

# Xuanyong Liu

## List of Publications by Year in descending order

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214  
papers

11,998  
citations

22153

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36028

97  
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219  
all docs

219  
docs citations

219  
times ranked

10774  
citing authors

#	ARTICLE	IF	CITATIONS
1	Antibacterial activity of large-area monolayer graphene film manipulated by charge transfer. Scientific Reports, 2014, 4, 4359.	3.3	342
2	Synergistic effects of dual Zn/Ag ion implantation in osteogenic activity and antibacterial ability of titanium. Biomaterials, 2014, 35, 7699-7713.	11.4	340
3	Mechanism of apatite formation on wollastonite coatings in simulated body fluids. Biomaterials, 2004, 25, 1755-1761.	11.4	315
4	Biological actions of silver nanoparticles embedded in titanium controlled by micro-galvanic effects. Biomaterials, 2011, 32, 693-705.	11.4	307
5	The synergistic effect of hierarchical micro/nano-topography and bioactive ions for enhanced osseointegration. Biomaterials, 2013, 34, 3184-3195.	11.4	282
6	Osteogenic activity and antibacterial effects on titanium surfaces modified with Zn-incorporated nanotube arrays. Biomaterials, 2013, 34, 3467-3478.	11.4	269
7	Surface nano-functionalization of biomaterials. Materials Science and Engineering Reports, 2010, 70, 275-302.	31.8	244
8	Stimulation of bone growth following zinc incorporation into biomaterials. Biomaterials, 2014, 35, 6882-6897.	11.4	241
9	In vivo evaluation of plasma-sprayed wollastonite coating. Biomaterials, 2005, 26, 3455-3460.	11.4	218
10	Multifunctions of dual Zn/Mg ion co-implanted titanium on osteogenesis, angiogenesis and bacteria inhibition for dental implants. Acta Biomaterialia, 2017, 49, 590-603.	8.3	217
11	Apatite formed on the surface of plasma-sprayed wollastonite coating immersed in simulated body fluid. Biomaterials, 2001, 22, 2007-2012.	11.4	215
12	Enhanced osteointegration on tantalum-implanted polyetheretherketone surface with bone-like elastic modulus. Biomaterials, 2015, 51, 173-183.	11.4	206
13	Osteogenic activity and antibacterial effect of zinc ion implanted titanium. Colloids and Surfaces B: Biointerfaces, 2014, 117, 158-165.	5.0	205
14	InÂvitro and inÂvivo anti-biofilm effects of silver nanoparticles immobilized on titanium. Biomaterials, 2014, 35, 9114-9125.	11.4	205
15	Influence of sulfur content on bone formation and antibacterial ability of sulfonated PEEK. Biomaterials, 2016, 83, 115-126.	11.4	189
16	Enhanced Corrosion Resistance and Biocompatibility of Magnesium Alloy by Mg-Al-Layered Double Hydroxide. ACS Applied Materials & Interfaces, 2016, 8, 35033-35044.	8.0	173
17	Surface modification of biodegradable magnesium and its alloys for biomedical applications. International Journal of Energy Production and Management, 2015, 2, 135-151.	3.7	141
18	Enhanced Osseointegration of Hierarchical Micro/Nanotopographic Titanium Fabricated by Microarc Oxidation and Electrochemical Treatment. ACS Applied Materials & Interfaces, 2016, 8, 3840-3852.	8.0	129

