Mahmoud Azami

List of Publications by Year
in descending order

90 papers	3,086 citations	117619 34 h-index	182417 51 g-index
90 all docs	90 docs citations	90 times ranked	4134 citing authors

#	Article	IF	Citations
1	Synthesis, characterization and antioxidant activity of a novel electroactive and biodegradable polyurethane for cardiac tissue engineering application. Materials Science and Engineering C, 2014, 44, 24-37.	7.3	125
2	Development of macroporous nanocomposite scaffolds of gelatin/bioactive glass prepared through layer solvent casting combined with lamination technique for bone tissue engineering. Ceramics International, 2010, 36, 2431-2439.	4.8	109
3	The effects of crosslinkers on physical, mechanical, and cytotoxic properties of gelatin sponge prepared via in-situ gas foaming method as a tissue engineering scaffold. Materials Science and Engineering C, 2016, 63, 1-9.	7.3	106
4	Preparation of a porous conductive scaffold from aniline pentamer-modified polyurethane/PCL blend for cardiac tissue engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 3179-3187.	4.0	104
5	Biomimetic formation of apatite on the surface of porous gelatin/bioactive glass nanocomposite scaffolds. Applied Surface Science, 2010, 257, 1740-1749.	6.1	103
6	Preparation of a biomimetic composite scaffold from gelatin/collagen and bioactive glass fibers for bone tissue engineering. Materials Science and Engineering C, 2016, 59, 533-541.	7.3	95
7	Controllable synthesis and characterization of porous polyvinyl alcohol/hydroxyapatite nanocomposite scaffolds via an in situ colloidal technique. Colloids and Surfaces B: Biointerfaces, 2011, 84, 310-316.	5.0	89
8	Bio-hybrid silk fibroin/calcium phosphate/PLGA nanocomposite scaffold to control the delivery of vascular endothelial growth factor. Materials Science and Engineering C, 2014, 35, 401-410.	7.3	86
9	Synthesis and solubility of calcium fluoride/hydroxy-fluorapatite nanocrystals for dental applications. Ceramics International, 2011, 37, 2007-2014.	4.8	75
10	Collagenâ€coated nanoâ€electrospun PCL seeded with human endometrial stem cells for skin tissue engineering applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1578-1586.	3.4	75
11	Fabrication and characterization of highly porous barium titanate based scaffold coated by Gel/HA nanocomposite with high piezoelectric coefficient for bone tissue engineering applications. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 195-202.	3.1	72
12	Characterization of wet-electrospun cellulose acetate based 3-dimensional scaffolds for skin tissue engineering applications: influence of cellulose acetate concentration. Cellulose, 2016, 23, 3239-3248.	4.9	68
13	Preparation, characterization and mechanical properties of controlled porous gelatin/hydroxyapatite nanocomposite through layer solvent casting combined with freeze-drying and lamination techniques. Journal of Porous Materials, 2010, 17, 313-320.	2.6	67
14	Preparation of fibrin gel scaffolds containing MWCNT/PU nanofibers for neural tissue engineering. Journal of Biomedical Materials Research - Part A, 2019, 107, 802-814.	4.0	67
15	Differentiation of Whartonâ€™s Jelly-Derived Mesenchymal Stem Cells into Motor Neuron-Like Cells on Three-Dimensional Collagen-Grafted Nanofibers. Molecular Neurobiology, 2016, 53, 2397-2408.	4.0	64
16	Synthesis and Characterization of a Laminated Hydroxyapatite/Gelatin Nanocomposite Scaffold with Controlled Pore Structure for Bone Tissue Engineering. International Journal of Artificial Organs, 2010, 33, 86-95.	1.4	63
17	A Porous Hydroxyapatite/Gelatin Nanocomposite Scaffold for Bone Tissue Repair: In Vitro and In Vivo Evaluation. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 2353-2368.	3.5	62
