Nathan J Castro

List of Publications by Year
in descending order

45 papers	2,419 citations	236612 25 h-index	315357 38 g-index
45 all docs	45 docs citations	45 times ranked	3685 citing authors

#	Article	IF	Citations
1	Nondestructive testing of native and tissue-engineered medical products: adding numbers to pictures. Trends in Biotechnology, 2022, 40, 194-209.	4.9	9
2	Nanotechnology and 3D/4D Bioprinting for Neural Tissue Regeneration. , 2022, , 427-458.		4
3	Type II Photoinitiator and Tuneable Poly(Ethylene Glycol)-Based Materials Library for Visible Light Photolithography. Tissue Engineering - Part A, 2020, 26, 292-304.	1.6	8
4	A multiwell applicator for conformal brachytherapy of superficial skin tumors: A simulation study. Skin Research and Technology, 2020, 26, 537-541.	0.8	5
5	The Current Versatility of Polyurethane Three-Dimensional Printing for Biomedical Applications. Tissue Engineering - Part B: Reviews, 2020, 26, 272-283.	2.5	58
6	Additive biomanufacturing of scaffolds for breast reconstruction. Additive Manufacturing, 2019, 30, 100845.	1.7	24
7	Development of 3D printable conductive hydrogel with crystallized PEDOT:PSS for neural tissue engineering. Materials Science and Engineering C, 2019, 99, 582-590.	3.8	167
8	Rational design and fabrication of multiphasic soft network composites for tissue engineering articular cartilage: A numerical model-based approach. Chemical Engineering Journal, 2018, 340, 15-23.	6.6	58
9	Designification of Neurotechnological Devices through 3D Printed Functional Materials. Advanced Functional Materials, 2018, 28, 1703905.	7.8	3
10	Conceptual design of a personalized radiation therapy patch for skin cancer. Current Directions in Biomedical Engineering, 2018, 4, 607-610.	0.2	6
11	Directly Induced Neural Differentiation of Human Adipose-Derived Stem Cells Using Three-Dimensional Culture System of Conductive Microwell with Electrical Stimulation. Tissue Engineering - Part A, 2018, 24, 537-545.	1.6	28
12	Independent Evaluation of Medical-Grade Bioresorbable Filaments for Fused Deposition Modelling/Fused Filament Fabrication of Tissue Engineered Constructs. Polymers, 2018, 10, 40.	2.0	41
13	Enhanced bone tissue regeneration using a 3D printed microstructure incorporated with a hybrid nano hydrogel. Nanoscale, 2017, 9, 5055-5062.	2.8	121
14	Current developments in multifunctional smart materials for 3D/4D bioprinting. Current Opinion in Biomedical Engineering, 2017, 2, 67-75.	1.8	70
15	Integrating three-dimensional printing and nanotechnology for musculoskeletal regeneration. Nanotechnology, 2017, 28, 382001.	1.3	22
16	An Integrated Design, Material, and Fabrication Platform for Engineering Biomechanically and Biologically Functional Soft Tissues. ACS Applied Materials & Interfaces, 2017, 9, 29430-29437.	4.0	98
17	4D printing of polymeric materials for tissue and organ regeneration. Materials Today, 2017, 20, 577-591.	8.3	292
18	Biomaterials and 3D Printing Techniques for Neural Tissue Regeneration. , 2016, , 1-24.		6