#	ARTICLE	IF	CITATIONS
19	A strontium-incorporated nanoporous titanium implant surface for rapid osseointegration. <i>Nanoscale</i> , 2016, 8, 5291-5301.	5.6	128
20	Bioactive calcium silicate ceramics and coatings. <i>Biomedicine and Pharmacotherapy</i> , 2008, 62, 526-529.	5.6	127
21	Surface modification of biomaterials using plasma immersion ion implantation and deposition. <i>Interface Focus</i> , 2012, 2, 325-336.	3.0	123
22	Electron storage mediated dark antibacterial action of bound silver nanoparticles: Smaller is not always better. <i>Acta Biomaterialia</i> , 2013, 9, 5100-5110.	8.3	116
23	Surface thermal oxidation on titanium implants to enhance osteogenic activity and in vivo osseointegration. <i>Scientific Reports</i> , 2016, 6, 31769.	3.3	112
24	Plasma-treated nanostructured TiO <sub>2</sub> surface supporting biomimetic growth of apatite. <i>Biomaterials</i> , 2005, 26, 6143-6150.	11.4	110
25	Effect of Local Alkaline Microenvironment on the Behaviors of Bacteria and Osteogenic Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 42018-42029.	8.0	110
26	Bioactivity and cytocompatibility of zirconia (ZrO <sub>2</sub> ) films fabricated by cathodic arc deposition. <i>Biomaterials</i> , 2006, 27, 3904-3911.	11.4	106
27	Protection of magnesium alloys: From physical barrier coating to smart self-healing coating. <i>Journal of Alloys and Compounds</i> , 2021, 853, 157010.	5.5	106
28	Plasma sprayed wollastonite/TiO <sub>2</sub> composite coatings on titanium alloys. <i>Biomaterials</i> , 2002, 23, 4065-4077.	11.4	104
29	Improvement of surface bioactivity on titanium by water and hydrogen plasma immersion ion implantation. <i>Biomaterials</i> , 2005, 26, 6129-6135.	11.4	102
30	Antibacterial Surface Design of Titanium-Based Biomaterials for Enhanced Bacteria-Killing and Cell-Assisting Functions Against Periprosthetic Joint Infection. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 11162-11178.	8.0	95
31	Selective responses of human gingival fibroblasts and bacteria on carbon fiber reinforced polyetheretherketone with multilevel nanostructured TiO <sub>2</sub> . <i>Biomaterials</i> , 2016, 83, 207-218.	11.4	92
32	Calcium Plasma Implanted Titanium Surface with Hierarchical Microstructure for Improving the Bone Formation. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13053-13061.	8.0	90
33	Silver-nanoparticles-modified biomaterial surface resistant to staphylococcus: new insight into the antimicrobial action of silver. <i>Scientific Reports</i> , 2016, 6, 32699.	3.3	90
34	Zn/Ag micro-galvanic couples formed on titanium and osseointegration effects in the presence of S.Aureus. <i>Biomaterials</i> , 2015, 65, 22-31.	11.4	89
35	UV-irradiation-induced bioactivity on TiO <sub>2</sub> coatings with nanostructural surface. <i>Acta Biomaterialia</i> , 2008, 4, 544-552.	8.3	88
36	Multifunctional sulfonated polyetheretherketone coating with beta-defensin-14 for yielding durable and broad-spectrum antibacterial activity and osseointegration. <i>Acta Biomaterialia</i> , 2019, 86, 323-337.	8.3	83

