Shiqi Mei

List of Publications by Year
in descending order

88 papers	2,417 citations	279798 23 h-index	243625 44 g-index
88 all docs	88 docs citations	88 times ranked	3006 citing authors

#	Article	IF	Citations
1	Polyetheretherketone/nano-fluorohydroxyapatite composite with antimicrobial activity and osseointegration properties. Biomaterials, 2014, 35, 6758-6775.	11.4	255
2	Hierarchically microporous/macroporous scaffold of magnesiumâ€“calcium phosphate for bone tissue regeneration. Biomaterials, 2010, 31, 1260-1269.	11.4	193
3	Preparation and characterization of bioactive mesoporous wollastonite â€“ Polycaprolactone composite scaffold. Biomaterials, 2009, 30, 1080-1088.	11.4	140
4	Effect of surface roughness on osteogenesis in vitro and osseointegration in vivo of carbon fiber-reinforced polyetheretherketone–nanohydroxyapatite composite. International Journal of Nanomedicine, 2015, 10, 1425.	6.7	109
5	Preparation, characterization, cellular response and in vivo osseointegration of polyetheretherketone/nano-hydroxyapatite/carbon fiber ternary biocomposite. Colloids and Surfaces B: Biointerfaces, 2015, 136, 64-73.	5.0	87
6	Peptide-laden mesoporous silica nanoparticles with promoted bioactivity and osteo-differentiation ability for bone tissue engineering. Colloids and Surfaces B: Biointerfaces, 2015, 131, 73-82.	5.0	70
7	A novel composite coupled hardness with flexiblenessâ€”polylactic acid toughen with thermoplastic polyurethane. Journal of Applied Polymer Science, 2011, 121, 855-861.	2.6	67
8	Synthesis and Characterization of Poly(dimethylsilylene ethynylenephenyleneethynylene) Terminated with Phenylacetylene. Polymer Bulletin, 2006, 56, 19-26.	3.3	63
9	In vitro degradability, bioactivity and cell responses to mesoporous magnesium silicate for the induction of bone regeneration. Colloids and Surfaces B: Biointerfaces, 2014, 120, 38-46.	5.0	58
10	Influences of tantalum pentoxide and surface coarsening on surface roughness, hydrophilicity, surface energy, protein adsorption and cell responses to PEEK based biocomposite. Colloids and Surfaces B: Biointerfaces, 2019, 174, 207-215.	5.0	55
11	3D-printed scaffolds of mesoporous bioglass/gliadin/polycaprolactone ternary composite for enhancement of compressive strength, degradability, cell responses and new bone tissue ingrowth. International Journal of Nanomedicine, 2018, Volume 13, 5433-5447.	6.7	48
12	Osseointegration of nanohydroxyapatite- or nano-calcium silicate-incorporated polyetheretherketone bioactive composites in vivo. International Journal of Nanomedicine, 2016, Volume 11, 6023-6033.	6.7	44
13	Influences of mesoporous zinc-calcium silicate on water absorption, degradability, antibacterial efficacy, hemostatic performances and cell viability to microporous starch based hemostat. Materials Science and Engineering C, 2017, 76, 340-349.	7.3	42
14	Implantable PEKK/tantalum microparticles composite with improved surface performances for regulating cell behaviors, promoting bone formation and osseointegration. Bioactive Materials, 2021, 6, 928-940.	15.6	42
15	Stimulation of cell responses and bone ingrowth into macro-microporous implants of nano-bioglass/polyetheretherketone composite and enhanced antibacterial activity by release of hinokitiol. Colloids and Surfaces B: Biointerfaces, 2018, 164, 347-357.	5.0	40
16	Effects of different sulfonation times and post-treatment methods on the characterization and cytocompatibility of sulfonated PEEK. Journal of Biomaterials Applications, 2020, 35, 342-352.	2.4	34
17	Response of Human Osteoblast to n-HA/PEEKâ€”Quantitative Proteomic Study of Bio-effects of Nano-Hydroxyapatite Composite. Scientific Reports, 2016, 6, 22832.	3.3	31
