Xiao Yang

List of Publications by Citations

69 papers	1,584 citations	24 h-index	37 g-index
70 ext. papers	2,113 ext. citations	7.3 avg, IF	4.75 L-index

#	Paper	IF	Citations
69	Bone regeneration with micro/nano hybrid-structured biphasic calcium phosphate bioceramics at segmental bone defect and the induced immunoregulation of MSCs. *Biomaterials*, **2017**, 147, 133-144	15.6	103
68	Microfabricated perfusable cardiac biowire: a platform that mimics native cardiac bundle. *Lab on A Chip*, **2014**, 14, 869-82	7.2	98
67	Comparison of osteointegration property between PEKK and PEEK: Effects of surface structure and chemistry. *Biomaterials*, **2018**, 170, 116-126	15.6	86
66	Application of hydroxyapatite nanoparticles in tumor-associated bone segmental defect. *Science Advances*, **2019**, 5, eaax6946	14.3	81
65	Diabetic wound regeneration using peptide-modified hydrogels to target re-epithelialization. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5792-E5801	11.5	77
64	Recent developments and applications of bioinspired dendritic polymers. *Polymer Chemistry*, **2015**, 6, 668-680	4.9	55
63	Role of biphasic calcium phosphate ceramic-mediated secretion of signaling molecules by macrophages in migration and osteoblastic differentiation of MSCs. *Acta Biomaterialia*, **2017**, 51, 447-460	10.8	51
62	Roles of calcium phosphate-mediated integrin expression and MAPK signaling pathways in the osteoblastic differentiation of mesenchymal stem cells. *Journal of Materials Chemistry B*, **2016**, 4, 2280-2289	7.3	48
61	Viscoelasticity in natural tissues and engineered scaffolds for tissue reconstruction. *Acta Biomaterialia*, **2019**, 97, 74-92	10.8	45
60	Comparison of ectopic bone formation process induced by four calcium phosphate ceramics in mice. *Materials Science and Engineering C*, **2017**, 70, 1000-1010	8.3	40
59	Processing and Properties of Bioactive Surface-Porous PEKK. *ACS Biomaterials Science and Engineering*, **2016**, 2, 977-986	5.5	38
58	Selective effect of hydroxyapatite nanoparticles on osteoporotic and healthy bone formation correlates with intracellular calcium homeostasis regulation. *Acta Biomaterialia*, **2017**, 59, 338-350	10.8	37
57	A bioceramic scaffold composed of strontium-doped three-dimensional hydroxyapatite whiskers for enhanced bone regeneration in osteoporotic defects. *Theranostics*, **2020**, 10, 1572-1589	12.1	36
56	Osteoinductivity of Porous Biphasic Calcium Phosphate Ceramic Spheres with Nanocrystalline and Their Efficacy in Guiding Bone Regeneration. *ACS Applied Materials & Interfaces*, **2019**, 11, 3722-3736	9.5	36
55	Effective dentin restorative material based on phosphate-terminated dendrimer as artificial protein. *Colloids and Surfaces B: Biointerfaces*, **2015**, 128, 304-314	6	34
54	Regulation of the secretion of immunoregulatory factors of mesenchymal stem cells (MSCs) by collagen-based scaffolds during chondrogenesis. *Materials Science and Engineering C*, **2017**, 70, 983-991	8.3	32
53	Cellulose Nanocrystal Reinforced Collagen-Based Nanocomposite Hydrogel with Self-Healing and Stress-Relaxation Properties for Cell Delivery. *Biomacromolecules*, **2020**, 21, 2400-2408	6.9	31