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37	Multilevel surface engineering of nanostructured TiO <sub>2</sub> on carbon-fiber-reinforced polyetheretherketone. <i>Biomaterials</i> , 2014, 35, 5731-5740.	11.4	81
38	Enhanced Bioactivity and Bacteriostasis of Surface Fluorinated Polyetheretherketone. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 16824-16833.	8.0	79
39	Layer-Number Dependent Antibacterial and Osteogenic Behaviors of Graphene Oxide Electrophoretic Deposited on Titanium. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 12253-12263.	8.0	78
40	PEO/Mg-Al-LDH Composite Coating on Mg Alloy as a Zn/Mg Ion-Release Platform with Multifunctions: Enhanced Corrosion Resistance, Osteogenic, and Antibacterial Activities. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4112-4121.	5.2	76
41	Antibacterial property, angiogenic and osteogenic activity of Cu-incorporated TiO <sub>2</sub> coating. <i>Journal of Materials Chemistry B</i> , 2014, 2, 6738-6748.	5.8	75
42	Sealing the Pores of PEO Coating with Mg-Al Layered Double Hydroxide: Enhanced Corrosion Resistance, Cytocompatibility and Drug Delivery Ability. <i>Scientific Reports</i> , 2017, 7, 8167.	3.3	74
43	Plasma-sprayed CaTiSiO <sub>5</sub> ceramic coating on Ti-6Al-4V with excellent bonding strength, stability and cellular bioactivity. <i>Journal of the Royal Society Interface</i> , 2009, 6, 159-168.	3.4	71
44	Dose-response relationships between copper and its biocompatibility/antibacterial activities. <i>Journal of Trace Elements in Medicine and Biology</i> , 2019, 55, 127-135.	3.0	71
45	Osteogenesis, angiogenesis and immune response of Mg-Al layered double hydroxide coating on pure Mg. <i>Bioactive Materials</i> , 2021, 6, 91-105.	15.6	71
46	Effects of a hybrid micro/nanorod topography-modified titanium implant on adhesion and osteogenic differentiation in rat bone marrow mesenchymal stem cells. <i>International Journal of Nanomedicine</i> , 2013, 8, 257.	6.7	70
47	Balancing the Osteogenic and Antibacterial Properties of Titanium by Codoping of Mg and Ag: An in Vitro and in Vivo Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 17826-17836.	8.0	70
48	Antimicrobial and Osteogenic Properties of Silver-Ion-Implanted Stainless Steel. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 10785-10794.	8.0	70
49	Butyrate-inserted Ni-Ti layered double hydroxide film for H <sub>2</sub> O <sub>2</sub> -mediated tumor and bacteria killing. <i>Materials Today</i> , 2017, 20, 238-257.	14.2	70
50	Regulation of extracellular bioactive cations in bone tissue microenvironment induces favorable osteoimmune conditions to accelerate in situ bone regeneration. <i>Bioactive Materials</i> , 2021, 6, 2315-2330.	15.6	69
51	Immunomodulatory Effects of Calcium and Strontium Co-Doped Titanium Oxides on Osteogenesis. <i>Frontiers in Immunology</i> , 2017, 8, 1196.	4.8	67
52	A Novel Stimuli-Responsive Injectable Antibacterial Hydrogel to Achieve Synergetic Photothermal/Genetic-Targeted Therapy towards Uveal Melanoma. <i>Advanced Science</i> , 2021, 8, e2004721.	11.2	67
53	Antimicrobial activity and cytocompatibility of Ag plasma-modified hierarchical TiO <sub>2</sub> film on titanium surface. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 113, 134-145.	5.0	66
54	Antimicrobial and osteogenic effect of Ag-implanted titanium with a nanostructured surface. <i>International Journal of Nanomedicine</i> , 2012, 7, 875.	6.7	65

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55	Layered double hydroxide/poly-dopamine composite coating with surface heparinization on Mg alloys: improved anticorrosion, endothelialization and hemocompatibility. <i>Biomaterials Science</i> , 2018, 6, 1846-1858.	5.4	65
56	Biofunctionalization of a titanium surface with a nano-sawtooth structure regulates the behavior of rat bone marrow mesenchymal stem cells. <i>International Journal of Nanomedicine</i> , 2012, 7, 4459.	6.7	64
57	Plasmonic gold nanoparticles modified titania nanotubes for antibacterial application. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	64
58	Enhanced osteoblast responses to poly ether ether ketone surface modified by water plasma immersion ion implantation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 117, 89-97.	5.0	64
59	Oxidative stress-mediated selective antimicrobial ability of nano-VO <sub>2</sub> against Gram-positive bacteria for environmental and biomedical applications. <i>Nanoscale</i> , 2016, 8, 11907-11923.	5.6	64
60	Recent progress in superhydrophobic coating on Mg alloys: A general review. <i>Journal of Magnesium and Alloys</i> , 2021, 9, 1471-1486.	11.9	64
61	Morphology of apatite formed on surface of wollastonite coating soaked in simulate body fluid. <i>Materials Letters</i> , 2002, 57, 652-655.	2.6	60
62	Hemocompatibility and selective cell fate of polydopamine-assisted heparinized PEO/PLLA composite coating on biodegradable AZ31 alloy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 121, 451-460.	5.0	60
63	Sequential activation of heterogeneous macrophage phenotypes is essential for biomaterials-induced bone regeneration. <i>Biomaterials</i> , 2021, 276, 121038.	11.4	60
64	Hierarchical micro/nanostructured titanium with balanced actions to bacterial and mammalian cells for dental implants. <i>International Journal of Nanomedicine</i> , 2015, 10, 6659.	6.7	59
65	M2 macrophages contribute to osteogenesis and angiogenesis on nanotubular TiO <sub>2</sub> surfaces. <i>Journal of Materials Chemistry B</i> , 2017, 5, 3364-3376.	5.8	59
66	Osteogenesis Catalyzed by Titanium-Supported Silver Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 5149-5157.	8.0	57
67	Plasma surface modification of titanium for hard tissue replacements. <i>Surface and Coatings Technology</i> , 2004, 186, 227-233.	4.8	54
68	Antibacterial activity and cytocompatibility of titanium oxide coating modified by iron ion implantation. <i>Acta Biomaterialia</i> , 2014, 10, 4505-4517.	8.3	53
69	CVD Growth of Graphene on NiTi Alloy for Enhanced Biological Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 19876-19881.	8.0	53
70	Multifunctional Mn-containing titania coatings with enhanced corrosion resistance, osteogenesis and antibacterial activity. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5397.	5.8	51
71	How Oxygen-Containing Groups on Graphene Influence the Antibacterial Behaviors. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700228.	3.7	51
72	Bifunctional galvanics mediated selective toxicity on titanium. <i>Materials Horizons</i> , 2018, 5, 264-267.	12.2	51

