Swaminathan Sethuraman

List of Publications by Year
in descending order

112	4,984	76326	102487
papers	citations	40 h-index	66 g-index

116	116	116	8030
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Self-Standing Photo-Crosslinked Hydrogel Construct: in vitro Microphysiological Vascular Model. Cells Tissues Organs, 2022, 211, 335-347.	2.3	0
2	3D bioprinting and photocrosslinking: emerging strategies & future perspectives. Materials Science and Engineering C, 2022, 134, 112576.	7.3	28
3	Designer DNA biomolecules as a defined biomaterial for 3D bioprinting applications. Materials Horizons, 2022, 9, 1141-1166.	12.2	17
4	Design considerations of bioinks for laser bioprinting technique towards tissue regenerative applications. Bioprinting, 2022, 27, e00205.	5.8	15
5	Nanohydroxyapatite-Protein Interface in Composite Sintered Scaffold Influences Bone Regeneration in Rabbit Ulnar Segmental Defect. Journal of Materials Science: Materials in Medicine, 2022, 33, 36.	3.6	1
6	Surface modified NIR magnetic nanoprobes for theranostic applications.. Expert Opinion on Drug Delivery, 2021, 18, 399-408.	5.0	2
7	Current standards and ethical landscape of engineered tissuesâ€"3D bioprinting perspective. Journal of Tissue Engineering, 2021, 12, 204173142110276.	5.5	48
8	Tissue engineering approaches towards the regeneration of biomimetic scaffolds for age-related macular degeneration. Journal of Materials Chemistry B, 2021, 9, 5935-5953.	5.8	2
9	Key advances of carboxymethyl cellulose in tissue engineering & 3D bioprinting applications. Carbohydrate Polymers, 2021, 256, 117561.	10.2	99
10	Development and evaluation of a multi-functional organicâ€"inorganic nanotheranostic hybrid for pancreatic cancer therapy. Biomedical Materials (Bristol), 2021, 16, 055016.	3.3	6
11	Reverse engineering of an anatomically equivalent nerve conduit. Journal of Tissue Engineering and Regenerative Medicine, 2021, 15, 998-1011.	2.7	8
12	Recent advancements in cardiovascular bioprinting and bioprinted cardiac constructs. Biomaterials Science, 2021, 9, 1974-1994.	5.4	32
13	ECM-Mimetic Multiresponsive Nanobullets Targeted Against Metastasizing Circulating Tumor Clusters in Breast Cancer. Annals of Biomedical Engineering, 2020, 48, 568-581.	2.5	3
14	Clinical complications of biodegradable screws for ligament injuries. Materials Science and Engineering C, 2020, 109, 110423.	7.3	27
15	Nanofiber matrices of protein mimetic bioactive peptides for biomedical applications. , 2020, , 199-217.		2
16	Additive manufacturing of biodegradable porous orthopaedic screw. Bioactive Materials, 2020, 5, 458-467.	15.6	56
17	Peptide nanostructures on nanofibers for peripheral nerve regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 1059-1070.	2.7	13
18	Nanohybrids â€" cancer theranostics for tiny tumor clusters. Journal of Controlled Release, 2019, 299, 21-30.	9.9	10

