Relationship between surface properties (roughness, we alloys and cell behaviour

Materials Science and Engineering C

23, 551-560

DOI: 10.1016/s0928-4931(03)00033-x

Citation Report

#	Article	IF	CITATIONS
1	Surface free energy and bacterial retention to saliva-coated dental implant materials—an in vitro study. Colloids and Surfaces B: Biointerfaces, 2004, 39, 199-205.	2.5	97
2	Nitinol surface roughness modulates in vitro cell response: a comparison between fibroblasts and osteoblasts. Materials Science and Engineering C, 2005, 25, 51-60.	3.8	82
3	Wettability and corrosion tests of diamond films grown on Ti6Al4V alloy. Surface and Coatings Technology, 2005, 194, 271-275.	2.2	27
4	Carbon plasma immersion ion implantation of nickel–titanium shape memory alloys. Biomaterials, 2005, 26, 2265-2272.	5.7	125
5	Investigation of nickel suppression and cytocompatibility of surface-treated nickel-titanium shape memory alloys by using plasma immersion ion implantation. Journal of Biomedical Materials Research - Part A, 2005, 72A, 238-245.	2.1	41
6	Adherent apatite coating on titanium substrate using chemical deposition. Journal of Biomedical Materials Research - Part A, 2005, 72A, 428-438.	2.1	57
7	Corrosion resistance, surface mechanical properties, and cytocompatibility of plasma immersion ion implantation-treated nickel-titanium shape memory alloys. Journal of Biomedical Materials Research - Part A, 2005, 75A, 256-267.	2.1	56
8	Surface characterization of completely degradable composite scaffolds. Journal of Materials Science: Materials in Medicine, 2005, 16, 1125-1130.	1.7	21
9	Response of osteoblastic cells to titanium submitted to three different surface treatments. Brazilian Oral Research, 2005, 19, 203-208.	0.6	19
10	Issues concerning the use of assays of cell adhesion to biomaterials. , 2005, , 745-762.		0
11	Mediation of Biomaterial–Cell Interactions by Adsorbed Proteins: A Review. Tissue Engineering, 2005, 11, 1-18.	4.9	1,464
12	Osteoblasts attachment on amorphous carbon films. Diamond and Related Materials, 2006, 15, 1300-1309.	1.8	14
13	A perspective on nanophase materials for orthopedic implant applications. Journal of Materials Chemistry, 2006, 16, 3737.	6.7	118
14	Stem cell attachment to layer-by-layer assembled TiO2 nanoparticle thin films. Biomaterials, 2006, 27, 4296-4303.	5.7	136
15	Study of the polyelectrolyte multilayer thin films' properties and correlation with the behavior of the human gingival fibroblasts. Materials Science and Engineering C, 2006, 26, 273-281.	3.8	40
16	Improvement of in vitro titanium bioactivity by three different surface treatments. Dental Materials, 2006, 22, 275-282.	1.6	94
17	Surface modification of titanium by etching in concentrated sulfuric acid. Dental Materials, 2006, 22, 1115-1120.	1.6	175
18	Influence of hydroxyapatite microstructure on human bone cell response. Journal of Biomedical Materials Research - Part A 2006, 78A 222-235	2.1	105

#	Article	IF	CITATIONS
19	Effects of applied voltages on hydroxyapatite coating of titanium by electrophoretic deposition. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 78B, 373-377.	1.6	64
20	Biomechanical and surface physico-chemical analyses of used osteosynthesis plates and screws—Potential for reuse in developing countries?. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 236-244.	1.6	13
21	A multiscale topography analysis of ground stainless steel and titanium alloys. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2007, 221, 1407-1420.	1.5	5
22	Effects of Chemical and Heat Treatments on Surface Characteristics and Biocompatibility of Titanium-Niobium Alloys. Materials Transactions, 2007, 48, 2978-2985.	0.4	7
23	Surface mechanical properties, corrosion resistance, and cytocompatibility of nitrogen plasma-implanted nickel–titanium alloys: A comparative study with commonly used medical grade materials. Journal of Biomedical Materials Research - Part A, 2007, 82A, 403-414.	2.1	56
24	Biomimetic Synthesis of Calcium Phosphate Materials on Alkaline-Treated Titanium. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5854-7.	0.5	3
25	Theoretical Investigation of Substrate Effect on Deliquescence Relative Humidity of NaCl Particles. Journal of Physical Chemistry A, 2007, 111, 633-639.	1.1	12
26	Laser surface treatment of hydroxyapatite for enhanced tissue integration: Surface characterization and osteoblastic interaction studies. Journal of Biomedical Materials Research - Part A, 2007, 81A, 920-929.	2.1	15
27	Cytotoxicity of polyethyleneimine (PEI), precursor base layer of polyelectrolyte multilayer films. Biomaterials, 2007, 28, 632-640.	5.7	184
28	The influence of surface energy on competitive protein adsorption on oxidized NiTi surfaces. Biomaterials, 2007, 28, 586-594.	5.7	159
29	Specific proliferation rates of human osteoblasts on calcium phosphate surfaces with variable concentrations of α-TCP. Materials Science and Engineering C, 2007, 27, 61-66.	3.8	9
30	In vitro osteogenesis on a microstructured titanium surface with additional submicron-scale topography. Clinical Oral Implants Research, 2007, 18, 333-344.	1.9	38
31	The influence of implant surface properties on cell adhesion and proliferation. Journal of Materials Science: Materials in Medicine, 2007, 18, 465-473.	1.7	68
32	Ta-doped multifunctional bioactive nanostructured films. Surface and Coatings Technology, 2008, 202, 3615-3624.	2.2	35
33	Surface energy of hydroxyapatite and β-tricalcium phosphate ceramics driving serum protein adsorption and osteoblast adhesion. Journal of Materials Science: Materials in Medicine, 2008, 19, 2307-2316.	1.7	114
34	Oxidized NiTi surfaces enhance differentiation of osteoblastâ€like cells. Journal of Biomedical Materials Research - Part A, 2008, 85A, 108-114.	2.1	14
35	Evaluation of cell affinity on poly(<scp>L</scp> â€lactide) and poly(εâ€caprolactone) blends and on PLLAâ€ <i>b</i> â€PCL diblock copolymer surfaces. Journal of Biomedical Materials Research - Part A, 2008, 87A, 405-417.	2.1	34
36	Surface Nanopatterning to Control Cell Growth. Advanced Materials, 2008, 20, 1488-1492.	11.1	155

#	Article	IF	CITATIONS
37	Physico-chemical and thermodynamic aspects of fibroblastic attachment on RGDS-modified chitosan membranes. Colloids and Surfaces B: Biointerfaces, 2008, 61, 216-223.	2.5	18
38	Factors affecting the measurement of roughness factor of surfaces and its implications for wetting studies. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 323, 83-93.	2.3	63
39	Improving the biocompatibility of NiTi alloy by chemical treatments: An in vitro evaluation in 3T3 human fibroblast cell. Materials Science and Engineering C, 2008, 28, 1117-1122.	3.8	25
40	Effect of nitride film coatings on cell compatibility. Dental Materials, 2008, 24, 986-993.	1.6	65
41	Response of fibroblast activity and polyelectrolyte multilayer films coating titanium. Dental Materials, 2008, 24, 1025-1035.	1.6	48
42	Dependence of the Quality of Adhesion between Poly(dimethylsiloxane) and Glass Surfaces on the Conditions of Treatment with Oxygen Plasma. Langmuir, 2008, 24, 13218-13224.	1.6	50
43	Wettability of Rough Polymer, Metal and Oxide Surfaces as Well as of Composite Surfaces. Journal of Adhesion Science and Technology, 2008, 22, 1893-1905.	1.4	8
44	Direct Bonding of Ferroelectrics. Ferroelectrics, 2008, 373, 51-68.	0.3	0
45	Multiscale analysis of abrasion damage on stainless steel. Surface Engineering, 2008, 24, 8-17.	1.1	10
46	Surface Properties and Biocompatibility of Acid-etched Titanium. Dental Materials Journal, 2008, 27, 415-421.	0.8	70
47	Surface Energy of Modified Nanoclays and Its Effect on Polymer/Clay Nanocomposites. Journal of Adhesion Science and Technology, 2009, 23, 663-688.	1.4	54
48	Ti6Ta4Sn Alloy and Subsequent Scaffolding for Bone Tissue Engineering. Tissue Engineering - Part A, 2009, 15, 3151-3159.	1.6	58
49	Biocompatibility of Nitinol for biomedical applications. , 2009, , 194-233.		14
50	Modification of Passive Layer on TiNbZrTa Alloy in Simulated Body Fluid (SBF) at Various pH. Key Engineering Materials, 2009, 415, 17-20.	0.4	0
51	Initiated CVD of Poly(2â€Hydroxyethyl Methacrylate) Hydrogels: Synthesis, Characterization and Inâ€vitro Biocompatibility. Chemical Vapor Deposition, 2009, 15, 150-155.	1.4	35
52	Bioactivity and osteoblast response of the microâ€arc oxidized zirconia films. Journal of Biomedical Materials Research - Part A, 2009, 88A, 117-127.	2.1	53
53	Correlation between rate of bony ingrowth to stainless steel, pure titanium, and titanium alloy implants <i>in vivo</i> and formation of hydroxyapetite on their surfaces <i>in vitro</i> . Journal of Biomedical Materials Research - Part A, 2009, 91A, 1006-1009.	2.1	15
54	<i>In vitro</i> studies on the influence of surface modification of Ni–Ti alloy on human bone cells. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1596-1608.	2.1	15

#	Article	IF	Citations
55	Effect of Nitinol surface treatments on its physicoâ€chemical properties. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 337-347.	1.6	19
56	Influence of argon-ion bombardment of titanium surfaces on the cell behavior. Surface and Coatings Technology, 2009, 203, 1765-1770.	2.2	22
57	Determination of the particle interactions, rheology and the surface roughness relationship for dental restorative ceramics. Journal of the European Ceramic Society, 2009, 29, 2959-2967.	2.8	8
58	Pulsed laser polishing of micro-milled Ti6Al4V samples. Journal of Manufacturing Processes, 2009, 11, 74-81.	2.8	139
59	Pulsed laser deposition of hydroxyapatite film on laser gas nitriding NiTi substrate. Applied Surface Science, 2009, 255, 9889-9892.	3.1	15
60	A new approach to graft bioactive polymer on titanium implants: Improvement of MG 63 cell differentiation onto this coating. Acta Biomaterialia, 2009, 5, 124-133.	4.1	91
61	Gene expression profile on chitosan/rhBMP-2 films: A novel osteoinductive coating for implantable materials. Acta Biomaterialia, 2009, 5, 2633-2646.	4.1	34
62	Improved bone-forming functionality on diameter-controlled TiO2 nanotube surface. Acta Biomaterialia, 2009, 5, 3215-3223.	4.1	528
63	Doping of a high calcium oxide metaphosphate glass with titanium dioxide. Journal of Non-Crystalline Solids, 2009, 355, 991-1000.	1.5	50
64	Effects of nanotopography on stem cell phenotypes. World Journal of Stem Cells, 2009, 1, 55.	1.3	77
65	Enhanced surface roughness and corrosion resistance of NiTi alloy by anodization in diluted HF solution. Smart Materials and Structures, 2009, 18, 024003.	1.8	16
66	Structure and properties of strontium-doped phosphate-based glasses. Journal of the Royal Society Interface, 2009, 6, 435-446.	1.5	135
67	Interactions between Saos-2 cells and microtextured amorphous diamond or amorphous diamond hybrid coated surfaces with different wettability properties. Diamond and Related Materials, 2009, 18, 1294-1300.	1.8	8
68	Nanoporous Titania Coating of Microwell Chips for Stem Cell Culture and Analysis. Journal of Biomechanical Science and Engineering, 2010, 5, 272-279.	0.1	28
69	Effect of nano-topographical features of Ti/TiO2 electrode surface on cell response and electrochemical stability in artificial saliva. Bioelectrochemistry, 2010, 79, 122-129.	2.4	84
70	TiO2 nanotube structures for enhanced cell and biological functionality. Jom, 2010, 62, 50-55.	0.9	20
71	Formation of bioceramic coatings containing hydroxyapatite on the titanium substrate by microâ€arc oxidation coupled with electrophoretic deposition. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 95B, 365-373.	1.6	26
72	Suppressed proliferation of mouse osteoblast-like cells by a rough-surfaced substrate leads to low differentiation and mineralization. Materials Science and Engineering C, 2010, 30, 1-7.	3.8	32