52	Antibacterial and anti-biofouling coating on hydroxyapatite surface based on peptide-modified tannic acid. *Colloids and Surfaces B: Biointerfaces*, **2017**, 160, 136-143	6	31
51	Nano-Hydroxyapatite Coating Promotes Porous Calcium Phosphate Ceramic-Induced Osteogenesis Via BMP/Smad Signaling Pathway. *International Journal of Nanomedicine*, **2019**, 14, 7987-8000	7.3	30
50	Antibacterial and biodegradable tissue nano-adhesives for rapid wound closure. *International Journal of Nanomedicine*, **2018**, 13, 5849-5863	7.3	27
49	Ibandronate does not reduce the anabolic effects of PTH in ovariectomized rat tibiae: a microarchitectural and mechanical study. *Bone*, **2011**, 48, 1154-63	4.7	26
48	Construction of surface HA/TiO coating on porous titanium scaffolds and its preliminary biological evaluation. *Materials Science and Engineering C*, **2017**, 70, 1047-1056	8.3	25
47	Healing of osteoporotic bone defects by micro-/nano-structured calcium phosphate bioceramics. *Nanoscale*, **2019**, 11, 2721-2732	7.7	25
46	A biomimetically hierarchical polyetherketoneketone scaffold for osteoporotic bone repair. *Science Advances*, **2020**, 6,	14.3	24
45	Stereolithography-Based Additive Manufacturing of High-Performance Osteoinductive Calcium Phosphate Ceramics by a Digital Light-Processing System. *ACS Biomaterials Science and Engineering*, **2020**, 6, 1787-1797	5.5	24
44	Bio-inspired peptide decorated dendrimers for a robust antibacterial coating on hydroxyapatite. *Polymer Chemistry*, **2017**, 8, 4264-4279	4.9	24
43	A Universal and Ultrastable Mineralization Coating Bioinspired from Biofilms. *Advanced Functional Materials*, **2018**, 28, 1802730	15.6	24
42	Positive alterations of viscoelastic and geometric properties in ovariectomized rat femurs with concurrent administration of ibandronate and PTH. *Bone*, **2013**, 52, 308-17	4.7	23
41	Injectable strontium-doped hydroxyapatite integrated with phosphoserine-tethered poly(epsilon-lysine) dendrons for osteoporotic bone defect repair. *Journal of Materials Chemistry B*, **2018**, 6, 7974-7984	7.3	23
40	Bioinspired from Salivary Acquired Pellicle: A Multifunctional Coating for Biominerals. *Chemistry of Materials*, **2017**, 29, 5663-5670	9.6	22
39	Modifications of collagen-based biomaterials with immobilized growth factors or peptides. *Methods*, **2015**, 84, 44-52	4.6	21
38	Biochemical and Biophysical Cues in Matrix Design for Chronic and Diabetic Wound Treatment. *Tissue Engineering - Part B: Reviews*, **2017**, 23, 9-26	7.9	19
37	Bone mineral density, microarchitectural and mechanical alterations of osteoporotic rat bone under long-term whole-body vibration therapy. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 53, 341-349	4.1	17
36	Bioinspired Peptide-Decorated Tannic Acid for in Situ Remineralization of Tooth Enamel: In Vitro and in Vivo Evaluation. *ACS Biomaterials Science and Engineering*, **2017**, 3, 3553-3562	5.5	16
35	Regulation of surface micro/nano structure and composition of polyetheretherketone and their influence on the behavior of MC3T3-E1 pre-osteoblasts. *Journal of Materials Chemistry B*, **2019**, 7, 5713-5724	7.3	16

34	Administration of PTH and ibandronate increases ovariectomized rat compact bone viscoelasticity. *Journal of the Mechanical Behavior of Biomedical Materials*, **2013**, 22, 51-8	4.1	16
33	Fabrication and preliminary biological evaluation of a highly porous biphasic calcium phosphate scaffold with nano-hydroxyapatite surface coating. *Ceramics International*, **2018**, 44, 1304-1311	5.1	15
32	Accelerated Bone Regeneration by MOF Modified Multifunctional Membranes through Enhancement of Osteogenic and Angiogenic Performance. *Advanced Healthcare Materials*, **2021**, 10, e2001369	10.1	15
31	Thermal degradation behavior and probable mechanism of aromatic poly(1,3,4-oxadiazole)s fibers. *Polymer Bulletin*, **2015**, 72, 1067-1080	2.4	14
30	Effective in situ repair and bacteriostatic material of tooth enamel based on salivary acquired pellicle inspired oligomeric procyanidins. *Polymer Chemistry*, **2016**, 7, 6761-6769	4.9	13
29	The in vitro and in vivo anti-melanoma effects of hydroxyapatite nanoparticles: influences of material factors. *International Journal of Nanomedicine*, **2019**, 14, 1177-1191	7.3	12
28	Administration duration influences the effects of low-magnitude, high-frequency vibration on ovariectomized rat bone. *Journal of Orthopaedic Research*, **2016**, 34, 1147-57	3.8	12
27	Effects of Nanotopography Regulation and Silicon Doping on Angiogenic and Osteogenic Activities of Hydroxyapatite Coating on Titanium Implant. *International Journal of Nanomedicine*, **2020**, 15, 4171-4189	7.3	11
26	The positive role of macrophage secretion stimulated by BCP ceramic in the ceramic-induced osteogenic differentiation of pre-osteoblasts via Smad-related signaling pathways. *RSC Advances*, **2016**, 6, 102134-102141	3.7	11
25	The directional migration and differentiation of mesenchymal stem cells toward vascular endothelial cells stimulated by biphasic calcium phosphate ceramic. *International Journal of Energy Production and Management*, **2018**, 5, 129-139	5.3	11
24	The morphological effect of nanostructured hydroxyapatite coatings on the osteoinduction and osteogenic capacity of porous titanium. *Nanoscale*, **2020**, 12, 24085-24099	7.7	10
23	A systematic assessment of hydroxyapatite nanoparticles used in the treatment of melanoma. *Nano Research*, **2020**, 13, 2106-2117	10	9
22	Role of N-Cadherin in a Niche-Mimicking Microenvironment for Chondrogenesis of Mesenchymal Stem Cells. *ACS Biomaterials Science and Engineering*, **2020**, 6, 3491-3501	5.5	8
21	A multi-level comparative analysis of human femoral cortical bone quality in healthy cadavers and surgical safe margin of osteosarcoma patients. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 66, 111-118	4.1	8
20	Mineralized collagen-modified PMMA cement enhances bone integration and reduces fibrous encapsulation in the treatment of lumbar degenerative disc disease. *International Journal of Energy Production and Management*, **2020**, 7, 181-193	5.3	8
19	The optimized preparation of HA/L-TiO/D-TiO composite coating on porous titanium and its effect on the behavior osteoblasts. *International Journal of Energy Production and Management*, **2020**, 7, 505-514	5.3	7
18	Positive role of calcium phosphate ceramics regulated inflammation in the osteogenic differentiation of mesenchymal stem cells. *Journal of Biomedical Materials Research - Part A*, **2020**, 108, 1305-1320	5.4	6
17	Self-reduction and morphology control of gold nanoparticles by dendronized poly(amido amine)s for photothermal therapy. *RSC Advances*, **2014**, 4, 44872-44878	3.7	6