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73	<i>In vitro</i> degradation, hemolysis, and cytocompatibility of PEO/PLLA composite coating on biodegradable AZ31 alloy. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015, 103, 342-354.	3.4	50
74	Enhanced apatite-forming ability and cytocompatibility of porous and nanostructured TiO <sub>2</sub> /CaSiO <sub>3</sub> coating on titanium. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 101, 83-90.	5.0	49
75	Selective Tumor Cell Inhibition Effect of Ni-Ti Layered Double Hydroxides Thin Films Driven by the Reversed pH Gradients of Tumor Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7843-7854.	8.0	49
76	Silicon-Doped Titanium Dioxide Nanotubes Promoted Bone Formation on Titanium Implants. <i>International Journal of Molecular Sciences</i> , 2016, 17, 292.	4.1	49
77	Combination types between graphene oxide and substrate affect the antibacterial activity. <i>Bioactive Materials</i> , 2018, 3, 341-346.	15.6	49
78	Nanostructural Surfaces with Different Elastic Moduli Regulate the Immune Response by Stretching Macrophages. <i>Nano Letters</i> , 2019, 19, 3480-3489.	9.1	49
79	Proliferation and gene expression of osteoblasts cultured in DMEM containing the ionic products of dicalcium silicate coating. <i>Biomedicine and Pharmacotherapy</i> , 2009, 63, 650-657.	5.6	47
80	Tantalum implanted entangled porous titanium promotes surface osseointegration and bone ingrowth. <i>Scientific Reports</i> , 2016, 6, 26248.	3.3	47
81	Mn-containing titanium surface with favorable osteogenic and antimicrobial functions synthesized by PIII&D. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 152, 376-384.	5.0	47
82	Minocycline hydrochloride loaded on titanium by graphene oxide: an excellent antibacterial platform with the synergistic effect of contact-killing and release-killing. <i>Biomaterials Science</i> , 2018, 6, 304-313.	5.4	47
83	Controllable and durable release of BMP-2-loaded 3D porous sulfonated polyetheretherketone (PEEK) for osteogenic activity enhancement. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 171, 668-674.	5.0	47
84	Acid-induced bioactive titania surface. <i>Journal of Biomedical Materials Research - Part A</i> , 2005, 75A, 888-894.	4.0	46
85	<i>In vitro</i> degradation behavior and cytocompatibility of biodegradable AZ31 alloy with PEO/HT composite coating. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 128, 44-54.	5.0	46
86	Cytocompatibility and antibacterial activity of titania nanotubes incorporated with gold nanoparticles. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 145, 597-606.	5.0	45
87	Characterization of plasma sprayed wollastonite powder and coatings. <i>Surface and Coatings Technology</i> , 2002, 153, 173-177.	4.8	44
88	Enhanced bioactivity and bacteriostasis effect of TiO <sub>2</sub> nanofilms with favorable biomimetic architectures on titanium surface. <i>RSC Advances</i> , 2013, 3, 11214.	3.6	44
89	Alkali-treated titanium selectively regulating biological behaviors of bacteria, cancer cells and mesenchymal stem cells. <i>Journal of Colloid and Interface Science</i> , 2014, 436, 160-170.	9.4	44
90	Antibacterial ability and hemocompatibility of graphene functionalized germanium. <i>Scientific Reports</i> , 2016, 6, 37474.	3.3	44

