Mehran Solati-Hashjin

List of Publications by Year
in descending order

72 papers	3,403 citations	136885 32 h-index	143943 57 g-index
74 all docs	74 docs citations	74 times ranked	4830 citing authors

#	Article	IF	Citations
1	Effect of Layer Thickness and Printing Orientation on Mechanical Properties and Dimensional Accuracy of 3D Printed Porous Samples for Bone Tissue Engineering. PLoS ONE, 2014, 9, e108252.	1.1	208
2	Porous scaffold internal architecture design based on minimal surfaces: A compromise between permeability and elastic properties. Materials and Design, 2017, 126, 98-114.	3.3	195
3	Magnesium incorporated hydroxyapatite: Synthesis and structural properties characterization. Ceramics International, 2014, 40, 6021-6029.	2.3	194
4	Effect of Cr2O3, Fe2O3 and TiO2 nucleants on the crystallization behaviour of SiO2â€"Al2O3â€"CaOâ€"MgO(R2O) glass-ceramics. Ceramics International, 2005, 31, 75-80.	2.3	156
5	Synthesis, characterization and bioactivity investigation of bioglass/hydroxyapatite composite. Ceramics International, 2010, 36, 291-297.	2.3	155
6	Synthesis and characterization of hydroxyapatite/Î²-tricalcium phosphate nanocomposites using microwave irradiation. Ceramics International, 2011, 37, 65-71.	2.3	120
7	Effect of technical parameters on porous structure and strength of 3D printed calcium sulfate prototypes. Robotics and Computer-Integrated Manufacturing, 2016, 37, 57-67.	6.1	119
8	The comparison of powder characteristics and physicochemical, mechanical and biological properties between nanostructure ceramics of hydroxyapatite and fluoridated hydroxyapatite. Materials Science and Engineering C, 2009, 29, 1387-1398.	3.8	117
9	Synthesis of silicon-substituted hydroxyapatite by a hydrothermal method with two different phosphorous sources. Ceramics International, 2011, 37, 1219-1229.	2.3	117
10	Microfluidic organ-on-a-chip models of human liver tissue. Acta Biomaterialia, 2020, 116, 67-83.	4.1	106
11	Effect of layer printing delay on mechanical properties and dimensional accuracy of 3D printed porous prototypes in bone tissue engineering. Ceramics International, 2015, 41, 8320-8330.	2.3	100
12	Polycaprolactone/starch composite: Fabrication, structure, properties, and applications. Journal of Biomedical Materials Research - Part A, 2015, 103, 2482-2498.	2.1	94
13	Effect of the addition ZrO2â€"Al2O3 on nanocrystalline hydroxyapatite bending strength and fracture toughness. Ceramics International, 2009, 35, 1569-1574.	2.3	81
14	Improved bio-physical performance of hydroxyapatite coatings obtained by electrophoretic deposition at dynamic voltage. Ceramics International, 2014, 40, 12681-12691.	2.3	81
15	Fabrication and characterization of regenerated silk scaffolds reinforced with natural silk fibers for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2392-2404.	2.1	77
16	Graphene oxide-enriched poly(Îµ-caprolactone) electrospun nanocomposite scaffold for bone tissue engineering applications. Journal of Bioactive and Compatible Polymers, 2017, 32, 325-342.	0.8	71
17	Novel nanocomposite proton exchange membranes based on NafionÂ® and AMPS-modified montmorillonite for fuel cell applications. Journal of Membrane Science, 2010, 365, 286-293.	4.1	70
18	Novel layered double hydroxides-hydroxyapatite/gelatin bone tissue engineering scaffolds: Fabrication, characterization, and in vivo study. Materials Science and Engineering C, 2017, 76, 701-714.	3.8	68

