Syam P Nukavarapu

List of Publications by Year
in descending order

61 papers	5,024 citations	218592 26 h-index	189801 50 g-index
65 all docs	65 docs citations	65 times ranked	7440 citing authors

#	Article	IF	Citations
1	Amorphous silica fiber matrix biomaterials: An analysis of material synthesis and characterization for tissue engineering. Bioactive Materials, 2023, 19, 155-166.	8.6	8
2	Bio-inspired zonal-structured matrices for bone-cartilage interface engineering. Biofabrication, 2022, 14, 025016.	3.7	20
3	Bio-inspired zonal-structured matrices for bone-cartilage interface engineering. Biofabrication, 2022, , .	3.7	1
4	Engineering biomaterials to 3D-print scaffolds for bone regeneration: practical and theoretical consideration. Biomaterials Science, 2022, 10, 2789-2816.	2.6	44
5	Insulin-Functionalized Bioactive Fiber Matrices with Bone Marrow-Derived Stem Cells in Rat Achilles Tendon Regeneration. ACS Applied Bio Materials, 2022, 5, 2851-2861.	2.3	2
6	Gradient scaffold with spatial growth factor profile for osteochondral interface engineering. Biomedical Materials (Bristol), 2021, 16, 035021.	1.7	18
7	Biomaterial-directed cell behavior for tissue engineering. Current Opinion in Biomedical Engineering, 2021, 17, 100260.	1.8	27
8	Evaluation of an Engineered Hybrid Matrix for Bone Regeneration via Endochondral Ossification. Annals of Biomedical Engineering, 2020, 48, 992-1005.	1.3	16
9	Evaluation of Autologously Derived Biomaterials and Stem Cells for Bone Tissue Engineering. Tissue Engineering - Part A, 2020, 26, 1052-1063.	1.6	5
10	Growing a backbone â€“ functional biomaterials and structures for intervertebral disc (IVD) repair and regeneration: challenges, innovations, and future directions. Biomaterials Science, 2020, 8, 1216-1239.	2.6	26
11	Bioactive polymeric materials and electrical stimulation strategies for musculoskeletal tissue repair and regeneration. Bioactive Materials, 2020, 5, 468-485.	8.6	91
12	Scaffolds for cartilage tissue engineering. , 2019, , 211-244.		3
13	Integration of Technologies for Bone Tissue Engineering. , 2019, , .		3
14	Synthesis and characterization of photocrosslinkable hydrogels from bovine skin gelatin. RSC Advances, 2019, 9, 13016-13025.	1.7	30
15	Histological Criteria that Distinguish Human and Mouse Bone Formed Within a Mouse Skeletal Repair Defect. Journal of Histochemistry and Cytochemistry, 2019, 67, 401-417.	1.3	7
16	Tissue Engineering of Skeletal Tissues. , 2018, , .		2
17	Self-neutralizing PLGA/magnesium composites as novel biomaterials for tissue engineering. Biomedical Materials (Bristol), 2018, 13, 035013.	1.7	30
18	Osteochondral Tissue Engineering: Translational Research and Turning Research into Products. Advances in Experimental Medicine and Biology, 2018, 1058, 373-390.	0.8	13

#	Article	IF	Citations
19	Hybrid extracellular matrix design for cartilageâ€mediated bone regeneration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 300-309.	1.6	16
20	Noninvasive Absolute Electron Paramagnetic Resonance Oxygen Imaging for the Assessment of Tissue Graft Oxygenation. Tissue Engineering - Part C: Methods, 2018, 24, 14-19.	1.1	13
21	Patient-Derived and Intraoperatively Formed Biomaterial for Tissue Engineering. Methods in Molecular Biology, 2017, 1553, 265-272.	0.4	2
22	Harnessing External Cues: Development and Evaluation of anIn VitroCulture System for Osteochondral Tissue Engineering. Tissue Engineering - Part A, 2017, 23, 719-737.	1.6	17
23	Hydrogels: Cell Delivery and Tissue Regeneration. , 2016, , 3841-3852.		0
24	Oxygen Tension-Controlled Matrices with Osteogenic and Vasculogenic Cells for Vascularized Bone Regeneration <i>In Vivo</i>. Tissue Engineering - Part A, 2016, 22, 610-620.	1.6	22
25	High Field Sodium MRI Assessment of Stem Cell Chondrogenesis in a Tissue-Engineered Matrix. Annals of Biomedical Engineering, 2016, 44, 1120-1127.	1.3	19
26	Novel Absorbable Polyurethane Biomaterials and Scaffolds for Tissue Engineering. Materials Research Society Symposia Proceedings, 2014, 1621, 93-99.	0.1	3
27	True MRI assessment of stem cell chondrogenesis in a tissue engineered matrix. , 2014, 2014, 3933-6.		6
28	A potential translational approach for bone tissue engineering through endochondral ossification. , 2014, 2014, 3925-8.		7
29	Novel and Unique Matrix Design for Osteochondral Tissue Engineering. Materials Research Society Symposia Proceedings, 2014, 1621, 17-23.	0.1	11
30	Design, fabrication and<i>in vitro</i>evaluation of a novel polymer-hydrogel hybrid scaffold for bone tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 131-142.	1.3	48
31	Oxygen-Tension Controlled Matrices for Enhanced Osteogenic Cell Survival and Performance. Annals of Biomedical Engineering, 2014, 42, 1261-1270.	1.3	31
32	Functionalized carbon nanotube reinforced scaffolds for bone regenerative engineering: fabrication, <i>in vitro</i> and <i>in vivo</i> evaluation. Biomedical Materials (Bristol), 2014, 9, 035001.	1.7	78
33	Electrospun Polymeric Nanofiber Scaffolds for Tissue Regeneration. , 2014, , 229-254.		0
34	Osteochondral tissue engineering: Current strategies and challenges. Biotechnology Advances, 2013, 31, 706-721.	6.0	325
35	Nanotubes for tissue engineering. , 2012, , 460-489.		1
36	Bone Tissue Engineering: Recent Advances and Challenges. Critical Reviews in Biomedical Engineering, 2012, 40, 363-408.	0.5	1,758