18	Construction of a hierarchical micro & nanoporous surface for loading genistein on the composite of polyetheretherketone/tantalum pentoxide possessing antibacterial activity and accelerated osteointegration. Biomaterials Science, 2021, 9, 167-185.	5.4	31

#	Article	IF	Citations
19	Dual-functional polyetheretherketone surface modification for regulating immunity and bone metabolism. Chemical Engineering Journal, 2021, 426, 130806.	12.7	31
20	Fabrication of Bioactive Scaffold of Poly(É›â€Caprolactone) and Nanofiber Wollastonite Composite. Journal of the American Ceramic Society, 2009, 92, 1017-1023.	3.8	30
21	Influences of niobium pentoxide on roughness, hydrophilicity, surface energy and protein absorption, and cellular responses to PEEK based composites for orthopedic applications. Journal of Materials Chemistry B, 2020, 8, 2618-2626.	5.8	29
22	Highly dispersed lithium doped mesoporous silica nanospheres regulating adhesion, proliferation, morphology, ALP activity and osteogenesis related gene expressions of BMSCs. Colloids and Surfaces B: Biointerfaces, 2018, 170, 563-571.	5.0	28
23	Influences of doping mesoporous magnesium silicate on water absorption, drug release, degradability, apatite-mineralization and primary cells responses to calcium sulfate based bone cements. Materials Science and Engineering C, 2017, 75, 620-628.	7.3	26
24	Hierarchically porous surface of PEEK/nMCS composite created by femtosecond laser and incorporation of resveratrol exhibiting antibacterial performances and osteogenic activity in vitro. Composites Part B: Engineering, 2020, 186, 107802.	12.0	25
25	In vitro degradability, bioactivity and primary cell responses to bone cements containing mesoporous magnesiumâ€“calcium silicate and calcium sulfate for bone regeneration. Journal of the Royal Society Interface, 2015, 12, 20150779.	3.4	24
26	Developing a novel magnesium glycerophosphate/silicate-based organic-inorganic composite cement for bone repair. Materials Science and Engineering C, 2018, 87, 104-111.	7.3	24
27	Preparation, characterization, in vitro bioactivity and rBMSCs responses to tantalum pentoxide/polyimide biocomposites for dental and orthopedic implants. Composites Part B: Engineering, 2019, 177, 107433.	12.0	24
28	Macro-mesoporous composites containing PEEK and mesoporous diopside as bone implants: characterization, in vitro mineralization, cytocompatibility, and vascularization potential and osteogenesis in vivo. Journal of Materials Chemistry B, 2017, 5, 8337-8352.	5.8	24
29	Lithium doped silica nanospheres/poly(dopamine) composite coating on polyetheretherketone to stimulate cell responses, improve bone formation and osseointegration. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 965-976.	3.3	23
30	Novel porous silica granules for instant hemostasis. RSC Advances, 2016, 6, 78930-78935.	3.6	22
31	A hierarchical nanostructural coating of amorphous silicon nitride on polyetheretherketone with antibacterial activity and promoting responses of rBMSCs for orthopedic applications. Journal of Materials Chemistry B, 2019, 7, 6035-6047.	5.8	22
32	Enhanced biocompatibility and osteogenic potential of mesoporous magnesium silicate/polycaprolactone/wheat protein composite scaffolds. International Journal of Nanomedicine, 2018, Volume 13, 1107-1117.	6.7	21
33	Folic Acid Functionalized Carbon Dot/Polypyrrole Nanoparticles for Specific Bioimaging and Photothermal Therapy. ACS Applied Bio Materials, 2021, 4, 3453-3461.	4.6	21
34	A microporous surface containing Si3N4/Ta microparticles of PEKK exhibits both antibacterial and osteogenic activity for inducing cellular response and improving osseointegration. Bioactive Materials, 2021, 6, 3136-3149.	15.6	21