#	Article	IF	CITATIONS
73	Impaired bacterial attachment to light activated Ni–Ti alloy. Materials Science and Engineering C, 2010, 30, 225-234.	3.8	9
74	Effect of Ta2O5/TiO2 thin film on mechanical properties, corrosion and cell behavior of the NiTi alloy implanted with tantalum. Materials Science and Engineering C, 2010, 30, 1227-1235.	3.8	49
75	Effect of surface roughness parameters on thermally sprayed PEEK coatings. Surface and Coatings Technology, 2010, 204, 3567-3572.	2.2	61
76	Spatial organization of osteoblast fibronectin matrix on titanium surfaces: Effects of roughness, chemical heterogeneity and surface energy. Acta Biomaterialia, 2010, 6, 291-301.	4.1	102
77	Investigating wettability alteration due to asphaltene precipitation: Imprints in surface multifractal characteristics. Applied Surface Science, 2010, 256, 6466-6472.	3.1	58
78	Protein adsorption and biomimetic mineralization behaviors of PLL–DNA multilayered films assembled onto titanium. Applied Surface Science, 2010, 257, 538-546.	3.1	35
79	Ex vivo expansion of human circulating myogenic progenitors on cluster-assembled nanostructured TiO2. Biomaterials, 2010, 31, 5385-5396.	5.7	21
80	Surface characterization and in vitro biocompatibility assessment of photosensitive polyimide films. Colloids and Surfaces B: Biointerfaces, 2010, 76, 505-511.	2.5	32
81	Impact of Nanoscale Roughness of Titanium Thin Film Surfaces on Bacterial Retention. Langmuir, 2010, 26, 1973-1982.	1.6	177
82	Behaviors of NIH-3T3 Fibroblasts on Graphene/Carbon Nanotubes: Proliferation, Focal Adhesion, and Gene Transfection Studies. ACS Nano, 2010, 4, 6587-6598.	7.3	395
83	A comparative study on titania layers formed on Ti, Ti-6Al-4V and NiTi shape memory alloy through a low temperature oxidation process. Surface and Coatings Technology, 2010, 205, 92-101.	2.2	32
84	Relative influence of surface topography and surface chemistry on cell response to bone implant materials. Part 1: Physico-chemical effects. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2010, 224, 1471-1486.	1.0	76
85	Cell/Material Interfaces: Influence of Surface Chemistry and Surface Topography on Cell Adhesion. Journal of Adhesion Science and Technology, 2010, 24, 831-852.	1.4	226
86	Effects of nanometric roughness on surface properties and fibroblast's initial cytocompatibilities of Ti6Al4V. Biointerphases, 2011, 6, 87-97.	0.6	21
87	Antibacterial effect and cytocompatibility of nano-structured TiO2 film containing Cl. Dental Materials Journal, 2011, 30, 790-798.	0.8	10
88	A Study of Adhesion of Silicon Dioxide on Polymeric Substrates for Optoelectronic Applications. , $2011,,.$		0
89	<i>In vivo</i> investigation on connective tissue healing to polished surfaces with different surface wettability. Clinical Oral Implants Research, 2011, 22, 699-705.	1.9	40
90	Tribological characterization of a biocompatible thin film of UHMWPE on Ti6Al4V and the effects of PFPE as top lubricating layer. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 953-960	1.5	48

ARTICLE IF CITATIONS Biofunctional calcium titanate coating on titanium by simple chemical treatment process using calcium-hydroxide slurryâ€"Effects of the heating temperatures. Progress in Organic Coatings, 2011, 70, 1.9 16 353-357. Effects of LP-MOCVD prepared TiO2 thin films on the in vitro behavior of gingival fibroblasts. Materials Chemistry and Physics, 2011, 125, 485-492. Hemocompatibility investigation of the NiTi alloy implanted with tantalum. Journal of Materials 1.7 21 Science: Materials in Medicine, 2011, 22, 2311-2318. Surface modification of titanium by using plasmaâ€induced graftâ€polymerization. Surface and Interface 0.8 Analysis, 2011, 43, 1566-1574. Highly Bioactive 8 nm Hydrothermal TiO₂Nanotubes Elicit Enhanced Bone Cell Response. 1.6 12 Advanced Engineering Materials, 2011, 13, B88. Responses of bone-forming cells on pre-immersed Zr-based bulk metallic glasses: Effects of 4.1 composition and roughness. Acta Biomaterialia, 2011, 7, 395-405. Plasma-assisted surface modification of organic biopolymers to prevent bacterial attachment. Acta 4.1 254 Biomaterialia, 2011, 7, 2015-2028. Surface characterization of anodized zirconium for biomedical applications. Applied Surface Science, 3.1 56 2011, 257, 6397-6405. Superhydrophobic hierarchical surfaces fabricated by anodizing of oblique angle deposited Al–Nb 3.1 19 alloy columnar films. Applied Surface Science, 2011, 257, 8282-8288. Effect of two-step functionalization of Ti by chemical processes on protein adsorption. Applied 3.1 Surface Science, 2011, 257, 8196-8204. Initiated chemical vapor deposition of poly(2-hydroxyethyl methacrylate) hydrogels. Thin Solid Films, 101 0.8 11 2011, 519, 4415-4417. The Effect of Exposed Glass Fibers and Particles of Bioactive Glass on the Surface Wettability of 1.1 Composite Implants. International Journal of Biomaterials, 2011, 2011, 1-11. Role of materials surface topography on mammalian cell response. International Materials Reviews, 103 9.4 139 2011, 56, 243-266. Determinants of cell–material crosstalk at the interface: towards engineering of cell instructive 104 1.5 materials. Journal of the Royal Society Interface, 2012, 9, 2017-2032. Air-directed attachment of coccoid bacteria to the surface of superhydrophobic lotus-like titanium. 105 0.8 125 Biofouling, 2012, 28, 539-550. Interactive Fibroblast-Keratinocyte Co-cultures: An<i>In Vivo</i>-Like Test Platform for Dental Implant-Based Soft Tissue Integration. Tissue Engineering - Part C: Methods, 2012, 18, 785-796. Biomimetic and Electrodeposited Calcium-Phosphates Coatings on Ti - Formation, Surface 8 Characterization, Biological Response., 0,,. An Innovative Non-contact Method to Determine Surface Free Energy on Micro-areas. Journal of 1.4

CITATION REPORT

7

Adhesion Science and Technology, 2012, 26, 131-150.

107

#

91

93

94

95

97

#	Article	IF	CITATIONS
109	Laser surface modification of PEEK. Applied Surface Science, 2012, 258, 9437-9442.	3.1	126
110	Fabrication, characterization and wear corrosion testing of bioactive hydroxyapatite/nano-TiO2 composite coatings on anodic Ti–6Al–4V substrate for biomedical applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 810-818.	1.7	54
111	Osseointegration of porous titanium modified by diamond-like carbon and carbon nitride. Diamond and Related Materials, 2012, 22, 128-135.	1.8	15
112	Cell Adhesion to PEEK Treated by Plasma Immersion Ion Implantation and Deposition for Active Medical Implants. Plasma Processes and Polymers, 2012, 9, 355-362.	1.6	56
113	Surface characteristic and cell response of CVD SiC coating for carbon/carbon composites used for hip arthroplasty. Surface and Interface Analysis, 2012, 44, 1319-1323.	0.8	9
114	Enhancement of bony inâ€growth to metal implants by combining controlled hydroxyapatite coating and heat treatment. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1668-1672.	2.1	6
115	Osteoblast response on Ti―and Zrâ€based bulk metallic glass surfaces after sand blasting modification. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1721-1728.	1.6	29
116	Formation and biocorrosion behavior of Zr-Al-Co-Nb bulk metallic glasses. Science Bulletin, 2012, 57, 1723-1727.	1.7	11
117	Attachment behaviour of Escherichia coli K12 and Salmonella Typhimurium P6 on food contact surfaces for food transportation. Food Microbiology, 2012, 31, 139-147.	2.1	23
118	Use of polyelectrolyte thin films to modulate Osteoblast response to microstructured titanium surfaces. Biomaterials, 2012, 33, 5267-5277.	5.7	33
119	In vitro and in vivo bioactivity of CoBlast hydroxyapatite coating and the effect of impaction on its osteoconductivity. Biotechnology Advances, 2012, 30, 352-362.	6.0	38
120	An easy way to measure surface free energy by drop shape analysis. Measurement: Journal of the International Measurement Confederation, 2012, 45, 317-324.	2.5	16
121	Osteoblast behavior on TiO2 microgrooves prepared by soft-lithography and sol–gel methods. Materials Science and Engineering C, 2012, 32, 742-748.	3.8	11
122	A new biocompatible coating layer applied on titanium substrates using a modified zinc phosphatizing method. Surface and Coatings Technology, 2012, 206, 2207-2212.	2.2	29
123	Endothelial cell adhesion on polyelectrolyte multilayer films functionalised with fibronectin and collagen. Chemical Papers, 2012, 66, .	1.0	13
124	Ni ion release, osteoblast–material interactions, and hemocompatibility of hafniumâ€implanted NiTi alloy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 646-659.	1.6	37
125	Comparative Analysis of Energetic Properties of Ti6Al4V Titanium and EN-AW-2017A(PA6) Aluminum Alloy Surface Layers for an Adhesive Bonding Application. Ozone: Science and Engineering, 2013, 35, 220-228.	1.4	26
126	Influence of acid-etching after grit-blasted on osseointegration of titanium dental implants: in vitro and in vivo studies. Journal of Materials Science: Materials in Medicine, 2013, 24, 2047-2055.	1.7	62

