Ruiqiang Hang

List of Publications by Year
in descending order

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105 papers	3,960 citations	101384 36 h-index	138251 58 g-index
105 all docs	105 docs citations	105 times ranked	4175 citing authors

#	Article	IF	Citations
1	The effects of titania nanotubes with embedded silver oxide nanoparticles on bacteria and osteoblasts. Biomaterials, 2014, 35, 4223-4235.	5.7	305
2	A multifaceted coating on titanium dictates osteoimmunomodulation and osteo/angio-genesis towards ameliorative osseointegration. Biomaterials, 2018, 162, 154-169.	5.7	206
3	Electrochemical surface engineering of titanium-based alloys for biomedical application. Electrochimica Acta, 2018, 271, 699-718.	2.6	168
4	High activity of carbon nanotubes supported binary and ternary Pd-based catalysts for methanol, ethanol and formic acid electro-oxidation. Journal of Power Sources, 2013, 242, 610-620.	4.0	147
5	Biocompatibility, corrosion resistance and antibacterial activity of TiO2/CuO coating on titanium. Ceramics International, 2017, 43, 16185-16195.	2.3	109
6	DLP printing photocurable chitosan to build bio-constructs for tissue engineering. Carbohydrate Polymers, 2020, 235, 115970.	5.1	109
7	Antimicrobial property, cytocompatibility and corrosion resistance of Zn-doped ZrO 2 /TiO 2 coatings on Ti6Al4V implants. Materials Science and Engineering C, 2017, 75, 7-15.	3.8	100
8	Effects of copper nanoparticles in porous TiO2 coatings on bacterial resistance and cytocompatibility of osteoblasts and endothelial cells. Materials Science and Engineering C, 2018, 82, 110-120.	3.8	96
9	Differential effect of hydroxyapatite nano-particle versus nano-rod decorated titanium micro-surface on osseointegration. Acta Biomaterialia, 2018, 76, 344-358.	4.1	93
10	Preparation, antibacterial effects and corrosion resistant of porous Cuâ€“TiO2 coatings. Applied Surface Science, 2014, 308, 43-49.	3.1	89
11	A micro/nano-biomimetic coating on titanium orchestrates osteo/angio-genesis and osteoimmunomodulation for advanced osseointegration. Biomaterials, 2021, 278, 121162.	5.7	84
12	Preparation, characterization, corrosion behavior and bioactivity of Ni2O3-doped TiO2 nanotubes on NiTi alloy. Electrochimica Acta, 2012, 70, 382-393.	2.6	80
13	In situ synthesis of Ni(OH)2/TiO2 composite film on NiTi alloy for non-enzymatic glucose sensing. Sensors and Actuators B: Chemical, 2016, 232, 150-157.	4.0	80
14	Linker-free covalent immobilization of heparin, SDF-1Î±, and CD47 on PTFE surface for antithrombogenicity, endothelialization and anti-inflammation. Biomaterials, 2017, 140, 201-211.	5.7	80
15	Corrosion behavior of Zn-incorporated antibacterial TiO2 porous coating on titanium. Ceramics International, 2016, 42, 17095-17100.	2.3	74
16	Antibacterial activity and cytocompatibility of Cuâ€“Tiâ€“O nanotubes. Journal of Biomedical Materials Research - Part A, 2014, 102, 1850-1858.	2.1	71
17	Self-assembled anodization of NiTi alloys for biomedical applications. Applied Surface Science, 2020, 517, 146118.	3.1	67
18	Antibacterial ability and cytocompatibility of Cu-incorporated Niâ€“Tiâ€“O nanopores on NiTi alloy. Rare Metals, 2019, 38, 552-560.	3.6	65

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19	Review of Antibacterial Activity of Titanium-Based Implantsâ€™ Surfaces Fabricated by Micro-Arc Oxidation. Coatings, 2017, 7, 45.	1.2	63
20	Antibacterial ability and angiogenic activity of Cu-Ti-O nanotube arrays. Materials Science and Engineering C, 2017, 71, 93-99.	3.8	60
21	Corrosion behavior of NiTi alloy in fetal bovine serum. Electrochimica Acta, 2010, 55, 5551-5560.	2.6	59
