Laura A Smith Callahan

List of Publications by Year
in descending order

37 papers	2,968 citations	279487 23 h-index	329751 37 g-index
37 all docs	37 docs citations	37 times ranked	4484 citing authors

#	Article	IF	Citations
1	Convergent genomic and pharmacological evidence of PI3K/GSK3 signaling alterations in neurons from schizophrenia patients. Neuropsychopharmacology, 2021, 46, 673-682.	2.8	24
2	Expression of SREBP2 and cholesterol metabolism related genes in TCGA glioma cohorts. Medicine (United States), 2020, 99, e18815.	0.4	7
3	Effect of Laminin Derived Peptides IKVAV and LRE Tethered to Hyaluronic Acid on hiPSC Derived Neural Stem Cell Morphology, Attachment and Neurite Extension. Journal of Functional Biomaterials, 2020, 11, 15.	1.8	7
4	Combination of IKVAV, LRE, and GPQGIWGQ Bioactive Signaling Peptides Increases Human Induced Pluripotent Stem Cell Derived Neural Stem Cells Extracellular Matrix Remodeling and Neurite Extension. Advanced Biology, 2020, 4, e2000084.	3.0	6
5	Manipulation of Extracellular Matrix Remodeling and Neurite Extension by Mouse Embryonic Stem Cells Using IKVAV and LRE Peptide Tethering in Hyaluronic Acid Matrices. Biomacromolecules, 2019, 20, 3009-3020.	2.6	12
6	Volumetric muscle loss injury repair using in situ fibrin gel cast seeded with muscle-derived stem cells (MDSCs). Stem Cell Research, 2018, 27, 65-73.	0.3	61
7	Mechanical stabilization of proteolytically degradable polyethylene glycol dimethacrylate hydrogels through peptide interaction. Acta Biomaterialia, 2018, 71, 271-278.	4.1	9
8	Gradient Material Strategies for Hydrogel Optimization in Tissue Engineering Applications. High-Throughput, 2018, 7, 1.	4.4	20
9	Polyethylene glycol in spinal cord injury repair: a critical review. Journal of Experimental Pharmacology, 2018, Volume 10, 37-49.	1.5	48
10	Human Induced Pluripotent Stem Cell Derived Neural Stem Cell Survival and Neural Differentiation on Polyethylene Glycol Dimethacrylate Hydrogels Containing a Continuous Concentration Gradient of N-Cadherin Derived Peptide His-Ala-Val-Asp-Ile. ACS Biomaterials Science and Engineering, 2017, 3, 776-781.	2.6	19
11	Concentration dependent survival and neural differentiation of murine embryonic stem cells cultured on polyethylene glycol dimethacrylate hydrogels possessing a continuous concentration gradient of n-cadherin derived peptide His-Ala-Val-Asp-Lle. Acta Biomaterialia, 2017, 56, 153-160.	4.1	25
12	Neurite extension and neuronal differentiation of human induced pluripotent stem cell derived neural stem cells on polyethylene glycol hydrogels containing a continuous Young's Modulus gradient. Journal of Biomedical Materials Research - Part A, 2017, 105, 824-833.	2.1	47
13	Effects of free radical initiators on polyethylene glycol dimethacrylate hydrogel properties and biocompatibility. Journal of Biomedical Materials Research - Part A, 2017, 105, 3059-3068.	2.1	33
14	Combinatorial Method/High Throughput Strategies for Hydrogel Optimization in Tissue Engineering Applications. Gels, 2016, 2, 18.	2.1	14
15	Response to di-functionalized hyaluronic acid with orthogonal chemistry grafting at independent modification sites in rodent models of neural differentiation and spinal cord injury. Journal of Materials Chemistry B, 2016, 4, 6865-6875.	2.9	14
16	The concentration game: differential effects of bioactive signaling in 2D and 3D culture. Neural Regeneration Research, 2016, 11, 66.	1.6	3
17	Optimization of adhesive conditions for neural differentiation of murine embryonic stem cells using hydrogels functionalized with continuous Ile-Lys-Val-Ala-Val concentration gradients. Acta Biomaterialia, 2015, 21, 55-62.	4.1	40
18	OGP Functionalized Phenylalanine-Based Poly(ester urea) for Enhancing Osteoinductive Potential of Human Mesenchymal Stem Cells. Biomacromolecules, 2015, 16, 1358-1371.	2.6	63