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91	Enhanced physicochemical and biological properties of C/Cu dual ions implanted medical titanium. <i>Bioactive Materials</i> , 2020, 5, 377-386.	15.6	44
92	Regulating the local pH level of titanium $\text{Mg}^{2+}/\text{Fe}$ layered double hydroxides films for enhanced osteogenesis. <i>Biomaterials Science</i> , 2018, 6, 1227-1237.	5.4	43
93	A facile and universal strategy to endow implant materials with antibacterial ability $\text{Ca}^{2+}/\text{Fe}^{2+}$ alkalinity disturbing bacterial respiration. <i>Biomaterials Science</i> , 2020, 8, 1815-1829.	5.4	43
94	Activating titanium oxide coatings for orthopedic implants. <i>Surface and Coatings Technology</i> , 2013, 233, 57-64.	4.8	42
95	Dual ions implantation of zirconium and nitrogen into magnesium alloys for enhanced corrosion resistance, antimicrobial activity and biocompatibility. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 148, 200-210.	5.0	42
96	Peroxidase-Like Activity of Ethylene Diamine Tetraacetic Acid and Its Application for Ultrasensitive Detection of Tumor Biomarkers and Circular Tumor Cells. <i>Analytical Chemistry</i> , 2017, 89, 666-672.	6.5	42
97	Biomimetic growth of apatite on hydrogen-implanted silicon. <i>Biomaterials</i> , 2004, 25, 5575-5581.	11.4	41
98	In Vitro and in Vivo Evaluation of Silicate-Coated Polyetheretherketone Fabricated by Electron Beam Evaporation. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 13197-13206.	8.0	40
99	Black Mn-containing layered double hydroxide coated magnesium alloy for osteosarcoma therapy, bacteria killing, and bone regeneration. <i>Bioactive Materials</i> , 2022, 17, 394-405.	15.6	40
100	Enhanced osteogenic activity of poly ether ether ketone using calcium plasma immersion ion implantation. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 142, 192-198.	5.0	39
101	Assembled gold nanorods for the photothermal killing of bacteria. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 173, 833-841.	5.0	39
102	Vacuum extraction enhances rhPDGF-BB immobilization on nanotubes to improve implant osseointegration in ovariectomized rats. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2014, 10, 1809-1818.	3.3	38
103	A surface-engineered multifunctional $\text{TiO}_2$ based nano-layer simultaneously elevates the corrosion resistance, osteoconductivity and antimicrobial property of a magnesium alloy. <i>Acta Biomaterialia</i> , 2019, 99, 495-513.	8.3	38
104	Chemically regulated bioactive ion delivery platform on a titanium surface for sustained controlled release. <i>Journal of Materials Chemistry B</i> , 2014, 2, 283-294.	5.8	37
105	Synergistic effects of immunoregulation and osteoinduction of ds-block elements on titanium surface. <i>Bioactive Materials</i> , 2021, 6, 191-207.	15.6	37
106	In vitro bioactivity and phase stability of plasma-sprayed nanostructured 3Y-TZP coatings. <i>Acta Biomaterialia</i> , 2009, 5, 2270-2278.	8.3	36
107	Microstructure and properties of Ag/N dual ions implanted titanium. <i>Surface and Coatings Technology</i> , 2011, 205, 5430-5436.	4.8	36
108	Ag-plasma modification enhances bone apposition around titanium dental implants: an animal study in Labrador dogs. <i>International Journal of Nanomedicine</i> , 2015, 10, 653.	6.7	36



