Aydin Bordbar-Khiabani

List of Publications by Year
in descending order

28 papers	1,121 citations	331259 21 h-index	525886 27 g-index
28 all docs	28 docs citations	28 times ranked	865 citing authors

#	Article	IF	Citations
1	Enhanced corrosion resistance and in-vitro biodegradation of plasma electrolytic oxidation coatings prepared on AZ91 Mg alloy using ZnO nanoparticles-incorporated electrolyte. Surface and Coatings Technology, 2019, 360, 153-171.	2.2	119
2	Smart Hydrogels for Advanced Drug Delivery Systems. International Journal of Molecular Sciences, 2022, 23, 3665.	1.8	99
3	Three-phase PANI@nano-Fe3O4@CFs heterostructure: Fabrication, characterization and investigation of microwave absorption and EMI shielding of PANI@nano-Fe3O4@CFs/epoxy hybrid composite. Composites Science and Technology, 2017, 150, 65-78.	3.8	97
4	Highly corrosion protection properties of plasma electrolytic oxidized titanium using rGO nanosheets. Applied Surface Science, 2019, 486, 153-165.	3.1	72
5	Corrosion behavior and in-vitro bioactivity of porous Mg/Al2O3 and Mg/Si3N4 metal matrix composites fabricated using microwave sintering process. Materials Chemistry and Physics, 2019, 225, 331-339.	2.0	59
6	Improved corrosion performance of biodegradable magnesium in simulated inflammatory condition via drug-loaded plasma electrolytic oxidation coatings. Materials Chemistry and Physics, 2020, 239, 122003.	2.0	52
7	Fabrication of a ternary PANI@Fe3O4@CFs nanocomposite as a high performance electrode for solid-state supercapacitors. International Journal of Hydrogen Energy, 2019, 44, 26794-26806.	3.8	47
8	Improving corrosion behavior and in vitro bioactivity of plasma electrolytic oxidized AZ91 magnesium alloy using calcium fluoride containing electrolyte. Materials Letters, 2018, 212, 98-102.	1.3	45
9	Improvement in magnetic and microwave absorption properties of nano-Fe 3 O 4 @CFs composites using a modified multi-step EPD process. Applied Surface Science, 2017, 420, 726-739.	3.1	41
10	Electrophoretic deposition of graphene oxide on plasma electrolytic oxidized-magnesium implants for bone tissue engineering applications. Materials Today: Proceedings, 2018, 5, 15603-15612.	0.9	40
11	Emerging magnesium-based biomaterials for orthopedic implantation. Emerging Materials Research, 2019, 8, 305-319.	0.4	38
12	Effect of ZnO pore-sealing layer on anti-corrosion and in-vitro bioactivity behavior of plasma electrolytic oxidized AZ91 magnesium alloy. Materials Letters, 2020, 258, 126779.	1.3	38
13	In-vitro corrosion and bioactivity behavior of tailored calcium phosphate-containing zinc oxide coating prepared by plasma electrolytic oxidation. Corrosion Science, 2020, 173, 108781.	3.0	37
14	Immobilization of rGO/ZnO hybrid composites on the Zn substrate for enhanced photocatalytic activity and corrosion stability. Journal of Alloys and Compounds, 2020, 845, 156219.	2.8	35
15	Plasma electrolytic oxidation of monocrystalline silicon using silicate electrolyte containing boric acid. Applied Surface Science, 2018, 462, 913-922.	3.1	34
16	Electrophoretic deposition of spherical carbonyl iron particles on carbon fibers as a microwave absorbent composite. Surfaces and Interfaces, 2016, 5, 1-7.	1.5	32
17	Improving optoelectrical properties of photoactive anatase TiO2 coating using rGO incorporation during plasma electrolytic oxidation. Ceramics International, 2019, 45, 1746-1754.	2.3	30
18	Functional PEO layers on magnesium alloys: innovative polymer-free drug-eluting stents. Surface Innovations, 2018, 6, 237-243.	1.4	29

#	Article	IF	Citations
19	Advanced surface treatment techniques counteract biofilm-associated infections on dental implants. Materials Research Express, 2020, 7, 015417.	0.8	29
20	The competitive mechanism of plasma electrolyte oxidation for the formation of magnesium oxide bioceramic coatings. Materials Today: Proceedings, 2018, 5, 15677-15685.	0.9	25
21	Surface functionalization of anodized tantalum with Mn3O4 nanoparticles for effective corrosion protection in simulated inflammatory condition. Ceramics International, 2022, 48, 3148-3156.	2.3	22
22	Additive Manufacturing: An Opportunity for the Fabrication of Near-Net-Shape NiTi Implants. Journal of Manufacturing and Materials Processing, 2022, 6, 65.	1.0	20
23	Comparison of corrosion and antibacterial properties of Al alloy treated by plasma electrolytic oxidation and anodizing methods. Materials Today: Proceedings, 2018, 5, 15667-15676.	0.9	19
24	Effects of co-incorporated ternary elements on biocorrosion stability, antibacterial efficacy, and cytotoxicity of plasma electrolytic oxidized titanium for implant dentistry. Materials Chemistry and Physics, 2022, 276, 125436.	2.0	19
25	Enhanced optoelectronic performance of plasma electrolytic oxidized monocrystalline silicon using rGO incorporation. Materials Letters, 2019, 239, 151-154.	1.3	16
26	Surface and structure characteristics of commercial K-Feldspar powders: Effects of temperature and leaching media. Chinese Journal of Chemical Engineering, 2020, 28, 307-317.	1.7	15
27	In situ synthesis of leuciteâ€based feldspathic dental porcelain with minor kalsilite and Fe₂O₃ impurities. International Journal of Applied Ceramic Technology, 2019, 16, 552-561.	1.1	9
28	Experimental procedures for assessing electrical and thermal conductivity of polyaniline. , 2019, , 227-258.		3