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19	Gradient nano-engineered in situ forming composite hydrogel for osteochondral regeneration. Biomaterials, 2018, 162, 82-98.	11.4	130
20	Responsive Nanomicellar Theranostic Cages for Metastatic Breast Cancer. Bioconjugate Chemistry, 2018, 29, 275-286.	3.6	27
21	A biomimetic mesoporous silicaâ€“polymer composite scaffold for bone tissue engineering. Journal of Porous Materials, 2018, 25, 397-406.	2.6	14
22	Surface topography of polylactic acid nanofibrous mats: influence on blood compatibility. Journal of Materials Science: Materials in Medicine, 2018, 29, 145.	3.6	17
23	Self-assembling peptide nanostructures on aligned poly(lactide-co-glycolide) nanofibers for the functional regeneration of sciatic nerve. Nanomedicine, 2017, 12, 219-235.	3.3	24
24	Injectable and 3D Bioprinted Polysaccharide Hydrogels: From Cartilage to Osteochondral Tissue Engineering. Biomacromolecules, 2017, 18, 1-26.	5.4	185
25	â€˜Nanoâ€“inâ€“nanoâ€™ hybrid liposomes increase target specificity and gene silencing efficiency in breast cancer induced SCID mice. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 119, 96-106.	4.3	14
26	Development of Porous Hydrogel Scaffolds with Multiple Cues for Liver Tissue Engineering. Regenerative Engineering and Translational Medicine, 2017, 3, 176-191.	2.9	8
27	Injectable glycosaminoglycanâ€“protein nano-complex in semi-interpenetrating networks: A biphasic hydrogel for hyaline cartilage regeneration. Carbohydrate Polymers, 2017, 175, 63-74.	10.2	35
28	In vitro co-culture of epithelial cells and smooth muscle cells on aligned nanofibrous scaffolds. Materials Science and Engineering C, 2017, 81, 191-205.	7.3	19
29	In vivo biodistribution and pathological manifestations of iron oxide incorporated mesoporous silica: implications on its biomedical applications. Journal of Porous Materials, 2017, 24, 751-758.	2.6	3
30	Multi-functional nanoparticles as theranostic agents for the treatment & imaging of pancreatic cancer. Acta Biomaterialia, 2017, 49, 422-433.	8.3	57
31	Fabrication and investigation of nanofibrous matrices as esophageal tissue scaffolds using human non-keratinized, stratified, squamous epithelial cells. RSC Advances, 2016, 6, 26461-26473.	3.6	10
32	Interaction of human smooth muscle cells on random and aligned nanofibrous scaffolds of PHBV and PHBV-gelatin. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 816-825.	3.4	12
33	EpCAM-targeted liposomal si-RNA delivery for treatment of epithelial cancer. Drug Delivery, 2016, 23, 1101-1114.	5.7	10
34	Dual drug loaded nanoliposomal chemotherapy: A promising strategy for treatment of head and neck squamous cell carcinoma. European Journal of Pharmaceutics and Biopharmaceutics, 2016, 99, 73-83.	4.3	53
35	Determination of Putrescine in Tiger Prawn Using an Amperometric Biosensor Based on Immobilization of Diamine Oxidase onto Ceria Nanospheres. Food and Bioprocess Technology, 2016, 9, 717-724.	4.7	13
36	PLGA nanofibers blended with designer self-assembling peptides for peripheral neural regeneration. Materials Science and Engineering C, 2016, 62, 329-337.	7.3	58