#	Article	IF	CITATIONS
127	Antimicrobial effects of oxygen plasma modified medical grade Ti–6Al–4V alloy. Vacuum, 2013, 89, 271-279.	1.6	12
128	Influence of Extracellular Matrix Proteins and Substratum Topography on Corneal Epithelial Cell Alignment and Migration. Tissue Engineering - Part A, 2013, 19, 1713-1722.	1.6	24
129	Surface modification of polymers by plasma treatments for the enhancement of biocompatibility and controlled drug release. Surface and Coatings Technology, 2013, 233, 99-107.	2.2	192
130	Understanding the role of nano-topography on the surface of a bone-implant. Biomaterials Science, 2013, 1, 135-151.	2.6	61
131	Biocompatibility of microbially reduced graphene oxide in primary mouse embryonic fibroblast cells. Colloids and Surfaces B: Biointerfaces, 2013, 105, 58-66.	2.5	73
132	Tunable surface free energies of functionalized molecular layers on Si surfaces for microfluidic immunosensor applications. Applied Surface Science, 2013, 271, 77-85.	3.1	16
133	Surface modification and adhesion improvement of polyester films. Open Chemistry, 2013, 11, 35-45.	1.0	15
134	Surface properties of polyurethane composites for biomedical applications. Applied Surface Science, 2013, 270, 553-560.	3.1	24
135	Cell response and corrosion behavior of electrodeposited diamond-like carbon films on nanostructured titanium. Corrosion Science, 2013, 66, 169-176.	3.0	19
136	Evaluation of wettability and surface energy of native Nitinol surfaces in relation to hemocompatibility. Materials Science and Engineering C, 2013, 33, 127-132.	3.8	24
137	Thin Polymer Brush Decouples Biomaterial's Micro-/Nanotopology and Stem Cell Adhesion. Langmuir, 2013, 29, 13843-13852.	1.6	31
139	Bioactive plasma electrolytic oxidation coatings—The role of the composition, microstructure, and electrochemical stability. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1524-1537.	1.6	39
140	Nuclear and cellular alignment of primary corneal epithelial cells on topography. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1069-1079.	2.1	22
141	The Study of Surface Modification and Biocompatibility of Porous Titanium. Advanced Materials Research, 2013, 647, 104-110.	0.3	О
142	Bio-Properties of Zr-Based BMGMC as Potential Hard Tissue Implants. Materials Science Forum, 0, 745-746, 754-760.	0.3	2
143	Low Pressure Radio-Frequency Oxygen Plasma Induced Oxidation of Titanium – Surface Characteristics and Biological Effects. PLoS ONE, 2013, 8, e84898.	1.1	9
144	Biocorrosion and biocompatibility of Zr–Cu–Fe–Al bulk metallic glasses. Surface and Interface Analysis, 2013, 45, 1714-1720.	0.8	24
145	<i>In vitro</i> response of preosteoblastic MG63 cells on Niâ€free Ti shape memory substrates. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 709-720.	1.6	10

#	Article	IF	CITATIONS
146	Influence of a layerâ€byâ€layerâ€assembled multilayer of antiâ€CD34 antibody, vascular endothelial growth factor, and heparin on the endothelialization and anticoagulation of titanium surface. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1144-1157.	2.1	28
147	Effect of Gas-Wetness of Cores on Imbibition. Journal of Dispersion Science and Technology, 2013, 34, 295-299.	1.3	0
148	Synthesis, characterization and mechanical properties of biodegradable magnesium alloys. Emerging Materials Research, 2013, 2, 45-52.	0.4	4
149	Ti6Al4V coating for carbon/carbon composites synthesized by magnetron sputtering: microstructure and <i>inâ€vitro</i> biotests. Surface and Interface Analysis, 2013, 45, 973-977.	0.8	6
150	Verifying the functional ability of microstructured surfaces by model-based testing. Measurement Science and Technology, 2014, 25, 094012.	1.4	4
151	Spine Interbody Implants: Material Selection and Modification, Functionalization and Bioactivation of Surfaces to Improve Osseointegration. Orthopaedic Surgery, 2014, 6, 81-89.	0.7	203
152	Blood and fibroblast responses to thermoset Bis <scp>GMA</scp> – <scp>TEGDMA</scp> /glass fiberâ€reinforced composite implants <i>in vitro</i> . Clinical Oral Implants Research, 2014, 25, 843-851.	1.9	16
153	Differential response of human gingival fibroblasts to titanium―and titaniumâ€zirconiumâ€modified surfaces. Journal of Periodontal Research, 2014, 49, 425-436.	1.4	58
154	Nanostructured Titanium Surface Obtained by Electrochemical Treatment. Materials Science Forum, 2014, 775-776, 19-23.	0.3	0
155	In vitro blood and fibroblast responses to BisGMA–TEGDMA/bioactive glass composite implants. Journal of Materials Science: Materials in Medicine, 2014, 25, 151-162.	1.7	11
156	Characterization of the Ti-10Nb-10Zr-5Ta Alloy for Biomedical Applications. Part 2: Wettability, Tribological Performance and Biocompatibility. Journal of Materials Engineering and Performance, 2014, 23, 326-332.	1.2	7
157	Incorporation of Ca and P on anodized titanium surface: Effect of high current density. Materials Science and Engineering C, 2014, 37, 223-231.	3.8	47
158	Structuration, selective dispersion and compatibilizing effect of (nano)fillers in polymer blends. Progress in Polymer Science, 2014, 39, 1526-1563.	11.8	432
159	Bioactive Supramolecular Peptide Nanofibers for Regenerative Medicine. Advanced Healthcare Materials, 2014, 3, 1357-1376.	3.9	90
160	Mussel-Inspired Dopamine- and Plant-Based Cardanol-Containing Polymer Coatings for Multifunctional Filtration Membranes. ACS Applied Materials & Interfaces, 2014, 6, 21297-21307.	4.0	82
161	LDI-MS examination of oxygen plasma modified polymer for designing tailored implant biointerfaces. RSC Advances, 2014, 4, 26240-26243.	1.7	11
162	Enhancing surface characteristics of Ti–6Al–4V for bio-implants using integrated anodization and thermal oxidation. Journal of Materials Chemistry B, 2014, 2, 3597.	2.9	61
163	Preparation and characterization of bioactive and degradable composites containing ordered mesoporous calcium-magnesium silicate and poly(l-lactide). Applied Surface Science, 2014, 317, 1090-1099.	3.1	9

#	Article	IF	CITATIONS
164	Long-term antibiotic delivery by chitosan-based composite coatings with bone regenerative potential. Applied Surface Science, 2014, 317, 56-66.	3.1	76
165	The effect of graphene substrate on osteoblast cell adhesion and proliferation. Journal of Biomedical Materials Research - Part A, 2014, 102, 3282-3290.	2.1	57
166	Characterization of hydroxyapatite containing a titania layer formed by anodization coupled with blasting. Acta Odontologica Scandinavica, 2014, 72, 989-998.	0.9	2
167	Biocompatible Ni-free Zr-based bulk metallic glasses with high-Zr-content: Compositional optimization for potential biomedical applications. Materials Science and Engineering C, 2014, 44, 400-410.	3.8	61
168	Biomimetic and Cell-Mediated Mineralization of Hydroxyapatite by Carrageenan Functionalized Graphene Oxide. ACS Applied Materials & amp; Interfaces, 2014, 6, 3132-3140.	4.0	130
169	Carbon Nanotube Thin Film-Supported Fibroblast and Pluripotent Stem Cell Growth. BioNanoScience, 2014, 4, 288-300.	1.5	5
170	Directing the fate of human and mouse mesenchymal stem cells by hydroxyl–methyl mixed self-assembled monolayers with varying wettability. Journal of Materials Chemistry B, 2014, 2, 4794.	2.9	73
171	Influence of Electropolishing and Magnetoelectropolishing on Corrosion and Biocompatibility of Titanium Implants. Journal of Materials Engineering and Performance, 2014, 23, 3907-3915.	1.2	31
172	Enhanced osteoblast responses to poly ether ether ketone surface modified by water plasma immersion ion implantation. Colloids and Surfaces B: Biointerfaces, 2014, 117, 89-97.	2.5	64
173	Laser surface modification of ultra-high-molecular-weight polyethylene (UHMWPE) for biomedical applications. Applied Surface Science, 2014, 302, 236-242.	3.1	59
174	Interface between grown osteoblast and micro-arc oxidized bioactive layers. Surface and Coatings Technology, 2014, 259, 185-192.	2.2	23
175	Sulfonate groups grafted on Ti6Al4V favor MC3T3-E1 cell performance in serum free medium conditions. Materials Science and Engineering C, 2014, 39, 196-202.	3.8	28
176	Anodization of NiTi alloy in an ethylene glycol electrolyte. Surface and Coatings Technology, 2014, 252, 142-147.	2.2	15
177	Effect of nanodiamond modification of siloxane surfaces on stem cell behaviour. Journal of Physics: Conference Series, 2014, 558, 012056.	0.3	4
178	Effects of duty cycle and electrolyte concentration on the microstructure and biocompatibility of plasma electrolytic oxidation treatment on zirconium metal. Thin Solid Films, 2015, 596, 87-93.	0.8	28
179	Surface modification induced phase transformation and structure variation on the rapidly solidified recast layer of titanium. Materials Characterization, 2015, 106, 463-469.	1.9	23
180	Characteristics of morphology, structure and composition of titanium surface under its modification by electrochemical polarization in phosphateâ€alkaline solutions. Surface and Interface Analysis, 2015, 47, 1081-1097.	0.8	6
181	Analysis of tractionâ€free assumption in highâ€resolution EBSD measurements. Journal of Microscopy, 2015, 260, 73-85.	0.8	27