18	Glutaraldehyde crosslinked gelatin/hydroxyapatite nanocomposite scaffold, engineered via compound techniques. Polymer Composites, 2010, 31, 2112-2120.	4.6	61

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19	Fabrication andin vivoevaluation of an osteoblast-conditioned nano-hydroxyapatite/gelatin composite scaffold for bone tissue regeneration. Journal of Biomedical Materials Research - Part A, 2016, 104, 2001-2010.	4.0	59
20	Fabrication of hydrogel based nanocomposite scaffold containing bioactive glass nanoparticles for myocardial tissue engineering. Materials Science and Engineering C, 2016, 69, 1137-1146.	7.3	57
21	Threeâ€dimensional culture of differentiated endometrial stromal cells to oligodendrocyte progenitor cells (<scp>OPC</scp>s) in fibrin hydrogel. Cell Biology International, 2013, 37, 1340-1349.	3.0	52
22	Preparation of a biomimetic nanocomposite scaffold for bone tissue engineering via mineralization of gelatin hydrogel and study of mineral transformation in simulated body fluid. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1347-1355.	4.0	47
23	A new approach for pancreatic tissue engineering: human endometrial stem cells encapsulated in fibrin gel can differentiate to pancreatic islet betaâ€cell. Cell Biology International, 2014, 38, 1174-1182.	3.0	47
24	Enhancing neuronal growth from human endometrial stem cells derived neuronâ€like cells in threeâ€dimensional fibrin gel for nerve tissue engineering. Journal of Biomedical Materials Research - Part A, 2014, 102, 2533-2543.	4.0	46
25	Injectable natural polymer compound for tissue engineering of intervertebral disc: In vitro study. Materials Science and Engineering C, 2017, 80, 502-508.	7.3	46
26	Osteoconductive and electroactive carbon nanofibers/hydroxyapatite nanocomposite tailored for bone tissue engineering: in vitro and in vivo studies. Scientific Reports, 2020, 10, 14853.	3.3	46
27	Preparation of laminated poly(Îµ-caprolactone)-gelatin-hydroxyapatite nanocomposite scaffold bioengineered via compound techniques for bone substitution. Biomatter, 2011, 1, 91-101.	2.6	45
28	Preparation of Pure PLLA, Pure Chitosan, and PLLA/Chitosan Blend Porous Tissue Engineering Scaffolds by Thermally Induced Phase Separation Method and Evaluation of the Corresponding Mechanical and Biological Properties. International Journal of Polymeric Materials and Polymeric Biomaterials, 2015, 64, 675-682.	3.4	41
29	In vitro evaluation of biomimetic nanocomposite scaffold using endometrial stem cell derived osteoblast-like cells. Tissue and Cell, 2013, 45, 328-337.	2.2	39
30	Repair of rat critical size calvarial defect using osteoblastâ€like and umbilical vein endothelial cells seeded in gelatin/hydroxyapatite scaffolds. Journal of Biomedical Materials Research - Part A, 2016, 104, 1770-1778.	4.0	39
31	A silk fibroin/decellularized extract of Whartonâ€™s jelly hydrogel intended for cartilage tissue engineering. Progress in Biomaterials, 2019, 8, 31-42.	4.5	39
32	Differentiation of human endometrial stem cells into endothelial-like cells on gelatin/chitosan/bioglass nanofibrous scaffolds. Artificial Cells, Nanomedicine and Biotechnology, 2017, 45, 163-173.	2.8	38
33	Preparation of collagen/polyurethane/knitted silk as a composite scaffold for tendon tissue engineering. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 652-662.	1.8	38
34	Preparation and characterization of nanocomposite polyelectrolyte membranes based on NafionÂ® ionomer and nanocrystalline hydroxyapatite. Polymer, 2011, 52, 1286-1296.	3.8	37
