Daqing Wei

List of Publications by Year
in descending order

49	1,398	22	36
papers	citations	h-index	g-index
		304368	344852

49	49	49	1311
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Characteristic and in vitro bioactivity of a microarc-oxidized TiO2-based coating after chemical treatment. Acta Biomaterialia, 2007, 3, 817-827.	4.1	120
2	Superhydrophobic double-layer coating for efficient heat dissipation and corrosion protection. Chemical Engineering Journal, 2019, 362, 638-649.	6.6	77
3	Synergistic Effects of Surface Chemistry and Topologic Structure from Modified Microarc Oxidation Coatings on Ti Implants for Improving Osseointegration. ACS Applied Materials & Interfaces, 2015, 7, 8932-8941.	4.0	74
4	Effect of heat treatment on the structure and in vitro bioactivity of microarc-oxidized (MAO) titania coatings containing Ca and P ions. Surface and Coatings Technology, 2007, 201, 8723-8729.	2.2	69
5	Characteristic of microarc oxidized coatings on titanium alloy formed in electrolytes containing chelate complex and nano-HA. Applied Surface Science, 2007, 253, 5045-5050.	3.1	67
6	Structure of calcium titanate/titania bioceramic composite coatings on titanium alloy and apatite deposition on their surfaces in a simulated body fluid. Surface and Coatings Technology, 2007, 201, 8715-8722.	2.2	62
7	Chemical treatment of TiO2-based coatings formed by plasma electrolytic oxidation in electrolyte containing nano-HA, calcium salts and phosphates for biomedical applications. Applied Surface Science, 2008, 254, 1775-1782.	3.1	56
8	Structure, MC3T3-E1 Cell Response, and Osseointegration of Macroporous Titanium Implants Covered by a Bioactive Microarc Oxidation Coating with Microporous Structure. ACS Applied Materials & Interfaces, 2014, 6, 4797-4811.	4.0	41
9	Formation of CaTiO₃/TiO₂ composite coating on titanium alloy for biomedical applications. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 444-451.	1.6	40
10	The effect of applied voltages on the structure, apatite-inducing ability and antibacterial ability of micro arc oxidation coating formed on titanium surface. Bioactive Materials, 2018, 3, 426-433.	8.6	40
11	Biomimetic apatite deposited on microarc oxidized anatase-based ceramic coating. Ceramics International, 2008, 34, 1139-1144.	2.3	39
12	The structure and in vitro apatite formation ability of porous titanium covered bioactive microarc oxidized TiO2-based coatings containing Si, Na and Ca. Ceramics International, 2014, 40, 501-509.	2.3	39
13	Rapidly formation of the highly bioactive surface with hydroxyapatite crystals on the titania micro arc oxidation coating by microwave hydrothermal treatment. Applied Surface Science, 2019, 487, 708-718.	3.1	39
14	Effect of applied voltage on the structure of microarc oxidized TiO2-based bioceramic films. Materials Chemistry and Physics, 2007, 104, 177-182.	2.0	38
15	Bioactive coating with hierarchical double porous structure on titanium surface formed by two-step microarc oxidation treatment. Surface and Coatings Technology, 2014, 252, 148-156.	2.2	30
16	Plasma electrolytic oxidation induced â€˜local over-growthâ€™ characteristic across substrate/coating interface: Effects and tailoring strategy of individual pulse energy. Surface and Coatings Technology, 2018, 342, 198-208.	2.2	30
17	Al2O3/reduced graphene oxide double-layer radiative coating for efficient heat dissipation. Materials and Design, 2018, 157, 130-140.	3.3	28
18	Characterization and properties of microarc oxidized coatings containing Si, Ca and Na on titanium. Ceramics International, 2011, 37, 1761-1768.	2.3	26