22	Microstructure and cytotoxicity evaluation of duplex-treated silver-containing antibacterial TiO2 coatings. Materials Science and Engineering C, 2014, 45, 402-410.	3.8	58
23	Targeting Early Healing Phase with Titania Nanotube Arrays on Tunable Diameters to Accelerate Bone Regeneration and Osseointegration. Small, 2021, 17, e2006287.	5.2	57
24	Nanostructured titaniumâ€“silver coatings with good antibacterial activity and cytocompatibility fabricated by one-step magnetron sputtering. Applied Surface Science, 2015, 355, 32-44.	3.1	56
25	High-current anodization: A novel strategy to functionalize titanium-based biomaterials. Electrochimica Acta, 2015, 173, 345-353.	2.6	52
26	Fabrication of Ni-Ti-O nanotube arrays by anodization of NiTi alloy and their potential applications. Scientific Reports, 2014, 4, 7547.	1.6	52
27	Size-dependent corrosion behavior and cytocompatibility of Niâ€“Tiâ€“O nanotubes prepared by anodization of biomedical NiTi alloy. Corrosion Science, 2016, 103, 173-180.	3.0	47
28	Bovine serum albumin assisted synthesis of Ag/Ag2O/ZnO photocatalyst with enhanced photocatalytic activity under visible light. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 568, 131-140.	2.3	47
29	Synthesis and antibacterial property of Ag-containing TiO2 coatings by combining magnetron sputtering with micro-arc oxidation. Surface and Coatings Technology, 2013, 235, 748-754.	2.2	45
30	Relationship between Ni release and cytocompatibility of Ni-Ti-O nanotubes prepared on biomedical NiTi alloy. Corrosion Science, 2017, 123, 209-216.	3.0	45
31	Antibacterial, osteogenic, and angiogenic activities of SrTiO 3 nanotubes embedded with Ag 2 O nanoparticles. Materials Science and Engineering C, 2017, 75, 1049-1058.	3.8	45
32	Microstructure, antibacterial properties and wear resistance of plasma Cuâ€“Ni surface modified titanium. Surface and Coatings Technology, 2013, 232, 515-520.	2.2	44
33	Wear and corrosion resistance of anti-bacterial Tiâ€“Cuâ€“N coatings on titanium implants. Applied Surface Science, 2014, 317, 614-621.	3.1	44
34	Dual light-induced in situ antibacterial activities of biocompatibleTiO₂/MoS₂/PDA/RGD nanorod arrays on titanium. Biomaterials Science, 2020, 8, 391-404.	2.6	44
35	A nano-silver composite based on the ion-exchange response for the intelligent antibacterial applications. Materials Science and Engineering C, 2014, 41, 134-141.	3.8	43
36	Osteogenic and angiogenic activities of silicon-incorporated TiO2 nanotube arrays. Journal of Materials Chemistry B, 2016, 4, 5548-5559.	2.9	39

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37	Electrochemical corrosion, wear and cell behavior of ZrO2/TiO2 alloyed layer on Ti-6Al-4V. Bioelectrochemistry, 2018, 121, 105-114.	2.4	34
38	Biodegradable Metallic Wires in Dental and Orthopedic Applications: A Review. Metals, 2018, 8, 212.	1.0	33
39	Highly ordered Niâ€“Tiâ€“O nanotubes for non-enzymatic glucose detection. Materials Science and Engineering C, 2015, 51, 37-42.	3.8	31
40	Direct writing alginate bioink inside pre-polymers of hydrogels to create patterned vascular networks. Journal of Materials Science, 2019, 54, 7883-7892.	1.7	31
41	Antibacterial activity of single crystalline silver-doped anatase TiO2 nanowire arrays. Applied Surface Science, 2016, 372, 139-144.	3.1	30
42	Corrosion behavior of porous ZrO2 ceramic coating on AZ31B magnesium alloy. Surface and Coatings Technology, 2018, 349, 434-441.	2.2	30
43	Length-dependent corrosion behavior, Ni2+ release, cytocompatibility, and antibacterial ability of Ni-Ti-O nanopores anodically grown on biomedical NiTi alloy. Materials Science and Engineering C, 2018, 89, 1-7.	3.8	28
