702858.	5.2	158
8	Adipogenic Differentiation of Individual Mesenchymal Stem Cell on Different Geometric Micropatterns. Langmuir, 2011, 27, 6155-6162.	1.6	103
9	Folate Conjugation to Polymeric Micelles via Boronic Acid Ester to Deliver Platinum Drugs to Ovarian Cancer Cell Lines. Biomacromolecules, 2013, 14, 962-975.	2.6	101
10	A new role of curcumin: as a multicolor photoinitiator for polymer fabrication under household UV to red LED bulbs. Polymer Chemistry, 2015, 6, 5053-5061.	1.9	95
11	Spatial immobilization of bone morphogenetic protein-4 in a collagen-PLGA hybrid scaffold for enhanced osteoinductivity. Biomaterials, 2012, 33, 6140-6146.	5.7	93
12	Comparison of decellularization techniques for preparation of extracellular matrix scaffolds derived from threeâ€dimensional cell culture. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2507-2516.	2.1	92
13	Enhanced transcellular penetration and drug delivery by crosslinked polymeric micelles into pancreatic multicellular tumor spheroids. Biomaterials Science, 2015, 3, 1085-1095.	2.6	88
14	Cartilage tissue engineering using funnel-like collagen sponges prepared with embossing ice particulate templates. Biomaterials, 2010, 31, 5825-5835.	5.7	83
15	Cellular Uptake and Movement in 2D and 3D Multicellular Breast Cancer Models of Fructose-Based Cylindrical Micelles That Is Dependent on the Rod Length. ACS Applied Materials & Interfaces, 2016, 8, 16622-16630.	4.0	72
16	Influence of nanoparticle shapes on cellular uptake of paclitaxel loaded nanoparticles in 2D and 3D cancer models. Polymer Chemistry, 2017, 8, 3317-3326.	1.9	68
17	Fructose-coated nanoparticles: a promising drug nanocarrier for triple-negative breast cancer therapy. Chemical Communications, 2014, 50, 15928-15931.	2.2	66
18	PLLAâ€“collagen and PLLAâ€“gelatin hybrid scaffolds with funnel-like porous structure for skin tissue engineering. Science and Technology of Advanced Materials, 2012, 13, 064210.	2.8	62

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19	Core-Cross-Linking Accelerates Antitumor Activities of Paclitaxelâ€“Conjugate Micelles to Prostate Multicellular Tumor Spheroids: A Comparison of 2D and 3D Models. Biomacromolecules, 2015, 16, 1470-1479.	2.6	62
20	PEGylated Albumin-Based Polyion Complex Micelles for Protein Delivery. Biomacromolecules, 2016, 17, 808-817.	2.6	59
21	Effects of Poly(L-lysine), Poly(acrylic acid) and Poly(ethylene glycol) on the Adhesion, Proliferation and Chondrogenic Differentiation of Human Mesenchymal Stem Cells. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 577-589.	1.9	58
22	Near Infrared Light Triggered Photo/Immuno-Therapy Toward Cancers. Frontiers in Bioengineering and Biotechnology, 2020, 8, 488.	2.0	54
23	In vitro Proliferation and Osteogenic Differentiation of Human Bone Marrow-derived Mesenchymal Stem Cells Cultured with Hardystonite (Ca2ZnSi 2O7) and Î²-TCP Ceramics. Journal of Biomaterials Applications, 2010, 25, 39-56.	1.2	51
24	Light-responsive azobenzene-based glycopolymer micelles for targeted drug delivery to melanoma cells. European Polymer Journal, 2015, 69, 616-627.	2.6	51
25	Preparation of Porous Collagen Scaffolds with Micropatterned Structures. Advanced Materials, 2012, 24, 4311-4316.	11.1	48
26	Preparation of collagen scaffolds with controlled pore structures and improved mechanical property for cartilage tissue engineering. Journal of Bioactive and Compatible Polymers, 2013, 28, 426-438.	0.8	47