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109	Plasma-sprayed Ceramic Coatings for Osseointegration. International Journal of Applied Ceramic Technology, 2013, 10, 1-10.	2.1	35
110	The prospect of layered double hydroxide as bone implants: A study of mechanical properties, cytocompatibility and antibacterial activity. Applied Clay Science, 2018, 165, 179-187.	5.2	35
111	Co-implantation of magnesium and zinc ions into titanium regulates the behaviors of human gingival fibroblasts. Bioactive Materials, 2021, 6, 64-74.	15.6	35
112	NIR-Triggered Crystal Phase Transformation of NiTi-Layered Double Hydroxides Films for Localized Chemothermal Tumor Therapy. Advanced Science, 2018, 5, 1700782.	11.2	34
113	Reactivity of plasma-sprayed wollastonite coating in simulated body fluid. Journal of Biomedical Materials Research Part B, 2002, 59, 259-264.	3.1	33
114	Plasma-sprayed wollastonite 2M/ZrO <sub>2</sub> composite coating. Surface and Coatings Technology, 2003, 172, 270-278.	4.8	33
115	Smart release of doxorubicin loaded on polyetheretherketone (PEEK) surface with 3D porous structure. Colloids and Surfaces B: Biointerfaces, 2018, 163, 175-183.	5.0	33
116	Sodium butyrate-modified sulfonated polyetheretherketone modulates macrophage behavior and shows enhanced antibacterial and osteogenic functions during implant-associated infections. Journal of Materials Chemistry B, 2019, 7, 5541-5553.	5.8	33
117	In-situ growth of layered double hydroxide films on biomedical magnesium alloy by transforming metal oxyhydroxide. Applied Surface Science, 2019, 496, 143690.	6.1	33
118	Molybdenum disulfide (MoS <sub>2</sub> ) nanosheets vertically coated on titanium for disinfection in the dark. Arabian Journal of Chemistry, 2020, 13, 1612-1623.	4.9	33
119	Light-induced bioactive TiO <sub>2</sub> surface. Applied Physics Letters, 2006, 88, 013905.	3.3	32
120	Antibacterial activity, osteogenic and angiogenic behaviors of copper-bearing titanium synthesized by PIII&D. Journal of Materials Chemistry B, 2016, 4, 1296-1309.	5.8	32
121	Antibacterial activity of an NIR-induced Zn ion release film. Journal of Materials Chemistry B, 2020, 8, 406-415.	5.8	32
122	Î <sup>2</sup> -CD/PEI/PVA composite hydrogels with superior self-healing ability and antibacterial activity for wound healing. Composites Part B: Engineering, 2022, 238, 109921.	12.0	32
123	Dissolution and mineralization of plasma-sprayed wollastonite coatings with different crystallinity. Surface and Coatings Technology, 2005, 200, 2420-2427.	4.8	31
124	Strontium delivery on topographical titanium to enhance bioactivity and osseointegration in osteoporotic rats. Journal of Materials Chemistry B, 2015, 3, 4790-4804.	5.8	31
125	Three-dimensional porous graphene nanosheets synthesized on the titanium surface for osteogenic differentiation of rat bone mesenchymal stem cells. Carbon, 2017, 125, 227-235.	10.3	31
126	Multi-scale hybrid modified coatings on titanium implants for non-cytotoxicity and antibacterial properties. Nanoscale, 2021, 13, 10587-10599.	5.6	30



