Xiao-Nong Zhang

List of Publications by Year
in descending order

65 papers	3,567 citations	236833 25 h-index	133188 59 g-index
65 all docs	65 docs citations	65 times ranked	3084 citing authors

#	Article	IF	Citations
1	Controlled release of hydrogen by implantation of magnesium induces P53-mediated tumor cells apoptosis. Bioactive Materials, 2022, 9, 385-396.	8.6	24
2	Magnesium promotes osteogenesis via increasing <scp>OPN</scp> expression and activating <scp>CaM</scp>/<scp>CaMKIV</scp>/<scp>CREB1</scp> pathway. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 1594-1603.	1.6	5
3	Solâ€"Gel-Derived Biodegradable Er-Doped ZnO/Polyethylene Glycol Nanoparticles for Cell Imaging. ACS Applied Nano Materials, 2022, 5, 7103-7112.	2.4	7
4	Biodegradable magnesium implants: a potential scaffold for bone tumor patients. Science China Materials, 2021, 64, 1007-1020.	3.5	28
5	High-purity magnesium pin enhances bone consolidation in distraction osteogenesis via regulating Ptch protein activating Hedgehog-alternative Wnt signaling. Bioactive Materials, 2021, 6, 1563-1574.	8.6	20
6	Degradable magnesium implants inhibit gallbladder cancer. Acta Biomaterialia, 2021, 128, 514-522.	4.1	25
7	Transient and Biocompatible Resistive Switching Memory Based on Electrochemicallyâ€Deposited Zinc Oxide. Advanced Electronic Materials, 2021, 7, 2100322.	2.6	10
8	Dosageâ€Dependent Antimicrobial Activity of DNAâ€Histone Microwebs Against <i>Staphylococcus Aureus</i>. Advanced Materials Interfaces, 2021, 8, 2100717.	1.9	4
9	Effects of MgF2 coating on the biodegradation and biological properties of magnesium. Surface and Coatings Technology, 2021, 422, 127552.	2.2	14
10	A novel lean alloy of biodegradable Mgâ€"2Zn with nanograins. Bioactive Materials, 2021, 6, 4333-4341.	8.6	16
11	Multifunctional Magnesium Anastomosis Staples for Wound Closure and Inhibition of Tumor Recurrence and Metastasis. ACS Biomaterials Science and Engineering, 2021, 7, 5269-5278.	2.6	9
12	Effect of Galvanic Corrosion on the Degradability of Biomedical Magnesium. Frontiers in Materials, 2021, 8, .	1.2	5
13	Local intragranular misorientation accelerates corrosion in biodegradable Mg. Acta Biomaterialia, 2020, 101, 575-585.	4.1	43
14	Cellular different responses to different nanotube inner diameter on surface of pure tantalum. Materials Science and Engineering C, 2020, 109, 110520.	3.8	12
15	High-purity magnesium pin enhances bone consolidation in distraction osteogenesis model through activation of the VHL/HIF-1Î±/VEGF signaling. Journal of Biomaterials Applications, 2020, 35, 224-236.	1.2	21
16	Microstructure controls the corrosion behavior of a lean biodegradable Mgâ€"2Zn alloy. Acta Biomaterialia, 2020, 107, 349-361.	4.1	32
17	Biodegradable Mg Implants Suppress the Growth of Ovarian Tumor. ACS Biomaterials Science and Engineering, 2020, 6, 1755-1763.	2.6	20
18	In vitro crevice corrosion of biodegradable magnesium in different solutions. Journal of Materials Science and Technology, 2020, 52, 83-88.	5.6	10

