Eduardo A Silva

List of Publications by Year
in descending order

50 papers	4,490 citations	172207 29 h-index	197535 49 g-index
52 all docs	52 docs citations	52 times ranked	6735 citing authors

#	Article	IF	Citations
1	Growth factor delivery-based tissue engineering: general approaches and a review of recent developments. Journal of the Royal Society Interface, 2011, 8, 153-170.	1.5	1,150
2	Spatioâ€“temporal VEGF and PDGF Delivery Patterns Blood Vessel Formation and Maturation. Pharmaceutical Research, 2007, 24, 258-264.	1.7	363
3	Angiogenic effects of sequential release of VEGF-A165 and PDGF-BB with alginate hydrogels after myocardial infarction. Cardiovascular Research, 2007, 75, 178-185.	1.8	329
4	Spatiotemporal control of vascular endothelial growth factor delivery from injectable hydrogels enhances angiogenesis. Journal of Thrombosis and Haemostasis, 2007, 5, 590-598.	1.9	292
5	Effects of VEGF temporal and spatial presentation on angiogenesis. Biomaterials, 2010, 31, 1235-1241.	5.7	209
6	Material-based deployment enhances efficacy of endothelial progenitor cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14347-14352.	3.3	199
7	Biological responses to physicochemical properties of biomaterial surface. Chemical Society Reviews, 2020, 49, 5178-5224.	18.7	183
8	Targeted Delivery of Nanoparticles to Ischemic Muscle for Imaging and Therapeutic Angiogenesis. Nano Letters, 2011, 11, 694-700.	4.5	135
9	Integrated approach to designing growth factor delivery systems. FASEB Journal, 2007, 21, 3896-3903.	0.2	119
10	Sustained Release of Multiple Growth Factors from Injectable Polymeric System as a Novel Therapeutic Approach Towards Angiogenesis. Pharmaceutical Research, 2010, 27, 264-271.	1.7	111
11	Injectable MMP-Sensitive Alginate Hydrogels as hMSC Delivery Systems. Biomacromolecules, 2014, 15, 380-390.	2.6	93
12	Injectable VEGF Hydrogels Produce Near Complete Neurological and Anatomical Protection following Cerebral Ischemia in Rats. Cell Transplantation, 2010, 19, 1063-1071.	1.2	90
13	Driving vascular endothelial cell fate of human multipotent Isl1+ heart progenitors with VEGF modified mRNA. Cell Research, 2013, 23, 1172-1186.	5.7	89
14	Refilling drug delivery depots through the blood. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12722-12727.	3.3	84
15	Synthetic Extracellular Matrices for Tissue Engineering and Regeneration. Current Topics in Developmental Biology, 2004, 64, 181-205.	1.0	75
16	Mimicking nature by codelivery of stimulant and inhibitor to create temporally stable and spatially restricted angiogenic zones. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17933-17938.	3.3	61
17	Guided Bone Regeneration Using Injectable Vascular Endothelial Growth Factor Delivery Gel. Journal of Periodontology, 2013, 84, 230-238.	1.7	58
18	Surface Modification with Alginate-Derived Polymers for Stable, Protein-Repellent, Long-Circulating Gold Nanoparticles. ACS Nano, 2012, 6, 4796-4805.	7.3	53