44	Corrosion behavior of DLC-coated NiTi alloy in the presence of serum proteins. Diamond and Related Materials, 2010, 19, 1230-1234.	1.8	26
45	From ultrathin nanosheets, triangular plates to nanocrystals with exposed (102) facets, a morphology and phase transformation of sp2 hybrid BN nanomaterials. RSC Advances, 2014, 4, 14233.	1.7	26
46	Enhanced anticorrosive and antibacterial performances of silver nanoparticles/polyethyleneimine/MAO composite coating on magnesium alloys. Journal of Materials Research and Technology, 2021, 11, 2354-2364.	2.6	25
47	A study of biotribological behavior of DLC coatings and its influence to human serum albumin. Diamond and Related Materials, 2010, 19, 62-66.	1.8	24
48	Biological response of endothelial cells to diamondâ€like carbonâ€coated NiTi alloy. Journal of Biomedical Materials Research - Part A, 2012, 100A, 496-506.	2.1	24
49	Fabrication of irregular-layer-free and diameter-tunable Niâ€“Tiâ€“O nanopores by anodization of NiTi alloy. Electrochemistry Communications, 2017, 76, 10-14.	2.3	23
50	The effects of TiO₂ nanotube arrays with different diameters on macrophage/endothelial cell response and ex vivo hemocompatibility. Journal of Materials Chemistry B, 2018, 6, 6322-6333.	2.9	23
51	Osteogenic activity, antibacterial ability, and Ni release of Mg-incorporated Ni-Ti-O nanopore coatings on NiTi alloy. Applied Surface Science, 2019, 486, 441-451.	3.1	23
52	Anodic growth of ultra-long Ni-Ti-O nanopores. Electrochemistry Communications, 2016, 71, 28-32.	2.3	22
53	Matrix Stiffness in Threeâ€Dimensional Systems Effects on the Behavior of C3A Cells. Artificial Organs, 2013, 37, 166-174.	1.0	21
54	Cu and Si co-doped microporous TiO2 coating for osseointegration by the coordinated stimulus action. Applied Surface Science, 2020, 503, 144072.	3.1	21

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55	Electrochemical stability, corrosion behavior, and biological properties of Niâ€“Tiâ€“O nanoporous layers anodically on NiTi alloy. Corrosion Science, 2021, 179, 109104.	3.0	21
56	Selective inhibition effects on cancer cells and bacteria of Niâ€“Tiâ€“O nanoporous layers grown on biomedical NiTi alloy by anodization. Rare Metals, 2022, 41, 78-85.	3.6	21
57	Cellular response to nano-structured Zr and ZrO2 alloyed layers on Ti-6Al-4V. Materials Science and Engineering C, 2018, 90, 523-530.	3.8	20
58	Enhancement of Antibacterial and Mechanical Properties of Photocurable Îµ-Poly-<scp>l</scp>-lysine Hydrogels by Tannic Acid Treatment. ACS Applied Bio Materials, 2021, 4, 2713-2722.	2.3	20
59	Exosomes secreted by macrophages upon copper ion stimulation can promote angiogenesis. Materials Science and Engineering C, 2021, 123, 111981.	3.8	20
60	Electrochemical synthesis, corrosion behavior and cytocompatibility of Ni-Ti-O nanopores on NiTi alloy. Materials Letters, 2017, 202, 5-8.	1.3	19
61	Synthesis and biological properties of Zn-incorporated micro/nano-textured surface on Ti by high current anodization. Materials Science and Engineering C, 2017, 78, 175-184.	3.8	18
62	Titanium-based implant comprising a porous microstructure assembled with nanoleaves and controllable silicon-ion release for enhanced osseointegration. Journal of Materials Chemistry B, 2018, 6, 5100-5114.	2.9	18
63	In situ growth of self-organized Cu-containing nano-tubes and nano-pores on Ti90â^'xCu10Alx (x=0, 45) alloys by one-pot anodization and evaluation of their antimicrobial activity and cytotoxicity. Surface and Coatings Technology, 2014, 240, 167-178.	2.2	17