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37	Engineering a growth factor embedded nanofiber matrix niche to promote vascularization for functional cardiac regeneration. Biomaterials, 2016, 97, 176-195.	11.4	77
38	The metamorphosis of vascular stents: passive structures to smart devices. RSC Advances, 2016, 6, 2835-2853.	3.6	7
39	Electrochemical acetylcholinesterase biosensor based on ZnO nanocuboids modified platinum electrode for the detection of carbosulfan in rice. Biosensors and Bioelectronics, 2016, 77, 1070-1077.	10.1	73
40	Combinatorial Effects of Curcumin with an Anti-Neoplastic Agent on Head and Neck Squamous Cell Carcinoma Through the Regulation of EGFR-ERK1/2 and Apoptotic Signaling Pathways. ACS Combinatorial Science, 2016, 18, 22-35.	3.8	47
41	Nano interfaced biosensor for detection of choline in triple negative breast cancer cells. Journal of Colloid and Interface Science, 2016, 462, 334-340.	9.4	34
42	Management of retinoblastoma: opportunities and challenges. Drug Delivery, 2016, 23, 2488-2496.	5.7	25
43	Topographic Cue from Electrospun Scaffolds Regulate Myelin-Related Gene Expressions in Schwann Cells. Journal of Biomedical Nanotechnology, 2015, 11, 512-521.	1.1	33
44	Interaction of human smooth muscle cells with nanofibrous scaffolds: Effect of fiber orientation on cell adhesion, proliferation, and functional gene expression. Journal of Biomedical Materials Research - Part A, 2015, 103, 2236-2250.	4.0	34
45	Nanoarchitecture of scaffolds and endothelial cells in engineering small diameter vascular grafts. Biotechnology Journal, 2015, 10, 96-108.	3.5	21
46	Influence of 3D porous galactose containing PVA/gelatin hydrogel scaffolds on three-dimensional spheroidal morphology of hepatocytes. Journal of Materials Science: Materials in Medicine, 2015, 26, 5345.	3.6	22
47	Osteogenic differentiation of stem cells on mesoporous silica nanofibers. RSC Advances, 2015, 5, 69205-69214.	3.6	19
48	Tjernberg peptide: a double edged sword in Alzheimerâ€™s disease. RSC Advances, 2015, 5, 59480-59490.	3.6	3
49	Phase-induced porous composite microspheres sintered scaffold with proteinâ€“mineral interface for bone tissue engineering. RSC Advances, 2015, 5, 22005-22014.	3.6	6
50	Metabolic pathways in cancers: key targets and implications in cancer therapy. RSC Advances, 2015, 5, 41751-41762.	3.6	9
51	Decoration of PLGA electrospun nanofibers with designer self-assembling peptides: a â€œNano-on-Nanoâ€• concept. RSC Advances, 2015, 5, 88748-88757.	3.6	16
52	Development of nanotheranostics against metastatic breast cancer â€” A focus on the biology & mechanistic approaches. Biotechnology Advances, 2015, 33, 1897-1911.	11.7	17
53	Evaluation of a quercetinâ€“gadolinium complex as an efficient positive contrast enhancer for magnetic resonance imaging. RSC Advances, 2015, 5, 86967-86979.	3.6	30
54	Dual drug loaded chitosan nanoparticlesâ€”sugar-coated arsenal against pancreatic cancer. Colloids and Surfaces B: Biointerfaces, 2015, 135, 689-698.	5.0	64

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55	Electrochemical evidence for asialoglycoprotein receptor â€“ mediated hepatocyte adhesion and proliferation in three dimensional tissue engineering scaffolds. Analytica Chimica Acta, 2015, 890, 83-90.	5.4	9
56	Multidimensional nanofibrous scaffolds of poly(lactide-co-caprolactone) and poly(ethyl oxazoline) with improved features for cardiac tissue engineering. Nanomedicine, 2015, 10, 3451-3467.	3.3	16
57	Influence of membrane lipid composition on flavonoidâ€“membrane interactions: Implications on their biological activity. Progress in Lipid Research, 2015, 58, 1-13.	11.6	100
58	Gemcitabine loaded biodegradable PLGA nanospheres for in vitro pancreatic cancer therapy. Materials Science and Engineering C, 2015, 47, 40-47.	7.3	58
59	Simple Signaling Molecules for Inductive Bone Regenerative Engineering. PLoS ONE, 2014, 9, e101627.	2.5	41
60	Engineered multifunctional nanomaterials for multimodal imaging of retinoblastoma cellsin vitro. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 1093-1109.	3.5	11
61	Epidermal Differentiation of Stem Cells on Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) Nanofibers. Annals of Biomedical Engineering, 2014, 42, 2589-2599.	2.5	35
62	Novel Resveratrol and 5-Fluorouracil Coencapsulated in PEGylated Nanoliposomes Improve Chemotherapeutic Efficacy of Combination against Head and Neck Squamous Cell Carcinoma. BioMed Research International, 2014, 2014, 1-14.	1.9	85
63	Development and evaluation of axially aligned nanofibres for blood vessel tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 640-651.	2.7	41
64	Ellagic acid encapsulated chitosan nanoparticles as anti-hemorrhagic agent. Carbohydrate Polymers, 2014, 111, 215-221.	10.2	60
65	In-situ generation of large microporous skeleton in mesoporous silica framework using different dicarboxylic acids. Journal of Porous Materials, 2014, 21, 53-62.	2.6	3
66	Electrochemical enzymeless detection of superoxide employing naringinâ€“copper decorated electrodes. Biosensors and Bioelectronics, 2014, 59, 134-139.	10.1	25
67	Electrochemical biosensor with ceriaâ€“polyaniline core shell nano-interface for the detection of carbonic acid in blood. Journal of Colloid and Interface Science, 2014, 425, 52-58.	9.4	31
68	Bioinspired hybrid mesoporous silicaâ€“gelatin sandwich construct for bone tissue engineering. Microporous and Mesoporous Materials, 2014, 187, 53-62.	4.4	50
69	Hydrogel based injectable scaffolds for cardiac tissue regeneration. Biotechnology Advances, 2014, 32, 449-461.	11.7	148
70	Safety and toxicity issues associated with lead-based traditional herbo-metallic preparations. Journal of Ethnopharmacology, 2014, 151, 1-11.	4.1	29
71	Evaluation of chitosan nanoformulations as potent anti-HIV therapeutic systems. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 476-484.	2.4	62
72	Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)-based nanofibrous scaffolds to support functional esophageal epithelial cells towards engineering the esophagus. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 574-593.	3.5	23