#	Article	IF	CITATIONS
182	Wetting Behavior of Dental Implants. , 2015, , .		2
183	Surface Modifications and Their Effects on Titanium Dental Implants. BioMed Research International, 2015, 2015, 1-11.	0.9	391
184	Advances in Shape Memory Polyurethanes and Composites: A Review. Polymer-Plastics Technology and Engineering, 2015, 54, 1410-1423.	1.9	49
185	Tailoring of PEEK bioactivity for improved cell interaction: plasma treatment in action. RSC Advances, 2015, 5, 41428-41436.	1.7	50
186	Role of α2β1 integrins in mediating cell shape on microtextured titanium surfaces. Journal of Biomedical Materials Research - Part A, 2015, 103, 564-573.	2.1	38
187	Characterization of gas tunnel type plasma sprayed hydroxyapatite–nanostructure titania composite coatings. Applied Surface Science, 2015, 347, 48-56.	3.1	34
188	Antibiotic-loaded chitosan–Laponite films for local drug delivery by titanium implants: cell proliferation and drug release studies. Journal of Materials Science: Materials in Medicine, 2015, 26, 269.	1.7	53
189	Physical and biological properties of the ion beam irradiated PMMA-based composite films. Applied Surface Science, 2015, 329, 116-126.	3.1	28
190	Surface modification of Ni–Ti alloys for stent application after magnetoelectropolishing. Materials Science and Engineering C, 2015, 50, 37-44.	3.8	33
191	Biofunctionalization of REDV elastin-like recombinamers improves endothelialization on CoCr alloy surfaces for cardiovascular applications. Colloids and Surfaces B: Biointerfaces, 2015, 127, 22-32.	2.5	48
192	Impact of surface chemistry and topography on the function of antigen presenting cells. Biomaterials Science, 2015, 3, 424-441.	2.6	71
193	A Novel Investigation of the Formation of Titanium Oxide Nanotubes on Thermally Formed Oxide of Ti-6Al-4V. Journal of Oral Implantology, 2015, 41, 523-531.	0.4	21
194	Nanomechanical Characterization and Protein Adsorption of Cold-Rolled Zirconium Alloy. Jom, 2015, 67, 726-732.	0.9	11
195	Enhanced osteoblast cells adhesion, spreading, and proliferation to surface-carboxylated poly(etheretherketone). Journal of Bioactive and Compatible Polymers, 2015, 30, 302-318.	0.8	20
196	Bone-like apatite coating on functionalized poly(etheretherketone) surface via tailored silanization layers technique. Materials Science and Engineering C, 2015, 55, 512-523.	3.8	58
197	Nano-hydroxyapatite-coated metal-ceramic composite of iron-tricalcium phosphate: Improving the surface wettability, adhesion and proliferation of mesenchymal stem cells in vitro. Colloids and Surfaces B: Biointerfaces, 2015, 135, 386-393.	2.5	41
198	Electrochemical characterization and in-vitro bio-assessment of AZ31B and AZ91E alloys as biodegradable implant materials. Journal of Materials Science: Materials in Medicine, 2015, 26, 217.	1.7	23
199	Fabrication of strongly attached hydroxyapatite coating on titanium by hydrothermal treatment of Ti–Zn–PO4 coated titanium in CaCl2 solution. Journal of Materials Science: Materials in Medicine, 2015, 26, 212.	1.7	14

#	Article	IF	CITATIONS
200	A combination of CO2 laser and plasma surface modification of poly(etheretherketone) to enhance osteoblast response. Applied Surface Science, 2015, 344, 79-88.	3.1	48
201	Anti-biofilm formation of a novel stainless steel against Staphylococcus aureus. Materials Science and Engineering C, 2015, 51, 356-361.	3.8	29
202	A Nitinol "U-Clip―versus Sutured Arteriovenous Anastomosis: Local Tissue Response and Intimal Hyperplasia Development in a Sheep Model. European Journal of Vascular and Endovascular Surgery, 2015, 49, 344-352.	0.8	3
203	Ti–O–N/Ti composite coating on Ti–6Al–4V: surface characteristics, corrosion properties and cellular responses. Journal of Materials Science: Materials in Medicine, 2015, 26, 144.	1.7	6
204	Regulation of stem cell fate by nanomaterial substrates. Nanomedicine, 2015, 10, 829-847.	1.7	65
205	Surface modification of Tiâ^'49.8at%Ni alloy by Ti ion implantation: phase transformation, corrosion, and cell behavior. International Journal of Minerals, Metallurgy and Materials, 2015, 22, 868-875.	2.4	3
206	Titanium in Biomedical Applications—Properties and Fabrication: A Review. Journal of Biomaterials and Tissue Engineering, 2015, 5, 593-619.	0.0	200
207	Generation of functionalized polymer nanolayer on implant surface via initiated chemical vapor deposition (iCVD). Journal of Colloid and Interface Science, 2015, 439, 34-41.	5.0	29
208	Phosphate chemical conversion coatings on metallic substrates for biomedical application: A review. Materials Science and Engineering C, 2015, 47, 97-104.	3.8	115
209	Highâ€Energy Nanosecond Laser Pulses for Synthesis of Better Bone Implants. , 2016, , .		1
210	Microstructure and Characteristics of Calcium Phosphate Layers on Bioactive Oxide Surfaces of Air-Sintered Titanium Foams after Immersion in Simulated Body Fluid. Materials, 2016, 9, 956.	1.3	12
211	Treatments to Optimize Dental Implant Surface Topography and Enhance Cell Bioactivity. , 0, , .		2
212	Dimension and Structures of Biological Seal of Peri-Implant Tissues. , 2016, , .		4
213	Uniform and electrically conductive biopolymerâ€doped polypyrrole coating for fibrous <scp>PLA</scp> . Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1721-1729.	1.6	10
214	A nano-scale mirror-like surface of Ti–6Al–4V attained by chemical mechanical polishing. Chinese Physics B, 2016, 25, 058301.	0.7	18
215	MC3T3-E1 Cells Behavior on Surfaces Bombarded by Argon Ions in Planar Cathode Discharge. Artificial Organs, 2016, 40, 497-504.	1.0	6
216	Effects of Superimposed Micro/Nanoâ€Structured Titanium Alloy Surface on Cellular Behaviors In Vitro. Advanced Engineering Materials, 2016, 18, 1259-1266.	1.6	11
217	Periodontal and periâ€implant diseases: identical or fraternal infections?. Molecular Oral Microbiology, 2016, 31, 285-301.	1.3	47

#	ARTICLE	IF	CITATIONS
218	Mouse embryonic fibroblasts accumulate differentially on titanium surfaces treated with nanosecond laser pulses. Biointerphases, 2016, 11, 031009.	0.6	5
219	Self-assembled monolayers of alendronate on Ti6Al4V alloy surfaces enhance osteogenesis in mesenchymal stem cells. Scientific Reports, 2016, 6, 30548.	1.6	27
220	Quantitative evaluation and factors of gas-wetness in gas/liquid/solid systems. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2016, 38, 597-605.	1.2	1
221	Effects of silicon contents on the characteristics of Zr–Ti–Si–W thin film metallic glasses. Thin Solid Films, 2016, 618, 28-35.	0.8	16
222	Competitive Adsorption of Plasma Proteins Using a Quartz Crystal Microbalance. ACS Applied Materials & Interfaces, 2016, 8, 13207-13217.	4.0	39
223	Mechanical properties and fractal analysis of the surface texture of sputtered hydroxyapatite coatings. Applied Surface Science, 2016, 379, 338-346.	3.1	45
224	Influence of the Structure of the Titanium Oxide Coating Surface on Immunocompetent Tumor Cells. Russian Physics Journal, 2016, 58, 1527-1533.	0.2	5
225	The effect of simulated inflammatory conditions on the surface properties of titanium and stainless steel and their importance as biomaterials. Materials Science and Engineering C, 2016, 66, 119-129.	3.8	45
226	Dual laser deposition of Ti:DLC composite for implants. Laser Physics, 2016, 26, 105605.	0.6	10
227	Diamond nanoparticles into poly (lactic acid) electrospun fibers: Cytocompatible and bioactive scaffolds with enhanced wettability and cell adhesion. Materials Letters, 2016, 183, 420-424.	1.3	16
228	Characterization of wet-electrospun cellulose acetate based 3-dimensional scaffolds for skin tissue engineering applications: influence of cellulose acetate concentration. Cellulose, 2016, 23, 3239-3248.	2.4	68
229	Laser surface treatment and the resultant hierarchical topography of Ti grade 2 for biomedical application. Applied Surface Science, 2016, 390, 560-569.	3.1	29
230	Fabrication of carbon nanotube nanocomposites via layer-by-layer assembly and evaluation in biomedical application. Nanomedicine, 2016, 11, 3087-3101.	1.7	7
231	Osseointegration of three-dimensional designed titanium implants manufactured by selective laser melting. Biofabrication, 2016, 8, 045014.	3.7	62
232	Review and the state of the art: Sol–gel and melt quenched bioactive glasses for tissue engineering. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1248-1275.	1.6	131
233	Characterization of maghemite (γ-Fe2O3)-loaded poly-l-lactic acid/thermoplastic polyurethane electrospun mats for soft tissue engineering. Journal of Materials Science, 2016, 51, 8361-8381.	1.7	7
234	Commercially pure titanium (cp-Ti) versus titanium alloy (Ti6Al4V) materials as bone anchored implants — Is one truly better than the other?. Materials Science and Engineering C, 2016, 62, 960-966.	3.8	182
235	Fabrication and characterization of gold nanoparticle-loaded TiO2 nanotube arrays for medical implants. Journal of Materials Science: Materials in Medicine, 2016, 27, 31.	1.7	17

#	Article	IF	CITATIONS
236	Improvement of the bio-functional properties of TiO2 nanotubes. Applied Surface Science, 2016, 388, 775-785.	3.1	82
237	Relevant aspects in the surface properties in titanium dental implants for the cellular viability. Materials Science and Engineering C, 2016, 64, 1-10.	3.8	77
238	Texturing of polypropylene (PP) with nanosecond lasers. Applied Surface Science, 2016, 374, 379-386.	3.1	31
239	Formation and properties of Ti-based Ti–Zr–Cu–Fe–Sn–Si bulk metallic glasses with different (TiÂ+ÂZr)/Cu ratios for biomedical application. Intermetallics, 2016, 72, 36-43.	1.8	32
240	Surface wettability and energy effects on the biological performance of poly-3-hydroxybutyrate films treated with RF plasma. Materials Science and Engineering C, 2016, 62, 450-457.	3.8	33
241	Biomechanical properties of a structurally optimized carbon-fibre/epoxy intramedullary nail for femoral shaft fracture fixation. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 56, 87-97.	1.5	8
242	Biological evaluation of ultra-fine titanium with improved mechanical strength for dental implant engineering. Journal of Materials Science, 2016, 51, 3097-3110.	1.7	22
243	An exploration of plastic deformation dependence of cell viability and adhesion in metallic implant materials. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 60, 177-186.	1.5	23
244	Precipitation of bone-like apatite on anodised titanium in simulated body fluid under UV irradiation. Surface and Coatings Technology, 2016, 301, 20-28.	2.2	12
246	Effect of chemical heterogeneity of biodegradable polymers on surface energy: A static contact angle analysis of polyester model films. Materials Science and Engineering C, 2016, 59, 998-1006.	3.8	22
247	Augmenting the bioactivity of polyetheretherketone using a novel accelerated neutral atom beam technique. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 1438-1446.	1.6	20
248	Novel hierarchical tantalum oxide-PDMS hybrid coating for medical implants: One pot synthesis, characterization and modulation of fibroblast proliferation. Journal of Colloid and Interface Science, 2017, 485, 106-115.	5.0	17
249	Improvement of in vitro corrosion and cytocompatibility of biodegradable Fe surface modified by Zn ion implantation. Applied Surface Science, 2017, 403, 168-176.	3.1	24
250	Influence of Preparation Techniques on the Properties of Bioactive GlassesBioactive Glasses. Series in Bioengineering, 2017, , 211-235.	0.3	0
251	Mechanical Behavior of Bioactive Glasses/Ceramics. Series in Bioengineering, 2017, , 173-209.	0.3	0
252	Corrosion resistance and biological activity of TiO ₂ implant coatings produced in oxygen-rich environments. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2017, 231, 20-27.	1.0	4
253	Comparative Study of Surface Chemical Composition and Oxide Layer Modification upon Oxygen Plasma Cleaning and Piranha Etching on a Novel Low Elastic Modulus Ti25Nb21Hf Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3770-3776.	1.1	10
254	Corrosion behaviour and microstructure of tantalum film on Ti6Al4V substrate by filtered cathodic vacuum arc deposition. Thin Solid Films, 2017, 636, 54-62.	0.8	22