#	Article	IF	Citations
19	Novel high-performance nanohybrid polyelectrolyte membranes based on bio-functionalized montmorillonite for fuel cell applications. Chemical Communications, 2010, 46, 6500.	2.2	65
20	A Porous Hydroxyapatite/Gelatin Nanocomposite Scaffold for Bone Tissue Repair: <i>In Vitro</i> and <i>In Vivo</i> Evaluation. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 2353-2368.	1.9	62
21	The effects of preservation procedures on amniotic membraneâ€™s ability to serve as a substrate for cultivation of endothelial cells. Cryobiology, 2011, 63, 145-151.	0.3	61
22	Structure, Properties, and In Vitro Behavior of Heat-Treated Calcium Sulfate Scaffolds Fabricated by 3D Printing. PLoS ONE, 2016, 11, e0151216.	1.1	57
23	Optimal design of a 3D-printed scaffold using intelligent evolutionary algorithms. Applied Soft Computing Journal, 2016, 39, 36-47.	4.1	54
24	Template-directed hydrothermal synthesis of dandelion-like hydroxyapatite in the presence of cetyltrimethylammonium bromide and polyethylene glycol. Ceramics International, 2009, 35, 2563-2569.	2.3	46
25	Title is missing!. Journal of Medical and Biological Engineering, 2013, 33, 207.	1.0	46
26	Release behavior and signaling effect of vitamin D3 in layered double hydroxides-hydroxyapatite/gelatin bone tissue engineering scaffold: An in vitro evaluation. Colloids and Surfaces B: Biointerfaces, 2017, 158, 697-708.	2.5	43
27	Facile Fabrication of Egg White Macroporous Sponges for Tissue Regeneration. Advanced Healthcare Materials, 2015, 4, 2281-2290.	3.9	41
28	Surface modification of POSSâ€nanocomposite biomaterials using reactive oxygen plasma treatment for cardiovascular surgical implant applications. Biotechnology and Applied Biochemistry, 2011, 58, 147-161.	1.4	39
29	Liver Tissue Engineering as an Emerging Alternative for Liver Disease Treatment. Tissue Engineering - Part B: Reviews, 2020, 26, 145-163.	2.5	38
30	Synthesis and characterization of hydroxyapatite cement. Journal of Molecular Structure, 2010, 969, 172-175.	1.8	35
31	Bone tissue engineering gelatinâ€“hydroxyapatite/graphene oxide scaffolds with the ability to release vitamin D: fabrication, characterization, and in vitro study. Journal of Materials Science: Materials in Medicine, 2020, 31, 97.	1.7	35
32	In vitro biomimetic deposition of apatite on alkaline and heat treated Ti6A14V alloy surface. Bulletin of Materials Science, 2008, 31, 101-108.	0.8	33
33	Effect of starch content on the biodegradation of polycaprolactone/starch composite for fabricating in situ pore-forming scaffolds. Polymer Testing, 2015, 43, 94-102.	2.3	33
34	Bone tissue engineering electrospun scaffolds based on layered double hydroxides with the ability to release vitamin D3: Fabrication, characterization and in vitro study. Applied Clay Science, 2020, 185, 105434.	2.6	33
35	Phase evaluation of an effervescent-added apatitic calcium phosphate bone cement. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 203-209.	1.6	32
36	Synthesis and characterisation of nanocrystalline Caâ€“Al layered double hydroxide {[Ca₂Al(OH)₆]NO₃.nH₂O}:<i>in vitro</i>study. Advances in Applied Ceramics, 2013, 112, 59-65.	0.6	32

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37	Epigallocatechin Gallate/Layered Double Hydroxide Nanohybrids: Preparation, Characterization, and In Vitro Anti-Tumor Study. PLoS ONE, 2015, 10, e0136530.	1.1	31
38	Synthesis and characterization of hydroxyapatite/titania nanocomposites using in situ precipitation technique. Superlattices and Microstructures, 2012, 51, 877-885.	1.4	29
39	New Insights of the Glycine-Nitrate Process For the Synthesis of Nano-Crystalline 8YSZ. Journal of the American Ceramic Society, 2007, 90, 2008-2014.	1.9	26
40	Enhancing glass ionomer cement features by using the HA/YSZ nanocomposite: A feed forward neural network modelling. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 317-327.	1.5	25
41	Surface modification for titanium implants by hydroxyapatite nanocomposite. Caspian Journal of Internal Medicine, 2012, 3, 460-5.	0.1	23
42	Effect of amino-functionalization on insulin delivery and cell viability for two types of silica mesoporous structures. Journal of Materials Science, 2016, 51, 10897-10909.	1.7	22
43	Layered double hydroxide-galactose as an excellent nanocarrier for targeted delivery of curcumin to hepatocellular carcinoma cells. Applied Clay Science, 2021, 200, 105891.	2.6	21
44	Biomimetic hydroxyapatite coatings deposited onto heat and alkali treated Ti6Al4V surface. Surface Engineering, 2009, 25, 583-588.	1.1	20
45	Three-dimensional printing of polycaprolactone/hydroxyapatite bone tissue engineering scaffolds mechanical properties and biological behavior. Journal of Materials Science: Materials in Medicine, 2022, 33, 31.	1.7	20
46	Microwave assisted synthesis & properties of nano HA-TCP biphasic calcium phosphate. International Journal of Minerals, Metallurgy and Materials, 2012, 19, 441-445.	2.4	18
47	Study of biodegradable ceramic bone graft substitute. Advances in Applied Ceramics, 2008, 107, 199-202.	0.6	17
48	Mechanical strength and setting times estimation of hydroxyapatite cement by using neural network. Materials & Design, 2010, 31, 2585-2591.	5.1	17
49	Electrochemical properties of LiMn2O4 cathode material doped with an actinide. Journal of Alloys and Compounds, 2006, 424, 225-230.	2.8	16
50	Mechanical behavior of a new biphasic calcium phosphate bone graft. Biotechnology and Bioprocess Engineering, 2008, 13, 204-209.	1.4	16
51	The effect of crystallographic orientation of titanium substrate on the structure and bioperformance of hydroxyapatite coatings. Colloids and Surfaces B: Biointerfaces, 2013, 103, 200-208.	2.5	16
52	Artificial neural network approach to estimate the composition of chemically synthesized biphasic calcium phosphate powders. Ceramics International, 2014, 40, 12439-12448.	2.3	16
53	Synthesis and characterization of co-doped TiO2 thin films on glass-ceramic. Materials Science in Semiconductor Processing, 2014, 26, 41-48.	1.9	15
54	Injectable and bioresorbable calcium phosphate delivery system with gentamicin sulphate for treatment of bone diseases:<i>in vitro</i>study. Advances in Applied Ceramics, 2011, 110, 482-489.	0.6	12