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73	Self-assembly characteristics of a structural analogue of Tjernberg peptide. RSC Advances, 2014, 4, 16517-16523.	3.6	6
74	Targeting strategies for delivery of anti-HIV drugs. Journal of Controlled Release, 2014, 192, 271-283.	9.9	47
75	Investigations on the membrane interactions of naringin and its complexes with copper and iron: implications for their cytotoxicity. RSC Advances, 2014, 4, 46407-46417.	3.6	14
76	Axially aligned 3D nanofibrous grafts of PLAâ€“PCL for small diameter cardiovascular applications. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 1791-1812.	3.5	46
77	Electrospun Nanofibers as Scaffolds for Skin Tissue Engineering. Polymer Reviews, 2014, 54, 348-376.	10.9	227
78	Investigation of the photodegradation properties of iron oxide doped mesoporous SBA-15 silica. Journal of Porous Materials, 2013, 20, 1009-1015.	2.6	4
79	Hierarchical self-assembly of Tjernberg peptide at nanoscale. Soft Matter, 2013, 9, 2684.	2.7	19
80	Engineered chemoswitchable mesoporous silica for tumor-specific cytotoxicity. Journal of Materials Chemistry B, 2013, 1, 3494.	5.8	26
81	Polymeric Scaffold Aided Stem Cell Therapeutics for Cardiac Muscle Repair and Regeneration. Macromolecular Bioscience, 2013, 13, 1119-1134.	4.1	35
82	Heterogeneous mesoporous SBA-15 silica as catalyst towards the synthesis of various biodegradable aliphatic polyesters. Macromolecular Research, 2013, 21, 833-842.	2.4	9
83	Hierarchical mesoporous silica nanofibers as multifunctional scaffolds for bone tissue regeneration. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 1988-2005.	3.5	49
84	Biocompatibility of Poly(3-hydroxybutyrate-co3-hydroxyvalerate) (PHBV) Nanofibers for Skin Tissue Engineering. Journal of Biomedical Nanotechnology, 2013, 9, 1383-1392.	1.1	38
85	In VivoBiocompatibility of PLGA-Polyhexylthiophene Nanofiber Scaffolds in a Rat Model. BioMed Research International, 2013, 2013, 1-8.	1.9	38
86	PCL and PCL-Gelatin Nanofibers as Esophageal Tissue Scaffolds: Optimization, Characterization and Cell-Matrix Interactions. Journal of Biomedical Nanotechnology, 2013, 9, 1540-1555.	1.1	62
87	The Integration of Nanotechnology and Biology for Cell Engineering: Promises and Challenges. Nanomaterials and Nanotechnology, 2013, 3, 19.	3.0	7
88	Self-Assembling Peptide Nanofibrous Scaffolds for Tissue Engineering: Novel Approaches and Strategies for Effective Functional Regeneration. Current Protein and Peptide Science, 2013, 14, 70-84.	1.4	66
89	Synthesis, characterization and DNA binding properties of rutinâ€“iron complex. RSC Advances, 2012, 2, 2797.	3.6	26
90	Fabrication, Characterization and In Vitro Evaluation of Aligned PLGAâ€“PCL Nanofibers for Neural Regeneration. Annals of Biomedical Engineering, 2012, 40, 2098-2110.	2.5	61