#	Article	IF	CITATIONS
255	Comparison of the osteogenic, adipogenic, chondrogenic and cementogenic differentiation potential of periodontal ligament cells cultured on different biomaterials. Materials Science and Engineering C, 2017, 76, 1075-1084.	3.8	4
256	Evaluation of Osseointegration in Titanium and Zirconia-Based Dental Implants with Surface Modification in a Miniature Pig Model. Journal of Medical and Biological Engineering, 2017, 37, 313-320.	1.0	8
257	Growth and accelerated differentiation of mesenchymal stem cells on graphene-oxide-coated titanate with dexamethasone on surface of titanium implants. Dental Materials, 2017, 33, 525-535.	1.6	53
258	The effects of parametric changes in electropolishing process on surface properties of 316L stainless steel. Applied Surface Science, 2017, 410, 432-444.	3.1	46
259	Enhancing the cell proliferation performance of NiTi substrate by laser diffusion nitriding. Surface and Coatings Technology, 2017, 309, 59-66.	2.2	29
260	Modification of titanium alloys surface properties by plasma electrolytic oxidation (PEO) and influence on biological response. Journal of Materials Science: Materials in Medicine, 2017, 28, 169.	1.7	50
261	Strategies for Optimizing the Soft Tissue Seal around Osseointegrated Implants. Advanced Healthcare Materials, 2017, 6, 1700549.	3.9	68
262	Influence of the pretreatment and curing of alkoxysilanes on the protection of the titanium–aluminum–vanadium alloy. Journal of Applied Polymer Science, 2017, 134, 45470.	1.3	8
263	Functionalisation of Ti6Al4V and hydroxyapatite surfaces with combined peptides based on KKLPDA and EEEEEEEE peptides. Colloids and Surfaces B: Biointerfaces, 2017, 160, 154-160.	2.5	20
264	Response of MG63 osteoblast cells to surface modification of Ti-6Al-4V implant alloy by laser interference lithography. Journal of Bionic Engineering, 2017, 14, 448-458.	2.7	36
265	Comparison study on the solution-based surface biomodification of titanium: Surface characteristics and cell biocompatibility. Surface and Coatings Technology, 2017, 329, 109-119.	2.2	18
266	Surface Mechanoengineering of a Zr-Based Bulk Metallic Glass via Ar-Nanobubble Doping To Probe Cell Sensitivity to Rigid Materials. ACS Applied Materials & Interfaces, 2017, 9, 43429-43437.	4.0	7
267	Laser surface texturing of Titanium for bioengineering applications. Procedia Manufacturing, 2017, 13, 694-701.	1.9	35
268	Surface properties of Ti-6Al-4V alloy part I: Surface roughness and apparent surface free energy. Materials Science and Engineering C, 2017, 70, 207-215.	3.8	68
269	Enhancing the osteoblastic differentiation through nanoscale surface modifications. Journal of Biomedical Materials Research - Part A, 2017, 105, 498-509.	2.1	13
270	Calcium Phosphate Coatings for Metallic Orthopedic Biomaterials. , 2017, , 167-183.		3
271	Biocompatibility of fiber-reinforced composites for dental applications. , 2017, , 23-39.		5
272	In Vitro Assessment of Early Bacterial Activity on Micro/Nanostructured Ti6Al4V Surfaces. Molecules, 2017, 22, 832.	1.7	15

#	Article	IF	CITATIONS
273	Biocompatibility of Titania Nanotube Coatings Enriched with Silver Nanograins by Chemical Vapor Deposition. Nanomaterials, 2017, 7, 274.	1.9	31
274	Evaluation of Nanofiber PLA Scaffolds Using Dry-and Wet-Electro Spinning Methods. , 2017, , .		1
275	Wettability of liquid caesium iodine and boron oxide on yttria-stabilized zirconia. Journal of Nuclear Science and Technology, 2018, 55, 838-842.	0.7	4
276	Proliferation of human aortic endothelial cells on Nitinol thin films with varying hole sizes. Biomedical Microdevices, 2018, 20, 25.	1.4	1
277	Effect of oxidation time on cytocompatibility of ultrafine-grained pure Ti in micro-arc oxidation treatment. Surface and Coatings Technology, 2018, 342, 12-22.	2.2	39
278	Study and Characterization of Mechanical and Electrochemical Corrosion Properties of Plasma Sprayed Hydroxyapatite Coatings on AISI 304L Stainless Steel. Journal of Biomimetics, Biomaterials and Biomedical Engineering, 2018, 35, 20-34.	0.5	7
279	Multifunctional Biomaterial Coating Based on Bio-Inspired Polyphosphate and Lysozyme Supramolecular Nanofilm. Biomacromolecules, 2018, 19, 1979-1989.	2.6	21
280	Effects of silver segregation on sputter deposited antibacterial silver-containing diamond-like carbon films. Thin Solid Films, 2018, 650, 58-64.	0.8	33
281	Effect of microstructure and surface features on wetting angle of a Fe-3.2 wt%C.E. cast iron with water. Applied Surface Science, 2018, 440, 341-350.	3.1	12
282	The effect of graphene oxide on surface features, biological performance and bio-stability of calcium phosphate coating applied by pulse electrochemical deposition. Applied Surface Science, 2018, 437, 122-135.	3.1	42
283	Preparation, mechanical properties and <i>in vitro</i> cytocompatibility of multi-walled carbon nanotubes/poly(etheretherketone) nanocomposites. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 428-447.	1.9	16
284	Tungsten film as a hard and compatible carrier for antibacterial agent of silver. Journal of Materials Science, 2018, 53, 10640-10652.	1.7	7
285	Micro texturing on metallic surfaces: State of the art. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 941-964.	1.5	60
286	Bio-functionalization of grade V titanium alloy with type I human collagen for enhancing and promoting human periodontal fibroblast cell adhesion – an in-vitro study. Colloids and Surfaces B: Biointerfaces, 2018, 161, 1-9.	2.5	29
287	The effect of grain size on the surface properties of titanium grade 2 after different treatments. Surface and Coatings Technology, 2018, 335, 13-24.	2.2	24
288	Enhancement of bioactivity on modified polyetheretherketone surfaces with –COOH, –OH and –PO4H2 functional groups. Materials Letters, 2018, 213, 84-87.	1.3	26
289	Synergistic Effect of Cold Plasma Treatment and RGD Peptide Coating on Cell Proliferation over Titanium Surfaces. Tissue Engineering and Regenerative Medicine, 2018, 15, 13-24.	1.6	27
290	Functional polymer surfaces for controlling cell behaviors. Materials Today, 2018, 21, 38-59.	8.3	257

#	Article	IF	CITATIONS
291	Depth sensitivity of subsurface imaging using atomic force acoustic microscopy: FEA Study. Journal of Physics Communications, 2018, 2, 115021.	0.5	2
292	Effects of Laser Processing Parameters on Texturized Layer Development and Surface Features of Ti6Al4V Alloy Samples. Coatings, 2018, 8, 6.	1.2	14
293	Polycaprolactone- Chitosan- Ag coatings on Ti6Al4V: Critical synergic aspects analyzed by Raman, EFM and contact angle. Revista Facultad De IngenierÃa, 2018, , 59-67.	0.5	1
294	Tuning Nanopore Diameter of Titanium Surfaces to Improve Human Gingival Fibroblast Response. International Journal of Molecular Sciences, 2018, 19, 2881.	1.8	14
295	On the increase of the chemical reactivity of cp titanium and Ti6Al4V at low electrical current in a protein-rich medium. Biomedical Physics and Engineering Express, 2018, 5, 015014.	0.6	1
296	Suppressing Grain Growth on Cu Foil Using Graphene. Coatings, 2018, 8, 334.	1.2	1
297	Plasma Polymerization for Tissue Engineering Purposes. , 0, , .		6
298	45S5 BAG-Ti6Al4V structures: The influence of the design on some of the physical and chemical interactions that drive cellular response. Materials and Design, 2018, 160, 95-105.	3.3	22
299	Layer-by-layer fabrication of highly transparent polymer based piezoelectric transducers. Materials Research Express, 2018, 5, 065313.	0.8	7
300	Micro-porous polyetheretherketone implants decorated with BMP-2 via phosphorylated gelatin coating for enhancing cell adhesion and osteogenic differentiation. Colloids and Surfaces B: Biointerfaces, 2018, 169, 233-241.	2.5	62
301	Double acid etching treatment of dental implants for enhanced biological properties. Journal of Applied Biomaterials and Functional Materials, 2018, 16, 83-89.	0.7	21
302	Antibacterial Coatings for Biomedical Applications. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 467-476.	0.2	1
303	Effect of Gas Wettability on the Surface Properties of Rocks. , 2018, , 121-162.		0
304	Biocompatibility and antibacterial properties of zirconium nitride coating on titanium abutments: An in vitro study. PLoS ONE, 2018, 13, e0199591.	1.1	65
305	Additive Manufacturing of Titanium Alloys for Orthopedic Applications: A Materials Science Viewpoint. Advanced Engineering Materials, 2018, 20, 1800172.	1.6	51
306	Tailoring the surface characteristics of electrophoretically deposited chitosan-based bioactive glass composite coatings on titanium implants via grit blasting. Progress in Organic Coatings, 2018, 123, 362-373.	1.9	43
307	Mitigation of microbiologically influenced corrosion of 304L stainless steel in the presence of Pseudomonas aeruginosa by Cistus ladanifer leaves extract. International Biodeterioration and Biodegradation, 2018, 133, 159-169.	1.9	58
308	The Influence of Selective Laser Melting (SLM) Process Parameters on In-Vitro Cell Response. International Journal of Molecular Sciences, 2018, 19, 1619.	1.8	45