35	Criticalâ€sized fullâ€thickness skin defect regeneration using ovine small intestinal submucosa with or without mesenchymal stem cells in rat model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2177-2190.	3.4	33
36	Erythropoietin/aloe vera-releasing wet-electrospun polyvinyl alcohol/chitosan sponge-like wound dressing: In vitro and in vivo studies. Journal of Bioactive and Compatible Polymers, 2018, 33, 269-281.	2.1	33

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37	Structural and functional changes of silk fibroin scaffold due to hydrolytic degradation. Journal of Applied Polymer Science, 2014, 131, .	2.6	32
38	Applying extrusion-based 3D printing technique accelerates fabricating complex biphasic calcium phosphate-based scaffolds for bone tissue regeneration. Journal of Advanced Research, 2022, 40, 69-94.	9.5	32
39	Effective parameters on conductivity of mineralized carbon nanofibers: an investigation using artificial neural networks. RSC Advances, 2016, 6, 111908-111918.	3.6	31
40	The single and synergistic effects of montmorillonite and curcumin-loaded chitosan microparticles incorporated onto poly(lactic acid) electrospun film on wound-healing. Journal of Bioactive and Compatible Polymers, 2018, 33, 239-253.	2.1	31
41	Biological evaluation of porous nanocomposite scaffolds based on strontium substituted Î²-TCP and bioactive glass: An in vitro and in vivo study. Materials Science and Engineering C, 2019, 105, 110071.	7.3	29
42	Effect of laminated hydroxyapatite/gelatin nanocomposite scaffold structure on osteogenesis using unrestricted somatic stem cells in rat. Cell Biology International, 2013, 37, 1181-1189.	3.0	28
43	Delivery of injectable thermo-sensitive hydrogel releasing nerve growth factor for spinal cord regeneration in rat animal model. Journal of Tissue Viability, 2020, 29, 359-366.	2.0	28
44	Synthesis of calcium phosphate-zirconia scaffold and human endometrial adult stem cells for bone tissue engineering. Artificial Cells, Nanomedicine and Biotechnology, 2016, 44, 66-73.	2.8	27
45	Characterization of decellularized ovine small intestine submucosal layer as extracellular matrixâ€based scaffold for tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 933-944.	3.4	27
46	Tissueâ€engineered nerve graft using silkâ€fibroin/polycaprolactone fibrous mats decorated with bioactive cerium oxide nanoparticles. Journal of Biomedical Materials Research - Part A, 2021, 109, 1588-1599.	4.0	27
47	Comparative study of poly(L-lactic acid) scaffolds coated with chitosan nanoparticles prepared via ultrasonication and ionic gelation techniques. Tissue Engineering and Regenerative Medicine, 2016, 13, 498-506.	3.7	25
48	Cellular activity of <scp>W</scp>harton's <scp>J</scp>ellyâ€derived mesenchymal stem cells on electrospun fibrous and solventâ€cast film scaffolds. Journal of Biomedical Materials Research - Part A, 2016, 104, 218-226.	4.0	25
49	Endothelial and Osteoblast Differentiation of Adipose-Derived Mesenchymal Stem Cells Using a Cobalt-Doped CaP/Silk Fibroin Scaffold. ACS Biomaterials Science and Engineering, 2019, 5, 2134-2146.	5.2	25
50	Induction of human umbilical Whartonâ€™s jelly-derived mesenchymal stem cells toward motor neuron-like cells. In Vitro Cellular and Developmental Biology - Animal, 2015, 51, 987-994.	1.5	24
51	A comparison study on the behavior of human endometrial stem cell-derived osteoblast cells on PLGA/HA nanocomposite scaffolds fabricated by electrospinning and freeze-drying methods. Journal of Orthopaedic Surgery and Research, 2018, 13, 63.	2.3	24
52	In vitro and in vivo investigations on bone regeneration potential of laminated hydroxyapatite/gelatin nanocomposite scaffold along with DBM. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	23