#	Article	IF	Citations
19	Structure and apatite formation of microarc oxidized TiO2-based films before and after alkali-treatment by various alkali concentrations. Surface and Coatings Technology, 2008, 202, 5012-5019.	2.2	24
20	Microarc oxidation coating covered Ti implants with micro-scale gouges formed by a multi-step treatment for improving osseointegration. Materials Science and Engineering C, 2017, 76, 908-917.	3.8	24
21	Preparation, cell response and apatite-forming ability of microarc oxidized coatings containing Si, Ca and Na on titanium. Ceramics International, 2011, 37, 2505-2512.	2.3	23
22	MC3T3-E1 cell response of amorphous phase/TiO2 nanocrystal composite coating prepared by microarc oxidation on titanium. Materials Science and Engineering C, 2014, 39, 186-195.	3.8	23
23	In-situ SEM analysis of brittle plasma electrolytic oxidation coating bonded to plastic aluminum substrate: Microstructure and fracture behaviors. Materials Characterization, 2019, 156, 109851.	1.9	23
24	Preparation, biomimetic apatite induction and osteoblast proliferation test of TiO2-based coatings containing P with a graded structure. Ceramics International, 2009, 35, 2343-2350.	2.3	22
25	Structure, cell response and biomimetic apatite induction of gradient TiO2-based/nano-scale hydrophilic amorphous titanium oxide containing Ca composite coatings before and after crystallization. Colloids and Surfaces B: Biointerfaces, 2009, 74, 230-237.	2.5	22
26	Structures, bonding strength and in vitro bioactivity and cytotoxicity of electrochemically deposited bioactive nano-brushite coating/TiO 2 nanotubes composited films on titanium. Surface and Coatings Technology, 2018, 340, 93-102.	2.2	22
27	TEM analysis and in vitro and in vivo biological performance of the hydroxyapatite crystals rapidly formed on the modified microarc oxidation coating using microwave hydrothermal technique. Chemical Engineering Journal, 2019, 373, 1091-1110.	6.6	22
28	The hydrothermal treated Zn-incorporated titania based microarc oxidation coating: Surface characteristics, apatite-inducing ability and antibacterial ability. Surface and Coatings Technology, 2018, 352, 489-500.	2.2	21
29	Formation and structure of sphene/titania composite coatings on titanium formed by a hybrid technique of microarc oxidation and heat-treatment. Applied Surface Science, 2011, 257, 3404-3411.	3.1	20
30	Synergistic effects of elastic modulus and surface topology of Ti-based implants on early osseointegration. RSC Advances, 2016, 6, 43685-43696.	1.7	20
31	Osseointegration of bioactive microarc oxidized amorphous phase/TiO2 nanocrystals composited coatings on titanium after implantation into rabbit tibia. Journal of Materials Science: Materials in Medicine, 2014, 25, 1307-1318.	1.7	19
32	Chemical etching of micro-plasma oxidized titania film on titanium alloy and apatite deposited on the surface of modified titania film in vitro. Thin Solid Films, 2008, 516, 1818-1825.	0.8	17
33	Characteristic and biocompatibility of the TiO2-based coatings containing amorphous calcium phosphate before and after heat treatment. Applied Surface Science, 2009, 255, 6232-6239.	3.1	17
34	The effect of NaOH concentration on the steam-hydrothermally treated bioactive microarc oxidation coatings containing Ca, P, Si and Na on pure Ti surface. Materials Science and Engineering C, 2015, 49, 669-680.	3.8	17
35	Mechanical and corrosion resistance of hydrophilic sphene/titania composite coatings on titanium and deposition and release of cefazolin sodium/chitosan films. Applied Surface Science, 2011, 257, 2657-2664.	3.1	16
36	Conformal coating containing Ca, P, Si and Na with double-level porous surface structure on titanium formed by a three-step microarc oxidation. RSC Advances, 2015, 5, 28908-28920.	1.7	16

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37	Facile One-Step Fabrication of Multilayer Nanocomposite Coating for Radiative Heat Dissipation. ACS Applied Electronic Materials, 2019, 1, 1527-1537.	2.0	15
38	The effect of titanium bead diameter of porous titanium on the formation of micro-arc oxidized TiO2-based coatings containing Si and Ca. Ceramics International, 2013, 39, 5725-5732.	2.3	14
39	Structure of microarc oxidized coatings containing Si, Ca and Na on titanium and deposition of cefazolin sodium/chitosan composite film. Surface and Coatings Technology, 2011, 205, 3798-3804.	2.2	13
40	Titania nanotube/nano-brushite composited bioactive coating with micro/nanotopography on titanium formed by anodic oxidation and hydrothermal treatment. Ceramics International, 2015, 41, 13115-13125.	2.3	12
41	Microarc oxidized TiO2 based ceramic coatings combined with cefazolin sodium/chitosan composited drug film on porous titanium for biomedical applications. Materials Science and Engineering C, 2013, 33, 4118-4125.	3.8	10
42	Rapid Fabrication, Microstructure, and in Vitro and in Vivo Investigations of a High-Performance Multilayer Coating with External, Flexible, and Silicon-Doped Hydroxyapatite Nanorods on Titanium. ACS Biomaterials Science and Engineering, 2019, 5, 4244-4262.	2.6	10
43	H₂Ti₅O₁₁Â·H₂O nanorod arrays formed on a Ti surface via a hybrid technique of microarc oxidation and chemical treatment. CrystEngComm, 2015, 17, 2705-2717.	1.3	9
44	MC3T3-E1 cells' response and osseointegration of bioactive spheneâ€“titanium oxide composite coatings fabricated by a hybrid technique of microarc oxidation and heat treatment on titanium. Journal of Materials Chemistry B, 2014, 2, 2993.	2.9	8
45	Rapid structural evolution and bone inducing mechanism of the multilayer coating with silicon-doped hydroxyapatite crystals on the microwave water steaming-hydrothermally treated titania coating. Applied Surface Science, 2021, 539, 148153.	3.1	8
46	Effect of heat treatment atmosphere on the structure and apatite-inducing ability of Ca, P, Si and Na incorporated microarc oxidation coating on titanium. Surface and Coatings Technology, 2017, 310, 190-198.	2.2	5
47	Liquid-phase plasma assisted electrophoresis and sintering SiC/hBN nanocomposite ceramic coating on aluminum alloy for radiative heat dissipation. Ceramics International, 2021, 47, 9310-9316.	2.3	5
48	Comparative investigations of<i>in vitro</i>and<i>in vivo</i>bioactivity of titanium<i>vs.</i>Tiâ€“24Nbâ€“4Zrâ€“8Sn alloy before and after sandblasting and acid etching. RSC Advances, 2020, 10, 23582-23591.	1.7	3
49	Rapid structural regulation, apatite-inducing mechanism and <i>in vivo</i> investigation of microwave-assisted hydrothermally treated titania coating. RSC Advances, 2021, 11, 7305-7317.	1.7	3