35	The effects of surface bioactivity and sustained-release of genistein from a mesoporous magnesium-calcium-silicate/PK composite stimulating cell responses in vitro, and promoting osteogenesis and enhancing osseointegration in vivo. Biomaterials Science, 2018, 6, 842-853.	5.4	20
36	Sulfonated porous surface of tantalum pentoxide/polyimide composite with micro-submicro structures displaying antibacterial performances and stimulating cell responses. Materials and Design, 2020, 190, 108510.	7.0	20

#	Article	IF	Citations
37	Synthesis and properties of novel 4,4â€²â€biphenyleneâ€bridged flameâ€retardant cyanate ester resin. Journal of Applied Polymer Science, 2011, 122, 2609-2615.	2.6	19
38	Efficient enzyme-activated therapy based on the different locations of protein and prodrug in nanoMOFs. Journal of Materials Chemistry B, 2020, 8, 6139-6147.	5.8	19
39	Biodegradable mesoporous calcium–magnesium silicate-polybutylene succinate scaffolds for osseous tissue engineering. International Journal of Nanomedicine, 2015, 10, 6699.	6.7	18
40	Macro-Microporous Surface with Sulfonic Acid Groups and Micro-Nano Structures of PEEK/Nano Magnesium Silicate Composite Exhibiting Antibacterial Activity and Inducing Cell Responses . International Journal of Nanomedicine, 2020, Volume 15, 2403-2417.	6.7	18
41	Helical Self-Assembly of Amphiphilic Chiral Azobenzene Alternating Copolymers. ACS Macro Letters, 2021, 10, 1174-1179.	4.8	18
42	Synthesis and thermal cure of diphenyl ethers terminated with acetylene and phenylacetylene. Polymer International, 2006, 55, 1063-1068.	3.1	17
43	Influences of surface treatments with abrasive paper and sand-blasting on surface morphology, hydrophilicity, mineralization and osteoblasts behaviors of n-CS/PK composite. Scientific Reports, 2017, 7, 568.	3.3	17
44	Effects of sintering temperature on surface morphology/microstructure, in vitro degradability, mineralization and osteoblast response to magnesium phosphate as biomedical material. Scientific Reports, 2017, 7, 823.	3.3	17
45	Copper-Doped Nano Laponite Coating on Poly(butylene Succinate) Scaffold with Antibacterial Properties and Cytocompatibility for Biomedical Application. Journal of Nanomaterials, 2018, 2018, 1-11.	2.7	17
46	Incorporation of molybdenum disulfide into polyetheretherketone creating biocomposites with improved mechanical, tribological performances and cytocompatibility for artificial joints applications. Colloids and Surfaces B: Biointerfaces, 2020, 189, 110819.	5.0	17
47	Diffusion Behavior of Drug Molecules in Acrylic Pressure-Sensitive Adhesive. ACS Omega, 2020, 5, 9408-9419.	3.5	17
48	Preparation and properties of BSA-loaded microspheres based on multi-(amino acid) copolymer for protein delivery. International Journal of Nanomedicine, 2014, 9, 1957.	6.7	16
49	Nanoporosity improved water absorption, in vitro degradability, mineralization, osteoblast responses and drug release of poly(butylene succinate)-based composite scaffolds containing nanoporous magnesium silicate compared with magnesium silicate. International Journal of Nanomedicine, 2017, Volume 12, 3637-3651.	6.7	15
50	Influences of mesoporous magnesium calcium silicate on mineralization, degradability, cell responses, curcumin release from macro-mesoporous scaffolds of gliadin based biocomposites. Scientific Reports, 2018, 8, 174.	3.3	15
51	Effects of a Coating of Nano Silicon Nitride on Porous Polyetheretherketone on Behaviors of MC3T3-E1 Cells in Vitro and Vascularization and Osteogenesis in Vivo. ACS Biomaterials Science and Engineering, 2019, 5, 6425-6435.	5.2	15