64	Improving exposure of anodically ordered Niâ€“Tiâ€“O and corrosion resistance and biological properties of NiTi alloys by substrate electropolishing. Rare Metals, 2021, 40, 3575-3587.	3.6	17
65	Effect of a biomimetic titania mesoporous coating doped with Sr on the osteogenic activity. Materials Science and Engineering C, 2018, 91, 153-162.	3.8	16
66	Preparation, characterization, corrosion behavior and cytocompatibility of NiTiO3 nanosheets hydrothermally synthesized on biomedical NiTi alloy. Materials Science and Engineering C, 2019, 97, 715-722.	3.8	16
67	Corrosion resistance, anticoagulant and antibacterial properties of surface-functionalized magnesium alloys. Materials Letters, 2019, 234, 323-326.	1.3	16
68	Fabrication of Ni-Ti-O nanoporous film on NiTi alloy in ethylene glycol containing NaCl. Surface and Coatings Technology, 2017, 321, 136-145.	2.2	15
69	Preparation, biocompatibility and wear resistance of microstructured Zr and ZrO 2 alloyed layers on 316L stainless steel. Materials Letters, 2017, 203, 24-27.	1.3	15
70	In vitro biodegradability of Mgâ€“2Gdâ€“xZn alloys with different Zn contents and solution treatments. Rare Metals, 2019, 38, 620-628.	3.6	15
71	Recent advances in anti-infection surfaces fabricated on biomedical implants by plasma-based technology. Surface and Coatings Technology, 2017, 312, 2-6.	2.2	14
72	A cytocompatible micro/nano-textured surface with Si-doped titania mesoporous arrays fabricated by a one-step anodization. Materials Science and Engineering C, 2017, 73, 120-129.	3.8	14

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73	Fabrication and corrosion behavior of TiO2 nanotubes on AZ91D magnesium alloy. Ceramics International, 2017, 43, 13683-13688.	2.3	14
74	Effects of solid diffusion zinc treatment on corrosion behavior, antibacterial ability, and cytocompatibility of AZ31B magnesium alloy. Materials Letters, 2019, 251, 30-33.	1.3	14
75	Corrosion behavior and cytocompatibility of nanostructured hydroxyapatite hydrothermally grown on porous MgO coatings with different P contents on magnesium. Materials Letters, 2020, 264, 127136.	1.3	13
76	The influence of substrate electropolishing on anodization behavior, corrosion resistance, cytocompatibility and antibacterial ability of NiTi alloy. Materials Letters, 2020, 268, 127631.	1.3	13
77	One-step fabrication of cytocompatible micro/nano-textured surface with TiO2 mesoporous arrays on titanium by high current anodization. Electrochimica Acta, 2016, 199, 116-125.	2.6	12
78	A high current anodization to fabricate a nano-porous structure on the surface of Ti-based implants. Journal of Materials Science: Materials in Medicine, 2019, 30, 2.	1.7	12
79	Self-assembled nanosheets on NiTi alloy facilitate endothelial cell function and manipulate macrophage immune response. Journal of Materials Science and Technology, 2021, 78, 110-120.	5.6	12
80	Corrosion behavior, antibacterial ability, and osteogenic activity of Zn-incorporated Ni-Ti-O nanopore layers on NiTi alloy. Journal of Materials Science and Technology, 2022, 97, 69-78.	5.6	12
81	Favorable manipulation of macrophage/endothelial cell functionality and their cross-talk on silicon-doped titania nanotube arrays. Nanoscale, 2019, 11, 5920-5931.	2.8	11
82	Exosomes derived from macrophages upon Zn ion stimulation promote osteoblast and endothelial cell functions. Journal of Materials Chemistry B, 2021, 9, 3800-3807.	2.9	11
83	The fabrication of Ag-containing hierarchical micro/nano-structure on titanium and its antibacterial activity. Materials Letters, 2017, 193, 97-100.	1.3	10