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19	Crevice corrosion â€“ A newly observed mechanism of degradation in biomedical magnesium. Acta Biomaterialia, 2019, 98, 152-159.	4.1	28
20	Cell behaviors on surface of pure tantalum with nano-dimpled structure. Rare Metals, 2019, 38, 543-551.	3.6	8
21	Translational status of biomedical Mg devices in China. Bioactive Materials, 2019, 4, 358-365.	8.6	33
22	In vitro degradation and mineralization of high-purity magnesium in three physiological fluids. Materials Letters, 2019, 240, 279-283.	1.3	15
23	Assessment of the Biocompatibility and Biological Effects of Biodegradable Pure Zinc Material in the Colorectum. ACS Biomaterials Science and Engineering, 2018, 4, 4095-4103.	2.6	14
24	High-Purity Magnesium Staples Suppress Inflammatory Response in Rectal Anastomoses. ACS Applied Materials & Interfaces, 2017, 9, 9506-9515.	4.0	38
25	<i>InÂvivo</i> and <i>inÂvitro</i> assessment of the biocompatibility and degradation of high-purity Mg anastomotic staples. Journal of Biomaterials Applications, 2017, 31, 1203-1214.	1.2	21
26	Accelerating Corrosion of Pure Magnesium Co-implanted with Titanium in Vivo. Scientific Reports, 2017, 7, 41924.	1.6	25
27	Development of PLA/Mg composite for orthopedic implant: Tunable degradation and enhanced mineralization. Composites Science and Technology, 2017, 147, 8-15.	3.8	79
28	Synergistic effect of a biodegradable Mgâ€“Zn alloy on osteogenic activity and anti-biofilm ability: an in vitro and in vivo study. RSC Advances, 2016, 6, 45219-45230.	1.7	14
29	Site-Dependent Osseointegration of Biodegradable High-Purity Magnesium for Orthopedic Implants in Femoral Shaft and Femoral Condyle of New Zealand Rabbits. Journal of Materials Science and Technology, 2016, 32, 883-888.	5.6	16
30	Research of a novel biodegradable surgical staple made of high purity magnesium. Bioactive Materials, 2016, 1, 122-126.	8.6	41
31	Magnesium inference screw supports early graft incorporation with inhibition of graft degradation in anterior cruciate ligament reconstruction. Scientific Reports, 2016, 6, 26434.	1.6	28
32	In vitro evaluation of effects of Mg-6Zn alloy extracts on apoptosis of intestinal epithelial cells. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 1387-1393.	0.4	0
33	Study of Cell Behaviors on Anodized TiO2 Nanotube Arrays with Coexisting Multi-Size Diameters. Nano-Micro Letters, 2016, 8, 61-69.	14.4	14
34	High-purity magnesium interference screws promote fibrocartilaginous entheses regeneration in the anterior cruciate ligament reconstruction rabbit model via accumulation of BMP-2 and VEGF. Biomaterials, 2016, 81, 14-26.	5.7	136
35	Ag-Incorporated FHA Coating on Pure Mg: Degradation and in Vitro Antibacterial Properties. ACS Applied Materials & Interfaces, 2016, 8, 5093-5103.	4.0	46
36	In vitro and in vivo evaluation of effects of Mgâ€“6Zn alloy on tight junction of intestinal epithelial cell. Transactions of Nonferrous Metals Society of China, 2015, 25, 3760-3766.	1.7	9