52	Nanostructured Coating of Non-Crystalline Tantalum Pentoxide on Polyetheretherketone Enhances RBMS Cells/HGE Cells Adhesion. International Journal of Nanomedicine, 2021, Volume 16, 725-740.	6.7	15
53	Fabrication of Submicro-Nano Structures on Polyetheretherketone Surface by Femtosecond Laser for Exciting Cellular Responses of MC3T3-E1 Cells/Gingival Epithelial Cells. International Journal of Nanomedicine, 2021, Volume 16, 3201-3216.	6.7	15
54	Zein regulating apatite mineralization, degradability, in vitro cells responses and in vivo osteogenesis of 3D-printed scaffold of n-MS/ZN/PCL ternary composite. RSC Advances, 2018, 8, 18745-18756.	3.6	14

#	Article	IF	Citations
55	A study on in vitro and in vivo bioactivity of nano hydroxyapatite/polymer biocomposite. Science Bulletin, 2007, 52, 267-271.	1.7	13
56	Preparation and Characterization of Well Ordered Mesoporous Diopside Nanobiomaterial. Journal of Nanoscience and Nanotechnology, 2011, 11, 10746-10749.	0.9	13
57	Mesoporous magnesium silicate-incorporated poly(ε-caprolactone)-poly(ethylene glycol)-poly(ε-caprolactone) bioactive composite beneficial to osteoblast behaviors. International Journal of Nanomedicine, 2014, 9, 2665.	6.7	12
58	Mechanical Strength, Surface Properties, Cytocompatibility and Antibacterial Activity of Nano Zinc-Magnesium Silicate/Polyetheretherketone Biocomposites. Journal of Nanoscience and Nanotechnology, 2019, 19, 7615-7623.	0.9	12
59	Microporous Coatings of PEKK/SN Composites Integration with PEKK Exhibiting Antibacterial and Osteogenic Activity, and Promotion of Osseointegration for Bone Substitutes. ACS Biomaterials Science and Engineering, 2019, 5, 1290-1301.	5.2	12
60	Mesoporous calcium–silicon xerogels with mesopore size and pore volume influence hMSC behaviors by load and sustained release of rhBMP-2. International Journal of Nanomedicine, 2015, 10, 1715.	6.7	11
61	Improvement of bioactivity, degradability, and cytocompatibility of biocement by addition of mesoporous magnesium silicate into sodium-magnesium phosphate cement. Journal of Materials Science: Materials in Medicine, 2015, 26, 238.	3.6	10
62	Biocompatibility, degradability, bioactivity and osteogenesis of mesoporous/macroporous scaffolds of mesoporous diopside/poly(l -lactide) composite. Journal of the Royal Society Interface, 2015, 12, 20150507.	3.4	10
63	Siliconâ€containing fluorenylacetylene resins with low curing temperature and high thermal stability. Journal of Applied Polymer Science, 2019, 136, 48262.	2.6	10
64	Highly Effective Bone Fusion Induced by the Interbody Cage Made of Calcium Silicate/Polyetheretherketone in a Goat Model. ACS Biomaterials Science and Engineering, 2019, 5, 2409-2416.	5.2	10
65	Dual drugs release from nanoporously bioactive coating on polyetheretherketone for enhancement of antibacterial activity, rBMSCs responses and osseointegration. Materials and Design, 2020, 188, 108433.	7.0	10
66	In vitro Apatite Mineralization, Degradability, Cytocompatibility and in vivo New Bone Formation and Vascularization of Bioactive Scaffold of Polybutylene Succinate/Magnesium Phosphate/Wheat Protein Ternary Composite . International Journal of Nanomedicine, 2020, Volume 15, 7279-7295.	6.7	10
67	Degradability and biocompatibility of bioglass/poly(amino acid) composites with different surface bioactivity as bone repair materials. Journal of Applied Polymer Science, 2021, 138, 49751.	2.6	10
68	Synthesis, characterization, and properties of thermosets based on the cocuring of an acetyleneâ€terminated liquidâ€crystal and siliconâ€containing arylacetylene oligomer. Journal of Applied Polymer Science, 2017, 134, 45141.	2.6	9