#	Article	IF	CITATIONS
309	First Results of a New Vacuum Plasma Sprayed (VPS) Titanium-Coated Carbon/PEEK Composite Cage for Lumbar Interbody Fusion. Journal of Functional Biomaterials, 2018, 9, 23.	1.8	25
310	Rough Titanium Oxide Coating Prepared by Micro-Arc Oxidation Causes Down-Regulation of hTERT Expression, Molecular Presentation, and Cytokine Secretion in Tumor Jurkat T Cells. Materials, 2018, 11, 360.	1.3	8
311	Nanoscale Electrical Potential and Roughness of a Calcium Phosphate Surface Promotes the Osteogenic Phenotype of Stromal Cells. Materials, 2018, 11, 978.	1.3	29
312	Influence of Heat Treatment and UV Irradiation on the Wettability of Ti35Nb10Ta Nanotubes. Metals, 2018, 8, 37.	1.0	2
313	A unique hybrid-structured surface produced by rapid electrochemical anodization enhances bio-corrosion resistance and bone cell responses of β-type Ti-24Nb-4Zr-8Sn alloy. Scientific Reports, 2018, 8, 6623.	1.6	16
314	Differential effect of hydroxyapatite nano-particle versus nano-rod decorated titanium micro-surface on osseointegration. Acta Biomaterialia, 2018, 76, 344-358.	4.1	93
315	Characterization of tantalum and tantalum nitride films on Ti6Al4V substrate prepared by filtered cathodic vacuum arc deposition for biomedical applications. Surface and Coatings Technology, 2019, 365, 24-32.	2.2	22
316	Rubidium-Containing Calcium Alginate Hydrogel for Antibacterial and Diabetic Skin Wound Healing Applications. ACS Biomaterials Science and Engineering, 2019, 5, 4726-4738.	2.6	34
317	Surface Modification of Poly (ether ether ketone) with a Medlite C6 (ND-YAG Q-Switched) Skin Treatment Laser. Journal of Macromolecular Science - Physics, 2019, 58, 783-793.	0.4	4
318	Cyclic Thermal Oxidation Evaluation to Improve Ti6Al4V Surface in ApplicationsÂas Biomaterial. Journal of Materials Engineering and Performance, 2019, 28, 4991-4997.	1.2	15
319	Femtosecond Laser Nano/Micro Textured Ti6Al4V Surfaces—Effect on Wetting and MG-63 Cell Adhesion. Materials, 2019, 12, 2210.	1.3	33
320	Constructing a Dual-Function Surface by Microcasting and Nanospraying for Efficient Drag Reduction and Potential Antifouling Capabilities. Micromachines, 2019, 10, 490.	1.4	32
321	Bioactive Materials: A Comprehensive Review on Interactions with Biological Microenvironment Based on the Immune Response. Journal of Bionic Engineering, 2019, 16, 563-581.	2.7	39
322	The relationship of surface roughness and wettability of 316L stainless steel implants with plastic deformation mechanisms. Materials Today: Proceedings, 2019, 7, 389-393.	0.9	7
323	Combinatorial Development and In Vitro Characterization of the Quaternary Zr–Ti–X–Y (X–Y = Cu–Ag/Co–Ni) Metallic Glass for Prospective Bioimplants. Advanced Engineering Materials, 21, 1900726.	20619,	13
324	Customizable Implant-specific and Tissue-Specific Extracellular Matrix Protein Coatings Fabricated Using Atmospheric Plasma. Frontiers in Bioengineering and Biotechnology, 2019, 7, 247.	2.0	13
325	Surface Characteristics and Biocompatibility of Ultrafine-Grain Ti after Sandblasting and Acid Etching for Dental Implants. ACS Biomaterials Science and Engineering, 2019, 5, 5107-5115.	2.6	15
326	Improvement of PDMS surface biocompatibility is limited by the duration of oxygen plasma treatment. Journal of Biomedical Materials Research - Part A, 2019, 107, 2806-2813.	2.1	31

ARTICLE IF CITATIONS Functionally graded titanium implants: Characteristic enhancement induced by combined severe 327 1.1 46 plastic deformation. PLoS ONE, 2019, 14, e0221491. Plate-like hydroxyapatite synthesized from dodecanedioic acid enhances chondrogenic cell 0.4 proliferation. Bio-Medical Materials and Engineering, 2019, 30, 375-386. 329 Biocompatibility of Plasma-Treated Polymeric Implants. Materials, 2019, 12, 240. 1.3 41 Mechanical properties and biological responses of ultrafine-grained pure titanium fabricated by multi-directional forging. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 245, 30-36. Controlling Cell Behavior through the Design of Biomaterial Surfaces: A Focus on Surface 331 1.9 276 Modification Techniques. Advanced Materials Interfaces, 2019, 6, 1900572. Surface potential and charges impact on cell responses on biomaterials interfaces for medical applications. Materials Science and Engineering C, 2019, 104, 109883. 3.8 Effect of Ag on the Microstructure, Mechanical and Bio-corrosion Properties of Fe–30Mn Alloy. Acta 333 1.5 11 Metallurgica Sinica (English Letters), 2019, 32, 1337-1345. Effect of Ta2O5 content on the osseointegration and cytotoxicity behaviors in hydroxyapatite-Ta2O5 coatings applied by EPD on superelastic NiTi alloys. Materials Science and Engineering C, 2019, 102, 334 3.8 683-695 Comparison of Various Implant Provisional Resin Materials for Cytotoxicity and Attachment to Human 335 0.6 22 Gingival Fibroblasts. International Journal of Oral and Maxillofacial Implants, 2019, 34, 390-396. Nanostructured surface coatings for titanium alloy implants. Journal of Materials Research, 2019, 34, 1.2 1892-1899. Influence of Topological Cues on Fibronectin Adsorption and Contact Guidance of Fibroblasts on 339 2.36 Microgrooved Titanium. ACS Applied Bio Materials, 2019, 2, 1066-1077. Synthesis and synergetic effects of ladder-like silsesquioxane/epoxy compositional gradient hybrid coating. Progress in Organic Coatings, 2019, 130, 58-65. Excellent Lubricating Ability of Functionalization Graphene Dispersed in Perfluoropolyether for 341 2.4 17 Titanium Alloy. ACS Applied Nano Materials, 2019, 2, 1391-1401. Investigation of High Voltage Anodic Plasma (HVAP) Ag-DLC Coatings on Ti50Zr with Different Ag Amounts. Coatings, 2019, 9, 792. 342 1.2 Comparison of removal torque of dual-acid etched and single-acid etched implants in rabbit tibias. The 343 0.0 0 Journal of Korean Academy of Prosthodontics, 2019, 57, 335. <i>In vitro</i> comparative investigation of bioactivity and biocompatibility behavior of titanium 344 nano-composites fabricated by friction stir processing. Materials Research Express, 2019, 6, 125425. Structure Investigation of Titanium Metallization Coating Deposited onto AlN Ceramics Substrate by 345 1.2 21 Means of Friction Surfacing Process. Coatings, 2019, 9, 845. Effect of Microstructure on Contact Angle and Corrosion of Ductile Iron: Iron–Graphite Composite. 346 Langmuir, 2019, 35, 16120-16129.

#	Article	IF	CITATIONS
347	A nanopillar array on black titanium prepared by reactive ion etching augments cardiomyogenic commitment of stem cells. Nanoscale, 2019, 11, 20766-20776.	2.8	13
348	ZnO Microfiltration Membranes for Desalination by a Vacuum Flow-Through Evaporation Method. Membranes, 2019, 9, 156.	1.4	2
349	Effect of surface physico-chemico-biological modifications of titanium on critical and theoretical surface free energy. Applied Surface Science, 2019, 470, 386-394.	3.1	19
350	Processing of CP-Ti by high-pressure torsion and the effect of surface modification using a post-HPT laser treatment. Journal of Alloys and Compounds, 2019, 784, 653-659.	2.8	15
351	Correlation between Cells-on-Chips materials and cell adhesion/proliferation focused on material's surface free energy. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 565, 188-194.	2.3	9
352	Low-temperature argon and ammonia plasma treatment of poly-3-hydroxybutyrate films: Surface topography and chemistry changes affect fibroblast cells in vitro. European Polymer Journal, 2019, 112, 137-145.	2.6	30
353	Development of β-TCP-Ti6Al4V structures: Driving cellular response by modulating physical and chemical properties. Materials Science and Engineering C, 2019, 98, 705-716.	3.8	30
354	Physicochemical and release studies of new mucoadhesive fluconazole delivery systems. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 566, 11-20.	2.3	4
355	Effects of thermal treatment on optoelectrical properties of AZO/Ag-Mg-Al thin films. Applied Surface Science, 2019, 467-468, 249-254.	3.1	8
356	Surface modification of Ti-6Al-4V alloy for osseointegration by alkaline treatment and chitosan-matrix glass-reinforced nanocomposite coating. Carbohydrate Polymers, 2019, 205, 302-311.	5.1	33
357	Biological properties. , 2019, , 175-192.		0
358	Electrochemical micro texturing on flat and curved surfaces: simulation and experiments. International Journal of Advanced Manufacturing Technology, 2019, 100, 1269-1286.	1.5	41
359	Review: Silicon oxycarbide based materials for biomedical applications. Applied Materials Today, 2020, 18, 100482.	2.3	24
360	Versatile bioactive and antibacterial coating system based on silica, gentamicin, and chitosan: Improving early stage performance of titanium implants. Surface and Coatings Technology, 2020, 381, 125138.	2.2	70
361	Additive manufactured porous biomaterials targeting orthopedic implants: A suitable combination of mechanical, physical and topological properties. Materials Science and Engineering C, 2020, 107, 110342.	3.8	56
362	Mechanical and biological properties of Ti–(0–25Âwt%)Nb alloys for biomedical implants application. International Journal of Energy Production and Management, 2020, 7, 119-127.	1.9	54
363	A Review on Bio-functionalization of \hat{I}^2 -Ti Alloys. Journal of Bio- and Tribo-Corrosion, 2020, 6, 1.	1.2	21
364	Biomimetic Nanostructures Fabricated by Nanoimprint Lithography for Improved Cell oupling. Advanced Functional Materials, 2020, 30, 2004227.	7.8	23

#		IF	CITATIONS
965	Enhancement of Intracellular Calcium Ion Mobilization by Moderately but Not Highly Positive	2.0	17
303	Material Surface Charges. Frontiers in Bioengineering and Biotechnology, 2020, 8, 1016.	2.0	17
366	Surface modifications of metallic biomaterials. , 2020, , 387-424.		3
367	Polydopamine Linking Substrate for AMPs: Characterisation and Stability on Ti6Al4V. Materials, 2020, 13, 3714.	1.3	10
368	Highly stable and biocompatible hyaluronic acid-rehabilitated nanoscale MOF-Fe ²⁺ induced ferroptosis in breast cancer cells. Journal of Materials Chemistry B, 2020, 8, 9129-9138.	2.9	43
369	Performance Comparison of Advanced Ceramic Cladding Approaches via Solid-State and Traditional Welding Processes: A Review. Materials, 2020, 13, 5805.	1.3	11
370	The Capabilities of Spark-Assisted Chemical Engraving: A Review. Journal of Manufacturing and Materials Processing, 2020, 4, 99.	1.0	5
371	Surface modification of titanium manufactured through selective laser melting inhibited osteoclast differentiation through mitogen-activated protein kinase signaling pathway. Journal of Biomaterials Applications, 2020, 35, 169-181.	1.2	8
372	Ultrafast Laser Processing of Nanostructured Patterns for the Control of Cell Adhesion and Migration on Titanium Alloy. Nanomaterials, 2020, 10, 864.	1.9	35
373	Predictive Modeling of the In Vitro Responses of Preosteoblastic MC3T3-E1 Cells on Polymeric Surfaces Using Fourier Transform Infrared Spectroscopy. ACS Applied Materials & Interfaces, 2020, 12, 24466-24478.	4.0	6
374	Surface Comparison of Three Different Commercial Custom-Made Titanium Meshes Produced by SLM for Dental Applications. Materials, 2020, 13, 2177.	1.3	10
375	Modulating the Surface Properties of Metallic Implants and the Response of Breast Cancer Cells by Surface Relief Induced via Bulk Plastic Deformation. Frontiers in Materials, 2020, 7, .	1.2	5
376	Electrophoretic deposition of chitosan-bioactive glass nanocomposite coatings on AZ91 Mg alloy for biomedical applications. Progress in Organic Coatings, 2020, 147, 105803.	1.9	33
377	Reactive magnetron co-sputtering of Ti-xCuO coatings: Multifunctional interfaces for blood-contacting devices. Materials Science and Engineering C, 2020, 116, 111198.	3.8	21
378	Koh group influence on titanium surfaces and pure sol-gel silica for enhanced osteogenic activity. Journal of Biomaterials Applications, 2020, 35, 405-421.	1.2	2
379	Facile Method of Solvent-Flushing To Building Component Distribution within Photoactive Layers for High-Performance Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 31459-31466.	4.0	10
380	Surface Modification of the Ti-6Al-4V Alloy by Anodic Oxidation and Its Effect on Osteoarticular Cell Proliferation. Coatings, 2020, 10, 491.	1.2	9
381	Impact of chitosan/noble metals-based coatings on the plasmochemically activated surface of NiTi alloy. Materials Chemistry and Physics, 2020, 248, 122931.	2.0	7
382	Tantalum boride as a biocompatible coating to improve osteogenesis of the bionano interface. Journal of Biomedical Materials Research - Part A, 2020, 108, 1726-1735.	2.1	15