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19	Guiding morphogenesis in cell-instructive microgels for therapeutic angiogenesis. Biomaterials, 2018, 154, 34-47.	5.7	52
20	Enzymatically degradable alginate hydrogel systems to deliver endothelial progenitor cells for potential revasculature applications. Biomaterials, 2018, 179, 109-121.	5.7	52
21	Injectable alginate hydrogel for enhanced spatiotemporal control of lentivector delivery in murine skeletal muscle. Journal of Controlled Release, 2016, 237, 42-49.	4.8	50
22	Alginate-Based Bioinks for 3D Bioprinting and Fabrication of Anatomically Accurate Bone Grafts. Tissue Engineering - Part A, 2021, 27, 1168-1181.	1.6	49
23	Alginate hydrogels allow for bioactive and sustained release of VEGF-C and VEGF-D for lymphangiogenic therapeutic applications. PLoS ONE, 2017, 12, e0181484.	1.1	46
24	Hypoxia Augments Outgrowth Endothelial Cell (OEC) Sprouting and Directed Migration in Response to Sphingosine-1-Phosphate (S1P). PLoS ONE, 2015, 10, e0123437.	1.1	40
25	Microgels produced using microfluidic on-chip polymer blending for controlled released of VEGF encoding lentivectors. Acta Biomaterialia, 2018, 69, 265-276.	4.1	37
26	VEGF and IGF Delivered from Alginate Hydrogels Promote Stable Perfusion Recovery in Ischemic Hind Limbs of Aged Mice and Young Rabbits. Journal of Vascular Research, 2017, 54, 288-298.	0.6	36
27	Lysophosphatidic Acid and Sphingosine-1-Phosphate: A Concise Review of Biological Function and Applications for Tissue Engineering. Tissue Engineering - Part B: Reviews, 2015, 21, 531-542.	2.5	35
28	Viability and functionality of cells delivered from peptide conjugated scaffolds. Biomaterials, 2011, 32, 3721-3728.	5.7	31
29	Alginate and DNA Gels Are Suitable Delivery Systems for Diabetic Wound Healing. International Journal of Lower Extremity Wounds, 2015, 14, 146-153.	0.6	30
30	Alginate-Chitosan Hydrogels Provide a Sustained Gradient of Sphingosine-1-Phosphate for Therapeutic Angiogenesis. Annals of Biomedical Engineering, 2017, 45, 1003-1014.	1.3	26
31	Fibroblasts Derived from Human Pluripotent Stem Cells Activate Angiogenic Responses In Vitro and In Vivo. PLoS ONE, 2013, 8, e83755.	1.1	24
32	Biomaterial-Guided Gene Delivery for Musculoskeletal Tissue Repair. Tissue Engineering - Part B: Reviews, 2017, 23, 347-361.	2.5	24
33	Characterizing the encapsulation and release of lentivectors and adeno-associated vectors from degradable alginate hydrogels. Biomaterials Science, 2019, 7, 645-656.	2.6	23
34	The Role of Synthetic Extracellular Matrices in Endothelial Progenitor Cell Homing for Treatment of Vascular Disease. Annals of Biomedical Engineering, 2015, 43, 2301-2313.	1.3	20
35	Microfluidic generation of alginate microgels for the controlled delivery of lentivectors. Journal of Materials Chemistry B, 2016, 4, 6989-6999.	2.9	20
36	Computational-Based Design of Hydrogels with Predictable Mesh Properties. ACS Biomaterials Science and Engineering, 2020, 6, 308-319.	2.6	19

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37	A glue for biomaterials. Nature Materials, 2007, 6, 327-328.	13.3	18
38	Hydrogel biophysical properties instruct coculture‐mediated osteogenic potential. FASEB Journal, 2016, 30, 477-486.	0.2	18
39	Positron emission tomography imaging of novel AAV capsids maps rapid brain accumulation. Nature Communications, 2020, 11, 2102.	5.8	17
40	Comparison of Endothelial Differentiation Capacities of Human and Rat Adipose-Derived Stem Cells. Plastic and Reconstructive Surgery, 2016, 138, 1231-1241.	0.7	16
41	PRP and BMAC for Musculoskeletal Conditions via Biomaterial Carriers. International Journal of Molecular Sciences, 2019, 20, 5328.	1.8	16
42	Biomaterial Based Strategies for Engineering New Lymphatic Vasculature. Advanced Healthcare Materials, 2020, 9, e2000895.	3.9	15
43	Unraveling Muscle Impairment Associated With COVID-19 and the Role of 3D Culture in Its Investigation. Frontiers in Nutrition, 2022, 9, 825629.	1.6	15
44	Endothelial cells expressing low levels of CD143 (ACE) exhibit enhanced sprouting and potency in relieving tissue ischemia. Angiogenesis, 2014, 17, 617-630.	3.7	14
45	Alginate hydrogels of varied molecular weight distribution enable sustained release of sphingosine‐1‐phosphate and promote angiogenesis. Journal of Biomedical Materials Research - Part A, 2018, 106, 138-146.	2.1	14
46	Tuning cytokines enriches dendritic cells and regulatory T cells inÂthe periodontium. Journal of Periodontology, 2020, 91, 1475-1485.	1.7	13
47	Isolating and characterizing lymphatic endothelial progenitor cells for potential therapeutic lymphangiogenic applications. Acta Biomaterialia, 2021, 135, 191-202.	4.1	7
48	Thaw-Induced Gelation of Alginate Hydrogels for Versatile Delivery of Therapeutics. Annals of Biomedical Engineering, 2019, 47, 1701-1710.	1.3	6
49	Bioengineering strategies for gene delivery. , 2020, , 107-148.		4
50	Biomaterials and Cells for Revascularization. Molecular and Translational Medicine, 2017, , 139-172.	0.4	2