#	Article	IF	Citations
19	Influence of Discrete and Continuous Culture Conditions on Human Mesenchymal Stem Cell Lineage Choice in RGD Concentration Gradient Hydrogels. Biomacromolecules, 2013, 14, 3047-3054.	2.6	17
20	Maximizing phenotype constraint and extracellular matrix production in primary human chondrocytes using arginineâ€“glycineâ€“aspartate concentration gradient hydrogels. Acta Biomaterialia, 2013, 9, 7420-7428.	4.1	30
21	Resorbable, amino acid-based poly(ester urea)s crosslinked with osteogenic growth peptide with enhanced mechanical properties and bioactivity. Acta Biomaterialia, 2013, 9, 5132-5142.	4.1	69
22	Directed differentiation and neurite extension of mouse embryonic stem cell on aligned poly(lactide) nanofibers functionalized with YIGSR peptide. Biomaterials, 2013, 34, 9089-9095.	5.7	130
23	Concentration dependent neural differentiation and neurite extension of mouse ESC on primary amine-derivatized surfaces. Biomaterials Science, 2013, 1, 537.	2.6	10
24	Primary human chondrocyte extracellular matrix formation and phenotype maintenance using RGD-derivatized PEGDM hydrogels possessing a continuous Youngâ€™s modulus gradient. Acta Biomaterialia, 2013, 9, 6095-6104.	4.1	62
25	Strain-Promoted Cross-Linking of PEG-Based Hydrogels via Copper-Free Cycloaddition. ACS Macro Letters, 2012, 1, 1071-1073.	2.3	114
26	ECM Production of Primary Human and Bovine Chondrocytes in Hybrid PEG Hydrogels Containing Type I Collagen and Hyaluronic Acid. Biomacromolecules, 2012, 13, 1625-1631.	2.6	37
27	Computer-Designed Nano-Fibrous Scaffolds. Methods in Molecular Biology, 2012, 868, 125-134.	0.4	7
28	The Enhancement of human embryonic stem cell osteogenic differentiation with nano-fibrous scaffolding. Biomaterials, 2010, 31, 5526-5535.	5.7	112
29	Response of Human Embryonic Stem Cellâ€“Derived Mesenchymal Stem Cells to Osteogenic Factors and Architectures of Materials During <i>In Vitro</i> Osteogenesis. Tissue Engineering - Part A, 2010, 16, 3507-3514.	1.6	45
30	Enhancing Osteogenic Differentiation of Mouse Embryonic Stem Cells by Nanofibers. Tissue Engineering - Part A, 2009, 15, 1855-1864.	1.6	101
31	Biomimetic nanofibrous gelatin/apatite composite scaffolds for bone tissue engineering. Biomaterials, 2009, 30, 2252-2258.	5.7	483
32	Nanostructured polymer scaffolds for tissue engineering and regenerative medicine. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 226-236.	3.3	234
33	The influence of three-dimensional nanofibrous scaffolds on the osteogenic differentiation of embryonic stem cells. Biomaterials, 2009, 30, 2516-2522.	5.7	123
34	Tissue engineering with nano-fibrous scaffolds. Soft Matter, 2008, 4, 2144.	1.2	145
35	Bone regeneration on computer-designed nano-fibrous scaffolds. Biomaterials, 2006, 27, 3973-3979.	5.7	191
36	Surface Engineering of Nano-Fibrous Poly(L-Lactic Acid) Scaffolds via Self-Assembly Technique for Bone Tissue Engineering. Journal of Biomedical Nanotechnology, 2005, 1, 54-60.	0.5	60

#	Article	IF	Citations
37	Nano-fibrous scaffolds for tissue engineering. Colloids and Surfaces B: Biointerfaces, 2004, 39, 125-131.	2.5	546