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	Bone Tissue Engineering: Recent Advances and Challenges. Critical Reviews in Biomedical Engineering, 2012, 40, 363-408.	0.5	1,758
2	Electrospun poly(lactic acid-co-glycolic acid) scaffolds for skin tissue engineering. Biomaterials, 2008, 29, 4100-4107.	5.7	512
3	Electrospun nanofiber scaffolds: engineering soft tissues. Biomedical Materials (Bristol), 2008, 3, 034002.	1.7	512
4	Osteochondral tissue engineering: Current strategies and challenges. Biotechnology Advances, 2013, 31, 706-721.	6.0	325
5	Polyphosphazene/Nano-Hydroxyapatite Composite Microsphere Scaffolds for Bone Tissue Engineering. Biomacromolecules, 2008, 9, 1818-1825.	2.6	184
6	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
7	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
8	Optimally Porous and Biomechanically Compatible Scaffolds for Large-Area Bone Regeneration. Tissue Engineering - Part A, 2012, 18, 1376-1388.	1.6	108
9	Miscibility and in vitro osteocompatibility of biodegradable blends of poly[(ethyl alanato) (p-phenyl) Tj ETQq1 1 0.784314 rgBT /Overl	5.7	91
10	Dipeptide-based polyphosphazene and polyester blends for bone tissue engineering. Biomaterials, 2010, 31, 4898-4908.	5.7	91
11	Bioactive polymeric materials and electrical stimulation strategies for musculoskeletal tissue repair and regeneration. Bioactive Materials, 2020, 5, 468-485.	8.6	91
12	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
13	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
14	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
15	Recent Patents on Electrospun Biomedical Nanostructures: An Overview. Recent Patents on Biomedical Engineering, 2008, 1, 68-78.	0.5	66
16	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
17	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
18	Nanotechnology and orthopedics: a personal perspective. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 6-10.	3.3	53

#	Article	IF	Citations
19	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
20	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
21	Engineering biomaterials to 3D-print scaffolds for bone regeneration: practical and theoretical consideration. Biomaterials Science, 2022, 10, 2789-2816.	2.6	44
22	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
23	Oxygen-Tension Controlled Matrices for Enhanced Osteogenic Cell Survival and Performance. Annals of Biomedical Engineering, 2014, 42, 1261-1270.	1.3	31
24	Self-neutralizing PLGA/magnesium composites as novel biomaterials for tissue engineering. Biomedical Materials (Bristol), 2018, 13, 035013.	1.7	30
25	Synthesis and characterization of photocrosslinkable hydrogels from bovine skin gelatin. RSC Advances, 2019, 9, 13016-13025.	1.7	30
26	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
27	Biomaterial-directed cell behavior for tissue engineering. Current Opinion in Biomedical Engineering, 2021, 17, 100260.	1.8	27
28	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
29	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
30	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
31	Bio-inspired zonal-structured matrices for bone-cartilage interface engineering. Biofabrication, 2022, 14, 025016.	3.7	20
32	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
33	Gradient scaffold with spatial growth factor profile for osteochondral interface engineering. Biomedical Materials (Bristol), 2021, 16, 035021.	1.7	18
34	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
35	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
36	Evaluation of an Engineered Hybrid Matrix for Bone Regeneration via Endochondral Ossification. Annals of Biomedical Engineering, 2020, 48, 992-1005.	1.3	16

#	Article	IF	Citations
37	Optimal scaffold design and effective progenitor cell identification for the regeneration of vascularized bone. , 2011, 2011, 2464-7.		13
38	Osteochondral Tissue Engineering: Translational Research and Turning Research into Products. Advances in Experimental Medicine and Biology, 2018, 1058, 373-390.	0.8	13
39	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
40	Hydrogen bonding in blends of polyesters with dipeptideâ€containing polyphosphazenes. Journal of Applied Polymer Science, 2010, 115, 431-437.	1.3	11
41	Novel and Unique Matrix Design for Osteochondral Tissue Engineering. Materials Research Society Symposia Proceedings, 2014, 1621, 17-23.	0.1	11
42	Amorphous silica fiber matrix biomaterials: An analysis of material synthesis and characterization for tissue engineering. Bioactive Materials, 2023, 19, 155-166.	8.6	8
43	A potential translational approach for bone tissue engineering through endochondral ossification. , 2014, 2014, 3925-8.		7
44	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
45	Biodegradable Polyphosphazene Scaffolds for Tissue Engineering. , 0, , 117-138.		6
46	Nanostructured Scaffolds for Bone Tissue Engineering. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2011, , 169-192.	0.7	6
47	True MRI assessment of stem cell chondrogenesis in a tissue engineered matrix. , 2014, 2014, 3933-6.		6
48	Nanostructures for Tissue Engineering/Regenerative Medicine. , 0, , 375-407.		5
49	Evaluation of Autologously Derived Biomaterials and Stem Cells for Bone Tissue Engineering. Tissue Engineering - Part A, 2020, 26, 1052-1063.	1.6	5
50	Novel Absorbable Polyurethane Biomaterials and Scaffolds for Tissue Engineering. Materials Research Society Symposia Proceedings, 2014, 1621, 93-99.	0.1	3
51	Scaffolds for cartilage tissue engineering. , 2019, , 211-244.		3
52	Integration of Technologies for Bone Tissue Engineering. , 2019, , .		3
53	Patient-Derived and Intraoperatively Formed Biomaterial for Tissue Engineering. Methods in Molecular Biology, 2017, 1553, 265-272.	0.4	2
54	Tissue Engineering of Skeletal Tissues. , 2018, , .		2

#	Article	IF	Citations
55	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
56	Nanotubes for tissue engineering. , 2012, , 460-489.		1
57	Bio-inspired zonal-structured matrices for bone-cartilage interface engineering. Biofabrication, 2022, , .	3.7	1
58	Microtomy of Reinforced Polymer Scaffolds. Microscopy and Microanalysis, 2012, 18, 1640-1641.	0.2	0
59	Electrospun Polymeric Nanofiber Scaffolds for Tissue Regeneration. , 2014, , 229-254.		0
60	Hydrogels: Cell Delivery and Tissue Regeneration. , 2016, , 3841-3852.		0
61	Cell-Based Approaches for Bone Regeneration. , 0, , 97-116.		0