#	Article	IF	Citations
37	Microtomy of Reinforced Polymer Scaffolds. Microscopy and Microanalysis, 2012, 18, 1640-1641.	0.2	0
38	Optimally Porous and Biomechanically Compatible Scaffolds for Large-Area Bone Regeneration. Tissue Engineering - Part A, 2012, 18, 1376-1388.	1.6	108
39	Differential analysis of peripheral bloodâ€•and bone marrowâ€derived endothelial progenitor cells for enhanced vascularization in bone tissue engineering. Journal of Orthopaedic Research, 2012, 30, 1507-1515.	1.2	73
40	Nanostructured Scaffolds for Bone Tissue Engineering. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2011, , 169-192.	0.7	6
41	Short-Term and Long-Term Effects of Orthopedic Biodegradable Implants. Journal of Long-Term Effects of Medical Implants, 2011, 21, 93-122.	0.2	134
42	Optimal scaffold design and effective progenitor cell identification for the regeneration of vascularized bone. , 2011, 2011, 2464-7.		13
43	Functionalized Carbon Nanotube Composite Scaffolds for Bone Tissue Engineering: Prospects and Progress. Journal of Biomaterials and Tissue Engineering, 2011, 1, 76-85.	0.0	27
44	Biomimetic, bioactive etheric polyphosphazeneâ€poly(lactideâ€<i>co</i>â€glycolide) blends for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 92A, 114-125.	2.1	46
45	In situ Porous Structures: A Unique Polymer Erosion Mechanism in Biodegradable Dipeptideâ€Based Polyphosphazene and Polyester Blends Producing Matrices for Regenerative Engineering. Advanced Functional Materials, 2010, 20, 2794-2806.	7.8	55
46	Porous Structures: In situ Porous Structures: A Unique Polymer Erosion Mechanism in Biodegradable Dipeptide-Based Polyphosphazene and Polyester Blends Producing Matrices for Regenerative Engineering (Adv. Funct. Mater. 17/2010). Advanced Functional Materials, 2010, 20, n/a-n/a.	7.8	27
47	Hydrogen bonding in blends of polyesters with dipeptideâ€containing polyphosphazenes. Journal of Applied Polymer Science, 2010, 115, 431-437.	1.3	11
48	Chitosanâ€"poly(lactide-co-glycolide) microsphere-based scaffolds for bone tissue engineering: In vitro degradation and in vivo bone regeneration studies. Acta Biomaterialia, 2010, 6, 3457-3470.	4.1	141
49	Dipeptide-based polyphosphazene and polyester blends for bone tissue engineering. Biomaterials, 2010, 31, 4898-4908.	5.7	91
50	Novel Nanostructured Scaffolds as Therapeutic Replacement Options for Rotator Cuff Disease. Journal of Bone and Joint Surgery - Series A, 2010, 92, 170-179.	1.4	33
51	The influence of side group modification in polyphosphazenes on hydrolysis and cell adhesion of blends with PLGA. Biomaterials, 2009, 30, 3035-3041.	5.7	53
52	Nanotechnology and orthopedics: a personal perspective. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 6-10.	3.3	53
53	Miscibility and in vitro osteocompatibility of biodegradable blends of poly[(ethyl alanato) (p-phenyl) Tj ETQq1 1 0.784314 rgBT /Overl	5.7	91
54	Electrospun poly(lactic acid-co-glycolic acid) scaffolds for skin tissue engineering. Biomaterials, 2008, 29, 4100-4107.	5.7	512

#	Article	IF	Citations
55	Electrospun nanofiber scaffolds: engineering soft tissues. Biomedical Materials (Bristol), 2008, 3, 034002.	1.7	512
56	Polyphosphazene/Nano-Hydroxyapatite Composite Microsphere Scaffolds for Bone Tissue Engineering. Biomacromolecules, 2008, 9, 1818-1825.	2.6	184
57	Recent Patents on Electrospun Biomedical Nanostructures: An Overview. Recent Patents on Biomedical Engineering, 2008, 1, 68-78.	0.5	66
58	In Vitro and In Vivo Characterization of Biodegradable Poly(organophosphazenes) for Biomedical Applications. Journal of Inorganic and Organometallic Polymers and Materials, 2007, 16, 365-385.	1.9	70
59	Nanostructures for Tissue Engineering/Regenerative Medicine. , 0, , 375-407.		5
60	Biodegradable Polyphosphazene Scaffolds for Tissue Engineering. , 0, , 117-138.		6
61	Cell-Based Approaches for Bone Regeneration. , 0, , 97-116.		0