#	Article	IF	CITATIONS
383	An Integrated Overview of Ultraviolet Technology for Reversing Titanium Dental Implant Degradation: Mechanism of Reaction and Effectivity. Applied Sciences (Switzerland), 2020, 10, 1654.	1.3	4
384	UV-triggered polymerization of polycatecholamines enables the production of organ-on-chips inside a biosafety cabinet. Applied Materials Today, 2020, 20, 100721.	2.3	6
385	Impact of Femtosecond Laser Treatment Accompanied with Anodization of Titanium Alloy on Fibroblast Cell Growth. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900838.	0.8	10
386	A biodegradable Zn-1Cu-0.1Ti alloy with antibacterial properties for orthopedic applications. Acta Biomaterialia, 2020, 106, 410-427.	4.1	117
387	Hybrid composite pedicle screw - finite element modelling with parametric optimization. Informatics in Medicine Unlocked, 2020, 18, 100290.	1.9	6
388	Biological properties of a novel β-Ti alloy with a low young's modulus subjected to cold rolling. Applied Surface Science, 2020, 511, 145523.	3.1	15
389	The possibility of the polyurethane layer attachment to the unmodified and diazonium-modified titanium alloy applied as potential biomaterial. Surface and Coatings Technology, 2020, 385, 125389.	2.2	8
390	Probing the Influence of Î ³ -Sterilization on the Oxidation, Crystallization, Sliding Wear Resistance, and Cytocompatibility of Chemically Modified Graphene-Oxide-Reinforced HDPE/UHMWPE Nanocomposites and Wear Debris. ACS Biomaterials Science and Engineering, 2020, 6, 1462-1475.	2.6	13
391	Physical, electrochemical, and biocompatibility characteristics of Ti-Al-N thin film synthesized by DC pulsed magnetron sputtering. Journal of the Australian Ceramic Society, 2020, 56, 1155-1165.	1.1	2
392	Investigations in the fabrication of surface patterns for wettability modification on a Zr-based bulk metallic glass by nanosecond laser surface texturing. Journal of Materials Processing Technology, 2020, 283, 116714.	3.1	35
393	Mechanisms of yttrium on the wettability, surface tension and interactions between Ni-20Co-20Cr-10Al-ξY alloys and MgO ceramics. Journal of Materials Science and Technology, 2021, 70, 39-48.	5.6	1
394	Superamphiphilic zwitterionic block copolymer surfactant-assisted fabrication of polyamide thin-film composite membrane with highly enhanced desalination performance. Journal of Membrane Science, 2021, 618, 118677.	4.1	23
395	A Cellular Potts energy-based approach to analyse the influence of the surface topography on single cell motility. Journal of Theoretical Biology, 2021, 509, 110487.	0.8	2
396	Niobium-oxynitride coatings for biomedical applications: Its antibacterial effects and in-vitro cytotoxicity. Materials Science and Engineering C, 2021, 120, 111662.	3.8	14
397	Measurement methods for the mechanical testing and biocompatibility assessment of polymer-ceramic connective tissue replacements. Measurement: Journal of the International Measurement Confederation, 2021, 171, 108733.	2.5	11
398	Hydroxyapatite/sodium alginate coatings electrophoretically deposited on titanium substrates: microstructure and properties. Applied Surface Science, 2021, 540, 148353.	3.1	29
399	Electrophoretic deposition of ferulic acid loaded bioactive glass/chitosan as antibacterial and bioactive composite coatings. Surface and Coatings Technology, 2021, 405, 126657.	2.2	23
400	The effect of surface laser texturing on the corrosion performance of the biocompatible β-Ti12Mo6Zr2Fe alloy. Surface and Coatings Technology, 2021, 405, 126628.	2.2	10

#	Article	IF	Citations
401	Polyether ether ketone surface modification with plasma and gelatin for enhancing cell attachment. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 622-629.	1.6	19
402	A multifunctional dexamethasone-delivery implant fabricated using atmospheric plasma and its effects on apoptosis, osteogenesis and inflammation. Drug Delivery and Translational Research, 2021, 11, 86-102.	3.0	7
403	Development of Multifunctional Materials Based on Poly(ether ether ketone) with Improved Biological Performances for Dental Applications. Materials, 2021, 14, 1047.	1.3	5
404	Influence of roughness and grinding direction on the thickness and adhesion of sol-gel coatings deposited by dip-coating on AZ31 magnesium substrates. A Landau–Levich equation revision. Surface and Coatings Technology, 2021, 408, 126798.	2.2	20
405	Antibiofilm effects of titanium surfaces modified by laser texturing and hotâ€pressing sintering with silver. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 1588-1600.	1.6	3
406	Effects of the conditions of microarc oxidation and hydrothermal treatments on the formation of micro-nano hybrid surface on titanium. Korean Journal of Dental Materials, 2021, 48, 15-26.	0.2	0
407	Evaluation of mechanical properties, in vitro corrosion resistance and biocompatibility of Gum Metal in the context of implant applications. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104289.	1.5	8
408	A novel nanoindentation protocol to characterize surface free energy of superhydrophobic nanopatterned materials. Journal of Materials Research, 2021, 36, 2357-2370.	1.2	8
409	Amyloid Aggregates of Smooth-Muscle Titin Impair Cell Adhesion. International Journal of Molecular Sciences, 2021, 22, 4579.	1.8	4
410	Impact of the surface modifications and cell culture techniques on the biomechanical properties of PDMS in relation to cell growth behavior. International Journal of Polymeric Materials and Polymeric Biomaterials, 2022, 71, 886-897.	1.8	3
411	In vitro cytocompatibility of a Zr-based metallic glass modified by laser surface texturing for potential implant applications. Applied Surface Science, 2021, 547, 149194.	3.1	26
412	Applications of biomaterials for immunosuppression in tissue repair and regeneration. Acta Biomaterialia, 2021, 126, 31-44.	4.1	27
413	A review on alpha case formation and modeling of mass transfer during investment casting of titanium alloys. Journal of Alloys and Compounds, 2021, 865, 158558.	2.8	34
414	Mechanical Properties and Corrosion Resistance of TiAl6V4 Alloy Produced with SLM Technique and Used for Customized Mesh in Bone Augmentations. Applied Sciences (Switzerland), 2021, 11, 5622.	1.3	8
415	Droplet microarrays for cell culture: effect of surface properties and nanoliter culture volume on global transcriptomic landscape. Materials Today Bio, 2021, 11, 100112.	2.6	7
416	A literature review on different types of surface treatment in implants. IP Annals of Prosthodontics and Restorative Dentistry, 2021, 7, 64-67.	0.2	1
417	Laser Hybrid Wire Arc Additive Manufacturing for Fabricating Thin Sections. , 2022, 7, 175-183.		5
418	Biomimetic Hierarchical Structuring of PLA by Ultra-Short Laser Pulses for Processing of Tissue Engineered Matrices: Study of Cellular and Antibacterial <u>Behavior. Polymers, 2021, 13, 2577.</u>	2.0	11

#	Article	IF	Citations
419	Nature-Inspired Nanoflower Structures on Titanium Surface via Alkali Treatment for Biomedical Applications. Journal of Biomimetics, Biomaterials and Biomedical Engineering, 0, 52, 20-28.	0.5	0
420	Surface characterization of bioceramic coatings on Zr and its alloys using plasma electrolytic oxidation (PEO): A review. Surfaces and Interfaces, 2021, 25, 101283.	1.5	27
421	Electrophoretically Deposited Chitosan/Eudragit E 100/AgNPs Composite Coatings on Titanium Substrate as a Silver Release System. Materials, 2021, 14, 4533.	1.3	15
422	Wettability of implant surfaces: Blood vs autologous platelet liquid (APL). Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 104773.	1.5	8
423	Enhanced bioactivity and antibacterial properties of anodized ZrO2 implant coatings via optimized nanoscale morphology and timed antibiotic release through PLGA overcoat. Ceramics International, 2021, 47, 33775-33787.	2.3	6
424	Surface pre-treatments of Ti-Nb-Zr-Ta beta titanium alloy: The effect of chemical, electrochemical and ion sputter etching on morphology, residual stress, corrosion stability and the MG-63 cell response. Results in Physics, 2021, 28, 104613.	2.0	14
425	Polycrystalline diamond coating on 3D printed titanium scaffolds: Surface characterisation and foreign body response. Materials Science and Engineering C, 2021, 130, 112467.	3.8	7
426	Integrated molecular dynamics and experimental approach to characterize low-free-energy perfluoro-decyl-acrylate (PFDA) coated silicon. Materials and Design, 2021, 208, 109902.	3.3	6
427	Pulsed laser deposition of nanostructured bioactive glass and hydroxyapatite coatings: Microstructural and electrochemical characterization. Materials Science and Engineering C, 2021, 130, 112459.	3.8	16
428	Influence of mineral coatings on fibroblast behaviour: The importance of coating formulation and experimental design. Colloids and Surfaces B: Biointerfaces, 2021, 208, 112059.	2.5	0
429	A novel multi-structural reinforced treatment on Ti implant utilizing a combination of alkali solution and bioactive glass sol. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 124, 104837.	1.5	4
430	Titanium, Titanium Alloys and Composites. , 2022, , 179-199.		2
431	Osteogenesis and angiogenesis of a bulk metallic glass for biomedical implants. Bioactive Materials, 2022, 8, 253-266.	8.6	15
432	Optimum Surface Roughness for Titanium-Coated PEEK Produced by Electron Beam PVD for Orthopedic Applications. Materials Technology, 2022, 37, 631-644.	1.5	9
433	Biomaterials: Characteristics and Properties. Topics in Mining, Metallurgy and Materials Engineering, 2017, , 5-15.	1.4	9
434	Chemically Inert Nanoparticles Affect Hemopoietic and Stromal Cells Microenvironments in Vitro. IFMBE Proceedings, 2013, , 209-212.	0.2	1
435	Development of Provisional Extracellular Matrix on Biomaterials Interface: Lessons from In Vitro Cell Culture. NATO Science for Peace and Security Series A: Chemistry and Biology, 2010, , 19-43.	0.5	3
437	ELECTROKINETIC PROPERTIES, IN VITRO DISSOLUTION, AND PROSPECTIVE HEMOAND BIOCOMPATIBILITY OF TITANIUM OXIDE AND OXYNITRIDE FILMS FOR CARDIOVASCULAR STENTS. Bulletin of Siberian Medicine, 2015, 14, 55-66.	0.1	5