53	Development of biomimetic gelatinâ€“chitosan/hydroxyapatite nanocomposite via double diffusion method for biomedical applications. International Journal of Materials Research, 2014, 105, 493-501.	0.3	22
54	Bone Regeneration in rat using a gelatin/bioactive glass nanocomposite scaffold along with endothelial cells (<scp>HUVEC</scp>s). International Journal of Applied Ceramic Technology, 2018, 15, 1427-1438.	2.1	21

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55	Investigation of Magnesium Incorporation within Gelatin/Calcium Phosphate Nanocomposite Scaffold for Bone Tissue Engineering. International Journal of Applied Ceramic Technology, 2015, 12, 245-253.	2.1	20
56	A network analysis of angiogenesis/osteogenesis-related growth factors in bone tissue engineering based on in-vitro and in-vivo data: A systems biology approach. Tissue and Cell, 2021, 72, 101553.	2.2	20
57	A deep insight into the preparation of ceramic bone scaffolds utilizing robocasting technique. Ceramics International, 2022, 48, 5939-5954.	4.8	20
58	Application of Platelet Rich Fibrin in Tissue Engineering: Focus on Bone Regeneration. Platelets, 2021, 32, 183-188.	2.3	19
59	Synthesis and characterization of a laminated hydroxyapatite/gelatin nanocomposite scaffold with controlled pore structure for bone tissue engineering. International Journal of Artificial Organs, 2010, 33, 86-95.	1.4	19
60	In vitro evaluation of human endometrial stem cellâ€derived osteoblastâ€like cellsâ€™ behavior on gelatin/collagen/bioglass nanofibersâ€™ scaffolds. Journal of Biomedical Materials Research - Part A, 2016, 104, 2210-2219.	4.0	18
61	New Insights into Cartilage Tissue Engineering: Improvement of Tissue-Scaffold Integration to Enhance Cartilage Regeneration. BioMed Research International, 2022, 2022, 1-13.	1.9	18
62	Advanced approaches to regenerate spinal cord injury: The development of cell and tissue engineering therapy and combinational treatments. Biomedicine and Pharmacotherapy, 2022, 146, 112529.	5.6	16
63	The Effect of Carrier Type on Bone Regeneration of Demineralized Bone Matrix In Vivo. Journal of Craniofacial Surgery, 2013, 24, 2135-2140.	0.7	15
64	Proanthocyanidin as a crosslinking agent for fibrin, collagen hydrogels and their composites with decellularized Whartonâ€™s-jelly-extract for tissue engineering applications. Journal of Bioactive and Compatible Polymers, 2020, 35, 554-571.	2.1	15
65	Facile synthesis of biphasic calcium phosphate microspheres with engineered surface topography for controlled delivery of drugs and proteins. Colloids and Surfaces B: Biointerfaces, 2017, 157, 223-232.	5.0	14
66	Scalable and cost-effective generation of osteogenic micro-tissues through the incorporation of inorganic microparticles within mesenchymal stem cell spheroids. Biofabrication, 2020, 12, 015021.	7.1	13
67	Preparation and characterization of <scp>58S</scp> bioactive glass based scaffold with Kaempferolâ€containing Zein coating for bone tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 1259-1270.	3.4	13
68	Mineralized Human Amniotic Membrane as a Biomimetic Scaffold for Hard Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2020, 6, 6285-6298.	5.2	10
69	Preparation and characterization of 3D nanocomposite scaffold from bioactive glass/Î²-tricalcium phosphate via Robocasting method for bone tissue engineering. Journal of Non-Crystalline Solids, 2022, 593, 121769.	3.1	10
70	Nanocomposite scaffold seeded with mesenchymal stem cells for bone repair. Cell Biology International, 2019, 43, 1379-1392.	3.0	9
71	Fabrication and Characterization of a Three-Dimensional Fibrin Gel Model to Evaluate Anti-Proliferative Effects of Astragalus hamosus Plant Extract on Breast Cancer Cells. Asian Pacific Journal of Cancer Prevention, 2022, 23, 731-741.	1.2	9