27	Fructose-Coated Nanodiamonds: Promising Platforms for Treatment of Human Breast Cancer. Biomacromolecules, 2016, 17, 2946-2955.	2.6	47
28	Effect of cell density on adipogenic differentiation of mesenchymal stem cells. Biochemical and Biophysical Research Communications, 2009, 381, 322-327.	1.0	46
29	Nanodiamonds with Surface Grafted Polymer Chains as Vehicles for Cell Imaging and Cisplatin Delivery: Enhancement of Cell Toxicity by POEGMEMA Coating. ACS Macro Letters, 2013, 2, 246-250.	2.3	45
30	Albumin-micelles via a one-pot technology platform for the delivery of drugs. Chemical Communications, 2014, 50, 6394.	2.2	44
31	Drug Conjugation to Cyclic Peptideâ€“Polymer Selfâ€Assembling Nanotubes. Chemistry - A European Journal, 2014, 20, 12745-12749.	1.7	44
32	Effect of shell-crosslinking of micelles on endocytosis and exocytosis: acceleration of exocytosis by crosslinking. Biomaterials Science, 2013, 1, 265-275.	2.6	43
33	Polyion Complex Micelle Based on Albuminâ€“Polymer Conjugates: Multifunctional Oligonucleotide Transfection Vectors for Anticancer Chemotherapeutics. Biomacromolecules, 2014, 15, 4195-4205.	2.6	43
34	A Novel Cylinder-Type Poly(L-Lactic Acid)â€“Collagen Hybrid Sponge for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2010, 16, 329-338.	1.1	42
35	Maintenance of cartilaginous gene expression on extracellular matrix derived from serially passaged chondrocytes during in vitro chondrocyte expansion. Journal of Biomedical Materials Research - Part A, 2012, 100A, 694-702.	2.1	42
36	Delivery of Amonafide from Fructose-Coated Nanodiamonds by Oxime Ligation for the Treatment of Human Breast Cancer. Biomacromolecules, 2018, 19, 481-489.	2.6	42

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37	Gradient-sized control of tumor spheroids on a single chip. Lab on A Chip, 2019, 19, 4093-4103.	3.1	42
38	Enhanced Delivery of the RAPTA-C Macromolecular Chemotherapeutic by Conjugation to Degradable Polymeric Micelles. Biomacromolecules, 2013, 14, 4177-4188.	2.6	41
39	Influencing Selectivity to Cancer Cells with Mixed Nanoparticles Prepared from Albuminâ€“Polymer Conjugates and Block Copolymers. Bioconjugate Chemistry, 2017, 28, 979-985.	1.8	41
40	Preparation of collagen porous scaffolds with a gradient pore size structure using ice particulates. Materials Letters, 2013, 107, 280-283.	1.3	40
41	Superior Chemotherapeutic Benefits from the Ruthenium-Based Anti-Metastatic Drug NAMI-A through Conjugation to Polymeric Micelles. Macromolecules, 2014, 47, 1646-1655.	2.2	40
42	Length vs. stiffness: which plays a dominant role in the cellular uptake of fructose-based rod-like micelles by breast cancer cells in 2D and 3D cell culture models?. Journal of Materials Chemistry B, 2018, 6, 4223-4231.	2.9	40
43	Inhibitory effects ofBacillusprobionts on growth and toxin production ofVibrio harveyipathogens of shrimp. Letters in Applied Microbiology, 2009, 49, 679-684.	1.0	37
44	Albuminâ€“polymer conjugate nanoparticles and their interactions with prostate cancer cells in 2D and 3D culture: comparison between PMMA and PCL. Journal of Materials Chemistry B, 2016, 4, 2017-2027.	2.9	36
45	Swollen Micelles for the Preparation of Gated, Squeezable, pH-Responsive Drug Carriers. ACS Applied Materials & Interfaces, 2017, 9, 13865-13874.	4.0	35
46	Mammary Tumor Organoid Culture in Nonâ€Adhesive Alginate for Luminal Mechanics and Highâ€Throughput Drug Screening. Advanced Science, 2021, 8, e2102418.	5.6	35