84	The effects of annealing temperature on corrosion behavior, Ni2+ release, cytocompatibility, and antibacterial ability of Ni-Ti-O nanopores on NiTi alloy. Surface and Coatings Technology, 2018, 352, 175-181.	2.2	10
85	Low-temperature alkali corrosion induced growth of nanosheet layers on NiTi alloy and their corrosion behavior and biological responses. Corrosion Science, 2021, 190, 109654.	3.0	10
86	Simultaneously enhanced osteogenesis and angiogenesis via macrophage-derived exosomes upon stimulation with titania nanotubes. Materials Science and Engineering C, 2022, 134, 112708.	3.8	10
87	Biocompatible silane adhesion layer on titanium implants improves angiogenesis and osteogenesis. , 2022, 139, 213033.		10
88	Regulation of endothelial functionality through direct and immunomodulatory effects by Ni-Ti-O nanospindles on NiTi alloy. Materials Science and Engineering C, 2021, 123, 112007.	3.8	9
89	Exosomes derived from macrophages upon cobalt ion stimulation promote angiogenesis. Colloids and Surfaces B: Biointerfaces, 2021, 203, 111742.	2.5	8
90	Na-Ti-O nanostructured film anodically grown on titanium surface have the potential to improve osteogenesis. Surface and Coatings Technology, 2020, 397, 125907.	2.2	7

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91	Modulating the behaviors of C3A cells via surface charges of polyelectrolyte multilayers. Carbohydrate Polymers, 2013, 92, 1064-1070.	5.1	6
92	DOUBLE GLOW PLASMA SURFACE ALLOYING ANTIBACTERIAL SILVER COATING ON PURE TITANIUM. Surface Review and Letters, 2014, 21, 1450032.	0.5	6
93	The influence of electrolyte pH on anodic growth of Ni-Ti-O nanopores on NiTi alloy. Materials Letters, 2018, 220, 190-193.	1.3	5
94	Ethylene glycolâ€¯+â€¯H2Oâ€¯+â€¯Na2CO3: A new electrolyte system to anodically grow Ni-Ti-O nanopores on NiTi alloy. Materials Letters, 2018, 215, 1-3.	1.3	5
95	Osteogenic activity of Na2Ti3O7/SrTiO3 hybrid coatings on titanium. Surface and Coatings Technology, 2020, 398, 126090.	2.2	4
96	Facile preparation of nanostructured octacalcium phosphate coatings on micro-arc oxidized magnesium with different functionalities for bone repair application. Colloids and Surfaces B: Biointerfaces, 2021, 197, 111426.	2.5	4
97	Differential Nanoscale Topography Dedicates Osteocyte-Manipulated Osteogenesis via Regulation of the TGF-Î² Signaling Pathway. International Journal of Molecular Sciences, 2022, 23, 4212.	1.8	4
98	Resveratrol promotes osteogenesis and angiogenesis through mediating immunology of senescent macrophages. Biomedical Materials (Bristol), 2022, 17, 055005.	1.7	4
99	A hybrid co-culture model with endothelial cells designed for the hepatic tissue engineering. Journal of Materials Science: Materials in Medicine, 2017, 28, 139.	1.7	3
100	Preparation and cytocompatibility of Ni-Ti-O nanospindles on NiTi alloy. Materials Letters, 2019, 257, 126697.	1.3	3
101	THE INFLUENCE OF ELECTROLYTE STIRRING ON ANODIC GROWTH OF Ni-Ti-O NANOPORES ON NiTi ALLOY. Surface Review and Letters, 2019, 26, 1850162.	0.5	3
102	Correlation between LncRNA Profiles in the Blood Clot Formed on Nano-Scaled Implant Surfaces and Osseointegration. Nanomaterials, 2021, 11, 674.	1.9	3
103	Exosomes derived from magnesium ionâ€”stimulated macrophages inhibit angiogenesis. Biomedical Materials (Bristol), 2022, 17, 045008.	1.7	2
104	INVESTIGATION ON ANTIBACTERIAL PROPERTY OF Cu-COATING ON PURE TITANIUM FABRICATED VIA PLASMA SURFACE ALLOYING. Modern Physics Letters B, 2013, 27, 1341017.	1.0	0
105	The cell responses on Sr-incorporated Naâ€“Tiâ€“O nano-network on titanium surface. International Journal of Modern Physics B, 0, , .	1.0	0