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55	Cerebellum-inspired neural network solution of the inverse kinematics problem. Biological Cybernetics, 2015, 109, 561-574.	0.6	12
56	Cardiovascular 3D bioprinting: A review on cardiac tissue development. Bioprinting, 2022, 28, e00221.	2.9	12
57	Fabrication and evaluation of combined 3D printed/pamidronate-layered double hydroxides enriched electrospun scaffolds for bone tissue engineering applications. Applied Clay Science, 2022, 225, 106538.	2.6	11
58	The effect of adding reduced graphene oxide to electrospun polycaprolactone scaffolds on MG-63 cells activity. Materials Today Communications, 2021, 27, 102287.	0.9	10
59	Mechanical behavior of calcium sulfate scaffold prototypes built by solid free-form fabrication. Rapid Prototyping Journal, 2018, 24, 1392-1400.	1.6	9
60	Synthesis and characterization of conductive neural tissue engineering scaffolds based on urethane-polycaprolactone. International Journal of Polymeric Materials and Polymeric Biomaterials, 2019, 68, 827-835.	1.8	9
61	Preparation of Mesoporous Silica Nanoparticles for Insulin Drug Delivery. Advanced Materials Research, 0, 829, 251-257.	0.3	7
62	The study of collagen immobilization on a novel nanocomposite to enhance cell adhesion and growth. Iranian Biomedical Journal, 2011, 15, 6-14.	0.4	7
63	Studies of luminescence property of long afterglow Eu2+, Dy3+ activated Sr2MgSi2O7 phosphor. Pigment and Resin Technology, 2004, 33, 220-225.	0.5	6
64	Signaling molecules orchestrating liver regenerative medicine. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 1715-1737.	1.3	6
65	Novel calcium phosphate coated calcium silicate-based cement: <i>in vitro</i> evaluation. Biomedical Materials (Bristol), 2020, 15, 035008.	1.7	6
66	Dissolution behavior and fluoride release from new glass composition used in glass ionomer cements. Ceramics International, 2007, 33, 557-561.	2.3	5
67	Biological Evaluation of a Novel Tissue Engineering Scaffold of Layered Double Hydroxides (LDHs). Key Engineering Materials, 0, 493-494, 902-908.	0.4	4
68	Using an artificial intelligence technique to optimize calcium phosphates synthesis conditions. , 2012, , .		2
69	Nano-graphene oxide and vitamin D delivery. AIP Conference Proceedings, 2018, , .	0.3	1
70	Characterization of Hydroxyapatite Blocks for Biomedical Applicatons. , 0, , .		0
71	Protection of titanium metal by nanohydroxyapatite coating with zirconia and alumina second phases. Protection of Metals and Physical Chemistry of Surfaces, 2012, 48, 688-691.	0.3	0
72	Metal oxide-based ceramics. , 2021, , 301-331.		0