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91	Membrane fluidization & eryptotic properties of hesperidinâ€“copper complex. RSC Advances, 2012, 2, 11138.	3.6	15
92	Scientific validation of the different purification steps involved in the preparation of an Indian Ayurvedic medicine, Lauha bhasma. Journal of Ethnopharmacology, 2012, 142, 98-104.	4.1	36
93	Living cardiac patch: the elixir for cardiac regeneration. Expert Opinion on Biological Therapy, 2012, 12, 1623-1640.	3.1	78
94	Tissue engineering interventions for esophageal disorders â€" Promises and challenges. Biotechnology Advances, 2012, 30, 1481-1492.	11.7	51
95	Electrospun nanostructured chitosanâ€“poly(vinyl alcohol) scaffolds: a biomimetic extracellular matrix as dermal substitute. Biomedical Materials (Bristol), 2012, 7, 045005.	3.3	88
96	Axially aligned electrically conducting biodegradable nanofibers for neural regeneration. Journal of Materials Science: Materials in Medicine, 2012, 23, 1797-1809.	3.6	53
97	Mercury-based traditional herbo-metallic preparations: a toxicological perspective. Archives of Toxicology, 2012, 86, 831-838.	4.2	64
98	Role of biomaterials, therapeutic molecules and cells for hepatic tissue engineering. Biotechnology Advances, 2012, 30, 742-752.	11.7	57
99	Development and Characterization of Biodegradable Nanocomposite Injectables for Orthopaedic Applications Based on Polyphosphazenes. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 733-752.	3.5	38
100	Fabrication of uniaxially aligned 3D electrospun scaffolds for neural regeneration. Biomedical Materials (Bristol), 2011, 6, 025004.	3.3	133
101	Superparamagnetic nanosystems based on iron oxide nanoparticles & mesoporous silica: synthesis & evaluation of their magnetic, relaxometric and biocompatability properties. Journal of Materials Chemistry, 2011, 21, 15698.	6.7	35
102	Self-assembly of peptides: influence of substrate, pH and medium on the formation of supramolecular assemblies. Soft Matter, 2011, 7, 2744-2754.	2.7	109
103	Development of Poly(3-hydroxybutyrate-<i>co</i>-3-hydroxyvalerate) Fibers for Skin Tissue Engineering: Effects of Topography, Mechanical, and Chemical Stimuli. Biomacromolecules, 2011, 12, 3156-3165.	5.4	137
104	Investigations on Membrane Perturbation by Chrysin and Its Copper Complex Using Self-Assembled Lipid Bilayers. Langmuir, 2011, 27, 13374-13382.	3.5	48
105	Influence of polyhydric solvents on the catalytic & adsorption properties of self-oriented mesoporous SBA-15 silica. Journal of Porous Materials, 2011, 18, 329-336.	2.6	14
106	Fabrication and characterization of chitosanâ€gelatin blend nanofibers for skin tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 94B, 264-272.	3.4	125
107	Mechanical properties and osteocompatibility of novel biodegradable alanine based polyphosphazenes: Side group effects. Acta Biomaterialia, 2010, 6, 1931-1937.	8.3	92
108	Development of biomaterial scaffold for nerve tissue engineering: Biomaterial mediated neural regeneration. Journal of Biomedical Science, 2009, 16, 108.	7.0	488

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109	Novel low temperature setting nanocrystalline calcium phosphate cements for bone repair: Osteoblast cellular response and gene expression studies. Journal of Biomedical Materials Research - Part A, 2007, 82A, 884-891.	4.0	23
110	In vivo biodegradability and biocompatibility evaluation of novel alanine ester based polyphosphazenes in a rat model. Journal of Biomedical Materials Research - Part A, 2006, 77A, 679-687.	4.0	72
111	Biodegradable Poly[bis(ethyl alanato)phosphazene] - Poly(lactide-co-glycolide) Blends: Miscibility and Osteocompatibility Evaluations. Materials Research Society Symposia Proceedings, 2004, 844, 1.	0.1	5
112	Development of Novel Biodegradable Amino Acid Ester Based Polyphosphazeneâ€“ Hydroxyapatite Composites for Bone Tissue Engineering. Materials Research Society Symposia Proceedings, 2004, 845, 151.	0.1	3