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127	Nucleation and growth of calcium phosphate on Ca-implanted titanium surface. <i>Surface Science</i> , 2006, 600, 651-656.	1.9	29
128	Enhanced corrosion resistance and biocompatibility of magnesium alloy by hydroxyapatite/graphene oxide bilayer coating. <i>Materials Letters</i> , 2020, 264, 127322.	2.6	29
129	Mg-Fe LDH sealed PEO coating on magnesium for biodegradation control, antibacteria and osteogenesis. <i>Journal of Materials Science and Technology</i> , 2022, 105, 57-67.	10.7	29
130	Tuning the surface potential to reprogram immune microenvironment for bone regeneration. <i>Biomaterials</i> , 2022, 282, 121408.	11.4	29
131	Early apatite deposition and osteoblast growth on plasma-sprayed dicalcium silicate coating. <i>Journal of Biomedical Materials Research - Part A</i> , 2005, 74A, 356-365.	4.0	28
132	Antibacterial ability, cytocompatibility and hemocompatibility of fluorinated graphene. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 173, 681-688.	5.0	27
133	Self-assembled ferric oxyhydroxide nanosheet on PEO-coated magnesium alloy with photocatalytic/photothermal antibacterial and enhanced osteogenesis activities. <i>Chemical Engineering Journal</i> , 2022, 437, 135257.	12.7	27
134	Spacing-Dependent Antimicrobial Efficacy of Immobilized Silver Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 743-748.	4.6	26
135	Regulating corrosion reactions to enhance the anti-corrosion and self-healing abilities of PEO coating on magnesium. <i>Corrosion Science</i> , 2021, 192, 109840.	6.6	26
136	Mechanical Force Induced Self-Assembly of Chinese Herbal Hydrogel with Synergistic Effects of Antibacterial Activity and Immune Regulation for Wound Healing. <i>Small</i> , 2022, 18, e2201766.	10.0	26
137	Bioconductivity and mechanical properties of plasma-sprayed dicalcium silicate/zirconia composite coating. <i>Materials Science and Engineering C</i> , 2005, 25, 509-515.	7.3	25
138	Existence, release, and antibacterial actions of silver nanoparticles on Ag&ndash;P111 TiO <sub>2</sub> films with different nanotopographies. <i>International Journal of Nanomedicine</i> , 2014, 9, 3389.	6.7	25
139	Graphene oxide as a dual Zn/Mg ion carrier and release platform: enhanced osteogenic activity and antibacterial properties. <i>Journal of Materials Chemistry B</i> , 2018, 6, 2004-2012.	5.8	25
140	Petal effect-inspired superhydrophobic and highly adhesive coating on magnesium with enhanced corrosion resistance and biocompatibility. <i>Science China Materials</i> , 2018, 61, 629-642.	6.3	25
141	Corrosion Behavior and Biocompatibility of Diamond-like Carbon-Coated Zinc: An In Vitro Study. <i>ACS Omega</i> , 2021, 6, 9843-9851.	3.5	25
142	Achieving stem cell imaging and osteogenic differentiation by using nitrogen doped graphene quantum dots. <i>Journal of Materials Science: Materials in Medicine</i> , 2018, 29, 85.	3.6	24
143	Self-adjusting antibacterial properties of Ag-incorporated nanotubes on micro-nanostructured Ti surfaces. <i>Biomaterials Science</i> , 2019, 7, 4075-4087.	5.4	24
144	ZnO@ZnS nanorod-array coated titanium: Good to fibroblasts but bad to bacteria. <i>Journal of Colloid and Interface Science</i> , 2020, 579, 50-60.	9.4	24

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145	Improved in vitro angiogenic behavior of human umbilical vein endothelial cells with oxidized polydopamine coating. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 194, 111176.	5.0	23
146	Selective biofunctional modification of titanium implants for osteogenic and antibacterial applications. <i>Journal of Materials Chemistry B</i> , 2014, 2, 7475-7487.	5.8	22
147	Poly(styrenesulfonate)-Modified Ni-Ti Layered Double Hydroxide Film: A Smart Drug-Eluting Platform. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 24491-24501.	8.0	22
148	Nano Textured PEEK Surface for Enhanced Osseointegration. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 1279-1289.	5.2	22
149	Enhanced tendon to bone healing in rotator cuff tear by PLLA/CPS composite films prepared by a simple melt-pressing method: An in vitro and in vivo study. <i>Composites Part B: Engineering</i> , 2019, 165, 526-536.	12.0	22
150	A tailored positively-charged hydrophobic surface reduces the risk of implant associated infections. <i>Acta Biomaterialia</i> , 2020, 114, 421-430.	8.3	22
151	Enhanced osteogenic and selective antibacterial activities on micro-/nano-structured carbon fiber reinforced polyetheretherketone. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2944-2953.	5.8	21
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