69	Characterization and osteogenic evaluation of mesoporous magnesiumâ€“calcium silicate/polycaprolactone/polybutylene succinate composite scaffolds fabricated by rapid prototyping. RSC Advances, 2018, 8, 33882-33892.	3.6	9
70	Influences of sodium tantalite submicro-particles in polyetheretherketone based composites on behaviors of rBMSCs/HGE-1 cells for dental application. Colloids and Surfaces B: Biointerfaces, 2020, 188, 110723.	5.0	9
71	Rodâ€“coil block copolymer aggregates via polymerization-induced self-assembly. Soft Matter, 2020, 16, 3466-3475.	2.7	9
72	Simultaneous incorporation of gallium oxide and tantalum microparticles into micro-arc oxidation coating of titanium possessing antibacterial effect and stimulating cellular response. , 2022, 135, 212736.		9

#	Article	IF	Citations
73	Fabrication of boron- and nitrogen-doped carbon nanoparticles by stress from pyrolysis of borazine-containing arylacetylene. RSC Advances, 2014, 4, 6330.	3.6	8
74	Synthesis and properties of novel dicyanate with low dielectric and water absorption performance. Journal of Applied Polymer Science, 2011, 120, 3716-3723.	2.6	7
75	Preparation, rheological properties and primary cytocompatibility of TPU/PLA blends as biomedical materials. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 211-218.	1.0	7
76	Construction of Layered B₃N₃-Doped Graphene Sheets from an Acetylenic Compound Containing B₃N₃ by a Semisynthetic Strategy. ACS Applied Materials & Interfaces, 2019, 11, 33245-33253.	8.0	7
77	Improvement of rBMSCs Responses to Poly(propylene carbonate) Based Biomaterial through Incorporation of Nanolaponite and Surface Treatment Using Sodium Hydroxide. ACS Biomaterials Science and Engineering, 2020, 6, 329-339.	5.2	7
78	Self-assembly of amphiphilic alternating copolymers with stimuli-responsive rigid pendant groups. Polymer Chemistry, 2020, 11, 4798-4806.	3.9	7
79	Tantalum oxide submicro-particles into microporous coating on polyimide possessing antibacterial property and inducing cellular response for orthopedic application. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 124, 104800.	3.1	7
80	Physicochemical Properties and Biocompatibility of White Dextrin Modified Injectable Calciumâ€“Magnesium Phosphate Cement. International Journal of Applied Ceramic Technology, 2012, 9, 979-990.	2.1	6
81	An in situ self-catalytic hybrid cyanate ester resin and its self-catalytic polymerization behavior. RSC Advances, 2016, 6, 80213-80220.	3.6	6
82	Blended films containing polybutyrolactam and chitosan for potential wound dressing applications. Journal of Applied Polymer Science, 2018, 135, 46511.	2.6	6
83	Distributed process monitoring framework based on decomposed modified partial least squares. Canadian Journal of Chemical Engineering, 2019, 97, 3087-3100.	1.7	6
84	Microporous surface containing flower-like molybdenum disulfide submicro-spheres of sulfonated polyimide with antibacterial effect and promoting bone regeneration and osteointegration. Biomaterials Science, 2022, 10, 4243-4256.	5.4	5
85	Synthesis and Characterization of a Novel Cyanate Ester Containing Dimethyl Benzene Linkage. International Journal of Polymer Analysis and Characterization, 2010, 15, 415-423.	1.9	3
86	Tuning of the surface biological behavior of poly(L-lactide)-based composites by the incorporation of polyelectrolyte complexes for bone regeneration. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1713-1727.	3.5	3
87	Improvement of surface hydrophilicity, water uptake, biodegradability, and cytocompatibility through the incorporation of chitosan oligosaccharide into poly(<scp>l</scp>â€lactide). Journal of Applied Polymer Science, 2018, 135, 45724.	2.6	1
88	Preparation and characterization of well ordered mesoporous diopside nanobiomaterial. , 2010, , .		0