#	Article	IF	CITATIONS
438	The Interaction of Osteoblasts With Bone-Implant Materials: 1. The Effect of Physicochemical Surface Properties of Implant Materials. Physiological Research, 2011, 60, 95-111.	0.4	70
439	Preparation and Characterization of Porous Scaffolds with Favourable Interpore Connectivity. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2011, 26, 17-21.	0.6	5
440	Quantitative Analysis of Growth of Cells on Physicochemically Modified Surfaces. Bulletin of the Korean Chemical Society, 2013, 34, 524-530.	1.0	6
441	Surface Modification of Pure Titanium Implant Using Acid and Alkali Treatments. Afyon Kocatepe University Journal of Sciences and Engineering, 2015, 15, 6-13.	0.1	3
442	<i>In Vitro</i> Study on the Piezodynamic Therapy with a BaTiO ₃ -Coating Titanium Scaffold under Low-Intensity Pulsed Ultrasound Stimulation. ACS Applied Materials & Interfaces, 2021, 13, 49542-49555.	4.0	18
443	Electrophoretic deposition, microstructure and properties of multicomponent sodium alginate-based coatings incorporated with graphite oxide and hydroxyapatite on titanium biomaterial substrates. Applied Surface Science, 2022, 575, 151688.	3.1	22
444	Histologic and Histomorphometric Evaluation of a New Bioactive Liquid BBL on Implant Surface: A Preclinical Study in Foxhound Dogs. Materials, 2021, 14, 6217.	1.3	1
445	Laser textured novel patterns on Ti6Al4V alloy for dental implants surface improvement. Journal of Laser Applications, 2021, 33, .	0.8	2
446	3 Oppervlaktekarakteristieken van enossale implantaten en de microbiologische gevolgen. , 2008, , 21-25.		0
447	Plasma Surface Modification of Nickel Titanium Shape Memory Alloys. , 2012, , 45-68.		Ο
448	UV induced Precipitation of Bone like Apatite on Anodised Titanium in Simulated Body Fluid. , 2015, , .		1
449	The Microbiological Diagnosis Of The Peri-Implant Disease: Can It Really Have A Practical Significance?. Journal of Dental Health, Oral Disorders & Therapy, 2016, 4, .	0.0	Ο
450	Allgemeine Aspekte. , 2017, , 1-107.		0
451	Modeling of the mesenchymal stem cell microenvironment as a prospective approach to tissue bioengineering and regenerative medicine (a short review). Bulletin of Siberian Medicine, 2018, 17, 217-228.	0.1	3
452	Effect of the elemental composition and the deposition temperature of Ti-AL-C-N coatings on the morphology and viability of cells on such coatings. Proceedings of the National Academy of Sciences of Belarus Physics and Mathematics Series, 2018, 54, 369-378.	0.1	0
453	Wettability of Liquid Cesium Halides on Oxide Single Crystals. Transactions of the Atomic Energy Society of Japan, 2019, 18, 1-5.	0.2	1
454	Biocompatibility of Ti-Mn-N films with different manganese contents. Surface and Coatings Technology, 2020, 403, 126354.	2.2	5
456	EVALUATION OF BASAL DENTAL IMPLANTS IN EDENTULOUS POSTERIOR MAXILLARY REGION. Alexandria Dental Journal: ADJ, 2020, 45, 14-20.	0.1	1

#	Article	IF	CITATIONS
457	Evaluation of osteoblastic cell behavior upon culture on titanium substrates photo-functionalized by vacuum ultra-violet treatment. Experimental Cell Research, 2022, 410, 112944.	1.2	1
458	A review of protein adsorption and bioactivity characteristics of poly Îμ-caprolactone scaffolds in regenerative medicine. European Polymer Journal, 2022, 162, 110892.	2.6	15
459	Mussel-Inspired Carboxymethyl Chitosan Hydrogel Coating of Titanium Alloy with Antibacterial and Bioactive Properties. Materials, 2021, 14, 6901.	1.3	6
460	Titanium-nanohydroxyapatite composites produced by ball milling and sintering: wettability, bioactivity and toxicity studies. Metallurgical Research and Technology, 2022, 119, 112.	0.4	3
461	Fabrication of titanium-based alloys with bioactive surface oxide layer as biomedical implants: Opportunity and challenges. Transactions of Nonferrous Metals Society of China, 2022, 32, 1-44.	1.7	29
462	Modeling stress-strain nonlinear mechanics via entropy changes on surface wetting using the Born-Oppenheimer approximation. Results in Engineering, 2022, 13, 100349.	2.2	7
463	Progress in Niobium Oxide-Containing Coatings for Biomedical Applications: A Critical Review. ACS Omega, 2022, 7, 9088-9107.	1.6	28
464	Optimization of titanium and titanium alloy surface properties by ultra-short laser processing for improved antibacterial characteristics. Journal of Physics: Conference Series, 2022, 2240, 012040.	0.3	0
465	Microfluidic generation of monodispersed Janus alginate hydrogel microparticles using water-in-oil emulsion reactant. Biomicrofluidics, 2022, 16, 024101.	1.2	8
466	Microstructural characterization, wettability and cytocompatibility of gradient coatings synthesized by gas nitriding of three-layer Ti/Ni/Ti nanolaminates magnetron sputtered on the TiNi substrate. Surface and Coatings Technology, 2022, 436, 128291.	2.2	5
467	Electrochemical Behavior of SLM Ti–6Al–4V Alloy After Long Time of Immersion in Lactic Acid Environment. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2022, 53, 2060-2070.	1.1	3
468	Polydopamine Codoped BaTiO ₃ -Functionalized Polyvinylidene Fluoride Coating as a Piezo-Biomaterial Platform for an Enhanced Cellular Response and Bioactivity. ACS Biomaterials Science and Engineering, 2022, 8, 170-184.	2.6	9
469	Effect of Annealing Temperature on the Surface Structure and Properties of Porous TiNi. Inorganic Materials, 2021, 57, 1242-1249.	0.2	0
470	Interaction of Mg Alloy with PLA Electrospun Nanofibers Coating in Understanding Changes of Corrosion, Wettability, and pH. Nanomaterials, 2022, 12, 1369.	1.9	9
473	Tuning the Properties of Ba-M Hexaferrite BaFe11.5Co0.5O19: A Road Towards Diverse Applications. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 2502-2512.	1.9	10
474	Controlling unequal surface energy results caused by test liquids: the case of UV/O3 Treated PET. Scientific Reports, 2022, 12, 6772.	1.6	9
475	Intelligent modeling and optimization of titanium surface etching for dental implant application. Scientific Reports, 2022, 12, 7184.	1.6	3
476	Study on the Surface Modification of Nanostructured Ti Alloys and Coarse-Grained Ti Alloys. Metals, 2022, 12, 948.	1.0	5

#	Article	IF	CITATIONS
477	Surface Modification of Carbon Fiber-Reinforced Polyetheretherketone with MXene Nanosheets for Enhanced Photothermal Antibacterial Activity and Osteogenicity. ACS Biomaterials Science and Engineering, 2022, 8, 2375-2389.	2.6	18
478	Smart Polyurethane and Its Promising Applications. ACS Symposium Series, 0, , 327-361.	0.5	1
479	In Vitro Bio-Testing Comparative Analysis of NiTi Porous Alloys Modified by Heat Treatment. Metals, 2022, 12, 1006.	1.0	4
480	Study on Corrosion Resistance and Biological Properties of the Double Glow Plasma Nb-Zr Biological Implantation Alloying Layers. Coatings, 2022, 12, 942.	1.2	4
481	Biocompatibility Assessment of Coatings Obtained in Argon and Nitrogen Atmospheres for TiNi Materials. Metals, 2022, 12, 1603.	1.0	3
482	Improved Muscle Regeneration into a Joint Prosthesis with Mechano-Growth Factor Loaded within Mesoporous Silica Combined with Carbon Nanotubes on a Porous Titanium Alloy. ACS Nano, 2022, 16, 14344-14361.	7.3	5
483	Generic prediction of exocytosis rate constants by size-based surface energies of nanoparticles and cells. Scientific Reports, 2022, 12, .	1.6	3
484	Silver nanoparticles doped poly(3, 4-ethylene dioxythiophene) on titania nanotubes for orthopaedic application. Applied Surface Science, 2023, 610, 155416.	3.1	8
485	Nanoparticles in bodily tissues: predicting their equilibrium distributions. Environmental Science: Nano, 2023, 10, 424-439.	2.2	1
486	Surface modification of three-dimensional porous polymeric scaffolds in tissue engineering applications: A focus review on physical modifications methods. Polymer-Plastics Technology and Materials, 2022, 61, 1308-1333.	0.6	1
487	Biocompatibility of a Ti-Rich Medium-Entropy Alloy with Glioblastoma Astrocytoma Cells. International Journal of Molecular Sciences, 2022, 23, 14552.	1.8	2
488	Biomaterials and Clinical Applications of Customized Healing Abutment—A Narrative Review. Journal of Functional Biomaterials, 2022, 13, 291.	1.8	14
489	Enhancement of surface properties of polyetheretherketone implant material by fractional laser texturing. F1000Research, 0, 11, 1430.	0.8	2
490	Additively manufactured MAX- and MXene-composite scaffolds for bone regeneration- recent advances and future perspectives. Colloids and Surfaces B: Biointerfaces, 2023, 225, 113282.	2.5	8
491	Avaliação da influência das condições de usinagem sobre o estado de superfÃ∈ie obtido no fresamento de ligas de titânio. Revista Materia, 2022, 27, .	0.1	0
492	Osteoblastic Cell Behavior and Gene Expression Related to Bone Metabolism on Different Titanium Surfaces. International Journal of Molecular Sciences, 2023, 24, 3523.	1.8	3
493	Effect of Hydrothermal and Vapor Thermal Treatments on Apatite Inductivity of Titanate Nanotubes on Anodized Ti–5Nb–5Mo Surface. Nanomaterials, 2023, 13, 1296.	1.9	0
501	Cellular interactions and molecular signaling at the interface of cells and polymeric biomaterials. , 2023, , 33-56.		0

ARTICLE

IF CITATIONS