47	Superâ€Resolution Mapping of Single Nanoparticles inside Tumor Spheroids. Small, 2020, 16, e1905572.	5.2	32
48	Effects of extracellular matrices derived from different cell sources on chondrocyte functions. Biotechnology Progress, 2011, 27, 788-795.	1.3	31
49	Carbohydrate-Specific Uptake of Fucosylated Polymeric Micelles by Different Cancer Cell Lines. Biomacromolecules, 2015, 16, 1948-1957.	2.6	31
50	Modulating the cellular uptake of platinum drugs with glycopolymers. Polymer Chemistry, 2016, 7, 1031-1036.	1.9	31
51	Fluorescent Glyco Single-Chain Nanoparticle-Decorated Nanodiamonds. ACS Macro Letters, 2017, 6, 1168-1174.	2.3	30
52	Profluorescent PPV-Based Micellar System as a Versatile Probe for Bioimaging and Drug Delivery. Biomacromolecules, 2016, 17, 4086-4094.	2.6	28
53	Direct Correlation Between Zeta Potential and Cellular Uptake of Poly(methacrylic acid) Postâ€Modified with Guanidinium Functionalities. Macromolecular Chemistry and Physics, 2016, 217, 2302-2309.	1.1	27
54	Enhanced Antimetastatic Activity of the Ruthenium Anticancer Drug RAPTAâ€C Delivered in Fructoseâ€Coated Micelles. Macromolecular Bioscience, 2017, 17, 1600513.	2.1	27

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55	Sugar Concentration and Arrangement on the Surface of Glycopolymer Micelles Affect the Interaction with Cancer Cells. Biomacromolecules, 2019, 20, 273-284.	2.6	27
56	Enabling peristalsis of human colon tumor organoids on microfluidic chips. Biofabrication, 2022, 14, 015006.	3.7	27
57	Boronic acid ester with dopamine as a tool for bioconjugation and for visualization of cell apoptosis. Chemical Communications, 2014, 50, 6390-6393.	2.2	26
58	PEG Graftedâ€Nanodiamonds for the Delivery of Gemcitabine. Macromolecular Rapid Communications, 2016, 37, 2023-2029.	2.0	26
59	Penetration and drug delivery of albumin nanoparticles into pancreatic multicellular tumor spheroids. Journal of Materials Chemistry B, 2017, 5, 9591-9599.	2.9	24
60	Spatially resolved coding of Î»-orthogonal hydrogels by laser lithography. Chemical Communications, 2018, 54, 2436-2439.	2.2	24
61	pH-Triggered release of gemcitabine from polymer coated nanodiamonds fabricated by RAFT polymerization and copper free click chemistry. Polymer Chemistry, 2016, 7, 6220-6230.	1.9	23
62	Importance of Polymer Length in Fructose-Based Polymeric Micelles for an Enhanced Biological Activity. Macromolecules, 2019, 52, 477-486.	2.2	23
63	Exploring adipogenic differentiation of a single stem cell on poly(acrylic acid) and polystyrene micropatterns. Soft Matter, 2012, 8, 8429.	1.2	22
64	Light-sheet microscopy as a tool to understanding the behaviour of Polyion complex micelles for drug delivery. Chemical Communications, 2018, 54, 12618-12621.	2.2	21
65	Dual-Responsive pH and Temperature Sensitive Nanoparticles Based on Methacrylic Acid and Di(ethylene glycol) Methyl Ether Methacrylate for the Triggered Release of Drugs. Macromolecular Bioscience, 2015, 15, 1091-1104.	2.1	20
66	Safety of nanoparticles based on albuminâ€“polymer conjugates as a carrier of nucleotides for pancreatic cancer therapy. Journal of Materials Chemistry B, 2018, 6, 6278-6287.	2.9	20
67	Stabilization of Paclitaxel-Conjugated Micelles by Cross-Linking with Cystamine Compromises the Antitumor Effects against Two- and Three-Dimensional Tumor Cellular Models. Molecular Pharmaceutics, 2016, 13, 3648-3656.	2.3	19