#	Article	IF	Citations
19	A 3D printed nano bone matrix for characterization of breast cancer cell and osteoblast interactions. Nanotechnology, 2016, 27, 315103.	1.3	62
20	Cell Sources and Nanotechnology for Neural Tissue Engineering. , 2016, , 207-226.		0
21	Synergistic Effect of Cold Atmospheric Plasma and Drug Loaded Core-shell Nanoparticles on Inhibiting Breast Cancer Cell Growth. Scientific Reports, 2016, 6, 21974.	1.6	70
22	3D printing of novel osteochondral scaffolds with graded microstructure. Nanotechnology, 2016, 27, 414001.	1.3	62
23	4D printing smart biomedical scaffolds with novel soybean oil epoxidized acrylate. Scientific Reports, 2016, 6, 27226.	1.6	296
24	Improved Human Bone Marrow Mesenchymal Stem Cell Osteogenesis in 3D Bioprinted Tissue Scaffolds with Low Intensity Pulsed Ultrasound Stimulation. Scientific Reports, 2016, 6, 32876.	1.6	99
25	Four-Dimensional Printing Hierarchy Scaffolds with Highly Biocompatible Smart Polymers for Tissue Engineering Applications. Tissue Engineering - Part C: Methods, 2016, 22, 952-963.	1.1	128
26	Efficient Construction of Volar Wrist Splints. Hand, 2016, 11, 310-313.	0.7	2
27	Simulated Body Fluid Nucleation of Three-Dimensional Printed Elastomeric Scaffolds for Enhanced Osteogenesis. Tissue Engineering - Part A, 2016, 22, 940-948.	1.6	14
28	Cold Atmospheric Plasma Modified Electrospun Scaffolds with Embedded Microspheres for Improved Cartilage Regeneration. PLoS ONE, 2015, 10, e0134729.	1.1	29
29	Engineering a biomimetic three-dimensional nanostructured bone model for breast cancer bone metastasis study. Acta Biomaterialia, 2015, 14, 164-174.	4.1	70
30	Nanotechnology and 3D Bioprinting for Neural Tissue Regeneration. , 2015, , 307-331.		6
31	Integrating biologically inspired nanomaterials and table-top stereolithography for 3D printed biomimetic osteochondral scaffolds. Nanoscale, 2015, 7, 14010-14022.	2.8	172
32	Design of a Novel 3D Printed Bioactive Nanocomposite Scaffold for Improved Osteochondral Regeneration. Cellular and Molecular Bioengineering, 2015, 8, 416-432.	1.0	66
33	Biomimetic biphasic 3â€Đ nanocomposite scaffold for osteochondral regeneration. AIChE Journal, 2014, 60, 432-442.	1.8	26
34	Enhanced human bone marrow mesenchymal stem cell functions in novel 3D cartilage scaffolds with hydrogen treated multi-walled carbon nanotubes. Nanotechnology, 2013, 24, 365102.	1.3	56
35	Novel biologically-inspired rosette nanotube PLLA scaffolds for improving human mesenchymal stem cell chondrogenic differentiation. Biomedical Materials (Bristol), 2013, 8, 065003.	1.7	42
36	Development of Biomimetic and Bioactive 3D Nanocomposite Scaffolds for Osteochondral Regeneration. , 2013, , .		1

#	Article	IF	Citations
37	Development of a Biomimetic Electrospun Microfibrous Scaffold With Multiwall Carbon Nanotubes for Cartilage Regeneration. , 2013, , .		1
38	Novel Biologically Inspired Nanostructured Scaffolds for Directing Chondrogenic Differentiation of Mesenchymal Stem Cells. Materials Research Society Symposia Proceedings, 2013, 1498, 59-66.	0.1	1
39	Greater Osteoblast and Mesenchymal Stem Cell Adhesion and Proliferation on Titanium with Hydrothermally Treated Nanocrystalline Hydroxyapatite/Magnetically Treated Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2012, 12, 7692-7702.	0.9	40
40	Chromatographic and Traditional Albumin Isotherms on Cellulose: A Model for Wound Protein Adsorption on Modified Cotton. Journal of Biomaterials Applications, 2012, 26, 939-961.	1.2	6
41	Electrospun Fibrous Scaffolds for Bone and Cartilage Tissue Generation: Recent Progress and Future Developments. Tissue Engineering - Part B: Reviews, 2012, 18, 478-486.	2.5	56
42	Nanobiotechnology and Nanostructured Therapeutic Delivery Systems. Recent Patents on Biomedical Engineering, 2012, 5, 29-40.	0.5	5
43	Recent Progress in Interfacial Tissue Engineering Approaches for Osteochondral Defects. Annals of Biomedical Engineering, 2012, 40, 1628-1640.	1.3	83
44	Synthesis and manufacture of photocrosslinkable poly(caprolactone)-based three-dimensional scaffolds for tissue engineering applications. Advances in Bioscience and Biotechnology (Print), 2011, 02, 167-173.	0.3	6
45	Cotton and Protein Interactions. , 2006, , 49-65.		0