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37	InÂvitro and inÂvivo studies on the degradation of high-purity Mg (99.99wt.%) screw with femoral intracondylar fractured rabbit model. Biomaterials, 2015, 64, 57-69.	5.7	190
38	Guided proliferation and bone-forming functionality on highly ordered large diameter TiO2 nanotube arrays. Materials Science and Engineering C, 2015, 53, 272-279.	3.8	37
39	Doping inorganic ions to regulate bioactivity of Caâ€"P coating on bioabsorbable high purity magnesium. Progress in Natural Science: Materials International, 2014, 24, 479-485.	1.8	8
40	In vivo and in vitro evaluation of effects of Mg-6Zn alloy on apoptosis of common bile duct epithelial cell. BioMetals, 2014, 27, 1217-1230.	1.8	24
41	Shape and Site Dependent in Vivo Degradation of Mg-Zn Pins in Rabbit Femoral Condyle. International Journal of Molecular Sciences, 2014, 15, 2959-2970.	1.8	17
42	Comparison of the effects of Mgâ€"6Zn and Tiâ€"3Alâ€"2.5V alloys on TGF-Î²/TNF-Î±/VEGF/b-FGF in the healing of the intestinal tract in vivo. Biomedical Materials (Bristol), 2014, 9, 025011.	1.7	15
43	In vitro and in vivo assessment of the biocompatibility of an Mgâ€"6Zn alloy in the bile. Journal of Materials Science: Materials in Medicine, 2014, 25, 471-480.	1.7	25
44	In vitro and in vivo corrosion measurements of Mgâ€"6Zn alloys in the bile. Materials Science and Engineering C, 2014, 42, 116-123.	3.8	36
45	Comparison of the effects of Mgâ€"6Zn and titanium on intestinal tract in vivo. Journal of Materials Science: Materials in Medicine, 2013, 24, 1515-1525.	1.7	19
46	Effects of biodegradable Mgâ€"6Zn alloy extracts on cell cycle of intestinal epithelial cells. Journal of Biomaterials Applications, 2013, 27, 739-747.	1.2	14
47	Electrochemical property and in vitro degradation of DCPDâ€"PCL composite coating on the biodegradable Mgâ€"Zn alloy. Materials Letters, 2012, 68, 435-438.	1.3	30
48	Effects of biodegradable Mgâ€"6Zn alloy extracts on apoptosis of intestinal epithelial cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 388-393.	1.7	17
49	Interaction between a high purity magnesium surface and PCL and PLA coatings during dynamic degradation. Biomedical Materials (Bristol), 2011, 6, 025005.	1.7	132
50	Influence of Mg2+ concentration, pH value and specimen parameter on the hemolytic property of biodegradable magnesium. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1823-1826.	1.7	16
51	The in vitro indirect cytotoxicity test and in vivo interface bioactivity evaluation of biodegradable FHA coated Mgâ€"Zn alloys. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1785-1788.	1.7	34
52	Effect of fluoride coating on in vitro dynamic degradation of Mgâ€"Zn alloy. Materials Letters, 2011, 65, 2568-2571.	1.3	16
53	In vitro and in vivo mineralization and osseointegration of nanostructured Ti6Al4V. Journal of Nanoparticle Research, 2011, 13, 645-654.	0.8	23
54	Hierarchical titanium surface textures affect osteoblastic functions. Journal of Biomedical Materials Research - Part A, 2011, 99A, 666-675.	2.1	36

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55	The Bioactivated Interfacial Behavior of the Fluoridated Hydroxyapatite-Coated Mg-Zn Alloy in Cell Culture Environments. Bioinorganic Chemistry and Applications, 2011, 2011, 1-7.	1.8	6
56	Influence of dicalcium phosphate dihydrate coating on the in vitro degradation of Mg-Zn alloy. Frontiers of Materials Science in China, 2010, 4, 116-119.	0.5	8
57	Dynamic degradation behavior of MgZn alloy in circulating m-SBF. Materials Letters, 2010, 64, 1996-1999.	1.3	41
58	Influence of Heat Treatments on In Vitro Degradation Behavior of Mgâ€6Zn Alloy Studied by Electrochemical Measurements. Advanced Engineering Materials, 2010, 12, B170.	1.6	11
59	Research on an Mgâ€“Zn alloy as a degradable biomaterial. Acta Biomaterialia, 2010, 6, 626-640.	4.1	1,089
60	Electrodeposition of Caâ€“P coatings on biodegradable Mg alloy: In vitro biomineralization behaviorâ˜†. Acta Biomaterialia, 2010, 6, 1736-1742.	4.1	335
61	In vitro responses of human bone marrow stromal cells to a fluoridated hydroxyapatite coated biodegradable Mgâ€“Zn alloy. Biomaterials, 2010, 31, 5782-5788.	5.7	174
62	Biocompatibility of bio-Mg-Zn alloy within bone with heart, liver, kidney and spleen. Science Bulletin, 2009, 54, 484-491.	4.3	48
63	In vitro degradation, hemolysis and MC3T3-E1 cell adhesion of biodegradable Mgâ€“Zn alloy. Materials Science and Engineering C, 2009, 29, 1907-1912.	3.8	267
64	Increased osteoblast adhesion on nanophase Ti6Al4V. Science Bulletin, 2008, 53, 1757-1762.	4.3	6
65	Surface modification of pure titanium treated with B4C at high temperature. Surface and Coatings Technology, 2006, 200, 3016-3020.	2.2	23