68	Cellular Uptake of Gold Nanoparticles and Their Movement in 3D Multicellular Tumor Spheroids: Effect of Molecular Weight and Grafting Density of Poly(2â€hydroxyl ethyl acrylate). Macromolecular Bioscience, 2020, 20, e1900221.	2.1	19
69	Anti-metastatic effects of RAPTA-C conjugated polymeric micelles on two-dimensional (2D) breast tumor cells and three-dimensional (3D) multicellular tumor spheroids. Acta Biomaterialia, 2016, 32, 68-76.	4.1	18
70	Drug induced self-assembly of triblock copolymers into polymersomes for the synergistic dual-drug delivery of platinum drugs and paclitaxel. Polymer Chemistry, 2017, 8, 6289-6299.	1.9	18
71	Glycopolymer Self-Assemblies with Gold(I) Complexed to the Core as a Delivery System for Auranofin. Macromolecules, 2015, 48, 1065-1076.	2.2	17
72	Controlling the morphology of glyco-nanoparticles in water using block copolymer mixtures: the effect on cellular uptake. Polymer Chemistry, 2015, 6, 7812-7820.	1.9	17

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73	Unidirectional intercellular communication on a microfluidic chip. Biosensors and Bioelectronics, 2021, 175, 112833.	5.3	17
74	Spatially Guided Angiogenesis by Three-Dimensional Collagen Scaffolds Micropatterned with Vascular Endothelial Growth Factor. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 2185-2195.	1.9	16
75	Direct Polymerization of the Arsenic Drug PENAO to Obtain Nanoparticles with High Thiol-Reactivity and Anti-Cancer Efficiency. Bioconjugate Chemistry, 2018, 29, 546-558.	1.8	16
76	Enhanced drug toxicity by conjugation of platinum drugs to polymers with guanidine containing zwitterionic functional groups that mimic cell-penetrating peptides. Polymer Chemistry, 2014, 5, 6600-6610.	1.9	15
77	Nuclear deformation and expression change of cartilaginous genes during in vitro expansion of chondrocytes. Biochemical and Biophysical Research Communications, 2008, 374, 688-692.	1.0	12
78	Culture of bovine articular chondrocytes in funnel-like collagen-PLGA hybrid sponges. Biomedical Materials (Bristol), 2011, 6, 045011.	1.7	12
79	Effects of extracellular matrix proteins in chondrocyteâ€derived matrices on chondrocyte functions. Biotechnology Progress, 2013, 29, 1331-1336.	1.3	10
80	Cellâ€Derived Biomimetic 2D Nanoparticles to Improve Cellâ€Specific Targeting and Tissue Penetration for Enhanced Magnetic Resonance Imaging. Advanced Materials Interfaces, 2022, 9, .	1.9	10
81	Differentiation of PC12 cells in threeâ€dimensional collagen sponges with micropatterned nerve growth factor. Biotechnology Progress, 2012, 28, 773-779.	1.3	9
82	Micropatterned angiogenesis induced by poly(<scp>d</scp>,<scp>l</scp>-lactic-co-glycolic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.8	8
83	Synthesis of microcapsules using inverse emulsion periphery RAFT polymerization via SPG membrane emulsification. Polymer Chemistry, 2016, 7, 7047-7051.	1.9	7
84	Cationic glycopolymers through controlled polymerisation of a glucosamine-based monomer mimicking the behaviour of chitosan. Polymer Chemistry, 2017, 8, 1750-1753.	1.9	4
85	Regulating the uptake of poly(N-(2-hydroxypropyl) methacrylamide)-based micelles in cells cultured on micropatterned surfaces. Biointerphases, 2021, 16, 041002.	0.6	2
86	Cancer Spheroids: Superâ€Resolution Mapping of Single Nanoparticles inside Tumor Spheroids (Small) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.2	0