List of Publications

16	Complexation of Injectable Biphasic Calcium Phosphate with Phosphoserine-Presenting Dendrons with Enhanced Osteoregenerative Properties. *ACS Applied Materials & Interfaces*, **2020**, 12, 37873-37884	9.5	6
15	Bioactive scaffolds based on collagen filaments with tunable physico-chemical and biological features. *Soft Matter*, **2020**, 16, 4540-4548	3.6	5
14	Immunization with Na/K ATPase DR peptide prevents bone loss in an ovariectomized rat osteoporosis model. *Biochemical Pharmacology*, **2018**, 156, 281-290	6	4
13	Role of Na, K-ATPase ion pump in osteoinduction. *Acta Biomaterialia*, **2021**, 129, 293-308	10.8	4
12	Effect of process parameters on the microstructure and property of hydroxyapatite precursor powders and resultant sintered bodies. *International Journal of Applied Ceramic Technology*, **2019**, 16, 444-454	2	4
11	Machine learning on properties of multiscale multisource hydroxyapatite nanoparticles datasets with different morphologies and sizes. *Npj Computational Materials*, **2021**, 7,	10.9	4
10	A bioactive polymethylmethacrylate bone cement for prosthesis fixation in osteoporotic hip replacement surgery. *Materials and Design*, **2021**, 209, 109966	8.1	4
9	Improvement of Oxidation Resistance of Remelted Zone in an Al2O3-Forming Austenitic Stainless Steel by Annealing. *Oxidation of Metals*, **2015**, 83, 273-290	1.6	3
8	Application of osteoinductive calcium phosphate ceramics in children's endoscopic neurosurgery: report of five cases. *International Journal of Energy Production and Management*, **2018**, 5, 221-227	5.3	3
7	Progress in Preparation of Silk Fibroin Microspheres for Biomedical Applications. *Pharmaceutical Nanotechnology*, **2020**, 8, 358-371	4	3
6	The Morphology of Hydroxyapatite Nanoparticles Regulates Cargo Recognition in Clathrin-Mediated Endocytosis. *Frontiers in Molecular Biosciences*, **2021**, 8, 627015	5.6	2
5	Construction of a magnesium hydroxide/graphene oxide/hydroxyapatite composite coating on Mg-Ca-Zn-Ag alloy to inhibit bacterial infection and promote bone regeneration.. *Bioactive Materials*, **2022**, 18, 354-367	16.7	2
4	Osteoporotic bone recovery by a bamboo-structured bioceramic with controlled release of hydroxyapatite nanoparticles.. *Bioactive Materials*, **2022**, 17, 379-393	16.7	1
3	Ability of a novel biomimetic titanium alloy cage in avoiding subsidence and promoting fusion: a goat spine model study. *Materials and Design*, **2022**, 213, 110361	8.1	1
2	Heterostructured Metal-Organic Frameworks/Polydopamine Coating Endows Polyetheretherketone Implants with Multimodal Osteogenicity and Photoswitchable Disinfection.. *Advanced Healthcare Materials*, **2022**, e2200641	10.1	0
1	The morphology of hydroxyapatite nanoparticles regulates clathrin-mediated endocytosis in melanoma cells and resultant anti-tumor efficiency. *Nano Research*,1	10	0