72	Novel Bioactive Poly(Îµ-caprolactone)-Gelatin-Hydroxyapatite Nanocomposite Scaffolds for Bone Regeneration. Key Engineering Materials, 0, 493-494, 909-915.	0.4	8

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73	Regenerative strategies for the consequences of myocardial infarction: Chronological indication and upcoming visions. Biomedicine and Pharmacotherapy, 2022, 146, 112584.	5.6	8
74	Calcium Fluoride/Hydroxyfluorapatite Nanocrystals as Novel Biphasic Solid Solution for Tooth Tissue Engineering and Regenerative Dentistry. Key Engineering Materials, 2011, 493-494, 626-631.	0.4	7
75	Preparation of Mineralized Electrospun Fibers as a Biomimetic Nanocomposite. International Journal of Polymeric Materials and Polymeric Biomaterials, 2014, 63, 576-582.	3.4	7
76	A facile way to synthesize a photocrosslinkable methacrylated chitosan hydrogel for biomedical applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2021, 70, 730-741.	3.4	7
77	The cardiac niche role in cardiomyocyte differentiation of rat bone marrow-derived stromal cells: comparison between static and microfluidic cell culture methods. EXCLI Journal, 2018, 17, 762-774.	0.7	7
78	Alginate-Based Hydrogel Containing Taurine-Loaded Chitosan Nanoparticles in Biomedical Application. Archives of Neuroscience, 2019, In Press, .	0.3	7
79	New precipitation method for synthesis of nano-fluorapatite. Materials Research Innovations, 2013, 17, 257-262.	2.3	4
80	Repair of critical size rat calvarial defects using endometrial-derived stem cells embedded within gelatin/apatite nanocomposite scaffold. Stem Cell Discovery, 2013, 03, 37-43.	0.5	4
81	An In-Silico Study on the Most Effective Growth Factors in Retinal Regeneration Utilizing Tissue Engineering Concepts. Journal of Ophthalmic and Vision Research, 2021, 16, 56-67.	1.0	3
82	Fabrication of fibrous poly (É›â€caprolactone) nanoâ€fibers containing cerium dopedâ€bioglasses nanoparticles encapsulated collagen. Journal of Applied Polymer Science, 2021, 138, 51202.	2.6	2
83	Identification of regeneration-involved growth factors in cartilage engineering procedure promotes its reconstruction. Regenerative Medicine, 2021, 16, 719-731.	1.7	2
84	Comparison of Cell Proliferation and Adhesion of Human Osteoblast Differentiated Cells on Electrospun and Freeze-Dried PLGA/Bioglass Scaffolds. Archives of Neuroscience, 2018, 5, .	0.3	2
85	Wound closure, angiogenesis and antibacterial behaviors of tetracalcium phosphate/hydroxyethyl cellulose/hyaluronic acid/gelatin composite dermal scaffolds. Journal of Biomaterials Science, Polymer Edition, 2021, , 1-22.	3.5	2
86	Chitosan Scaffold Containing Periostin Enhances Sternum Bone Healing and Decreases Serum Level of TNF-Î± and IL-6 after Sternotomy in Rat. Tissue Engineering and Regenerative Medicine, 2022, 19, 839-852.	3.7	2
87	Bone Scaffold Biomimetics Based on Gelatin Hydrogel Mineralization. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 17, 59-69.	0.7	1
88	Investigation of Fluorine Incorporation within Gelatin/Calcium Phosphate Nanocomposite Scaffold Prepared through a Diffusion Method. Advanced Composites Letters, 2013, 22, 096369351302200.	1.3	1
89	Preparation and characterization of highly porous ceramic-based nanocomposite scaffolds with improved mechanical properties using the liquid phase-assisted sintering method. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 1854-1865.	1.1	0
90	Numerical study on the influence of process parameters in direct ink writing of high viscosity bio-inks. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2023, 237, 274-282.	1.1	0