

Carlo Paternoster

List of Publications by Year in descending order

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36
papers

547
citations

687220

13
h-index

677027

22
g-index

36
all docs

36
docs citations

36
times ranked

680
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of cross-rolling on the micro-texture and biodegradation of pure iron as biodegradable material for medical implants. <i>Acta Biomaterialia</i> , 2015, 17, 68-77.	4.1	57
2	Effect of grain sizes on mechanical properties and biodegradation behavior of pure iron for cardiovascular stent application. <i>Biomatter</i> , 2016, 6, e959874.	2.6	53
3	In vitro degradation behavior of Fe-20Mn-1.2C alloy in three different pseudo-physiological solutions. <i>Materials Science and Engineering C</i> , 2016, 61, 564-573.	3.8	50
4	Thermal evolution and mechanical properties of hard Ti-Cr-B-N and Ti-Al-Si-B-N coatings. <i>Surface and Coatings Technology</i> , 2008, 203, 736-740.	2.2	36
5	The use of multiple pseudo-physiological solutions to simulate the degradation behavior of pure iron as a metallic resorbable implant: a surface-characterization study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 19637-19646.	1.3	32
6	CO ₂ -rich atmosphere strongly affects the degradation of Fe-21Mn-1C for biodegradable metallic implants. <i>Materials Letters</i> , 2016, 181, 362-366.	1.3	26
7	Mechanical, microstructural and oxidation properties of reactively sputtered thin CrN coatings on steel. <i>Thin Solid Films</i> , 2011, 519, 6515-6521.	0.8	25
8	Synthesis, mechanical properties and corrosion behavior of powder metallurgy processed Fe/Mg ₂ Si composites for biodegradable implant applications. <i>Materials Science and Engineering C</i> , 2017, 81, 511-521.	3.8	24
9	Laser surface structuring affects polymer deposition, coating homogeneity, and degradation rate of Mg alloys. <i>Materials Letters</i> , 2015, 160, 359-362.	1.3	21
10	Understanding the effect of the reinforcement addition on corrosion behavior of Fe/Mg ₂ Si composites for biodegradable implant applications. <i>Materials Chemistry and Physics</i> , 2019, 223, 771-778.	2.0	20
11	Laser surface texturing of SS316L for enhanced adhesion of HUVECs. <i>Surface Engineering</i> , 2020, 36, 1240-1249.	1.1	18
12	Long-term <i>in vitro</i> degradation behaviour of Fe and Fe/Mg ₂ Si composites for biodegradable implant applications. <i>RSC Advances</i> , 2018, 8, 9627-9639.	1.7	17
13	Thermal stability of Cr _x nanometric coatings deposited on stainless steel. <i>Journal of Materials Science</i> , 2008, 43, 3377-3384.	1.7	13
14	Surface modification and direct plasma amination of L605 CoCr alloys: on the optimization of the oxide layer for application in cardiovascular implants. <i>RSC Advances</i> , 2019, 9, 2292-2301.	1.7	13
15	The addition of silver affects the deformation mechanism of a twinning-induced plasticity steel: Potential for thinner degradable stents. <i>Acta Biomaterialia</i> , 2019, 98, 103-113.	4.1	13
16	A microstructure study of nanostructured Fe-Mo+1.5wt.%SiO ₂ and +1.5wt.%TiO ₂ powders compacted by spark plasma sintering. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 496, 121-132.	2.6	12
17	Surface processing for iron-based degradable alloys: A preliminary study on the importance of acid pickling. <i>Bioactive Materials</i> , 2022, 11, 166-180.	8.6	11
18	Structural and mechanical characterization of nanostructured titanium oxide thin films deposited by filtered cathodic vacuum arc. <i>Surface and Coatings Technology</i> , 2013, 227, 42-47.	2.2	9

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19	Effect of electrolyte composition and deposition current for Fe/Fe-P electroformed bilayers for biodegradable metallic medical applications. <i>Materials Science and Engineering C</i> , 2017, 70, 195-206.	3.8	9
20	Influence of cold rolling on <i>in vitro</i> cytotoxicity and electrochemical behaviour of an Fe-Mn-C biodegradable alloy in physiological solutions. <i>Heliyon</i> , 2018, 4, e00926.	1.4	9
21	Effect of laser welding on the mechanical and degradation behaviour of Fe-20Mn-0.6C bioabsorbable alloy. <i>Journal of Materials Research and Technology</i> , 2020, 9, 13474-13482.	2.6	9
22	Plasma-immersion ion implantation surface oxidation on a cobalt-chromium alloy for biomedical applications. <i>Biointerphases</i> , 2020, 15, 041004.	0.6	8
23	Effect of Silver on Corrosion Behavior of Plastically Deformed Twinning-Induced Plasticity Steel for Biodegradable Stents. <i>Jom</i> , 2020, 72, 1892-1901.	0.9	8
24	Mechanical and degradation behavior of three Fe-Mn-C alloys for potential biomedical applications. <i>Materials Today Communications</i> , 2021, 27, 102250.	0.9	8
25	Six-Month Long <i>In Vitro</i> Degradation Tests of Biodegradable Twinning-Induced Plasticity Steels Alloyed with Ag for Stent Applications. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 3669-3682.	2.6	7
26	Influence of cross Rolling on the microstructure and mechanical properties of Zn bioabsorbable alloys. <i>Materials Letters</i> , 2020, 279, 128504.	1.3	6
27	Surface modification of L605 by oxygen plasma immersion ion implantation for biomedical applications. <i>MRS Communications</i> , 2018, 8, 1404-1412.	0.8	5
28	Fabrication of nanopatterned metal layers on silicon by nanoindentation/nanoscratching and electrodeposition. <i>Electrochimica Acta</i> , 2010, 55, 3355-3360.	2.6	4
29	Microstructural Precipitation Evolution and <i>In Vitro</i> Degradation Behavior of a Novel Chill-Cast Zn-Based Absorbable Alloy for Medical Applications. <i>Metals</i> , 2020, 10, 586.	1.0	4
30	Effect of oxygen content on the mechanical properties and plastic deformation mechanisms in the TWIP/TRIP Ti-12Mo alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 817, 141346.	2.6	4
31	Oxidation Behaviour and Thermal Stability of Nanocomposited Ti-Al-Si-B-N and Ti-Cr-B-N Coatings. <i>Materials Science Forum</i> , 0, 604-605, 19-28.	0.3	3
32	Thermal Stability of Nanostructured Coatings. <i>Materials Science Forum</i> , 0, 653, 1-22.	0.3	3
33	Titanium oxide thin film deposition by pulsed arc vacuum plasma. <i>Journal of Physics: Conference Series</i> , 2011, 275, 012019.	0.3	3
34	Improving the radiopacity of Fe-Mn biodegradable metals by magnetron-sputtered Fe-Mn-C coatings: Application for thinner stents. <i>Bioactive Materials</i> , 2022, 12, 64-70.	8.6	3
35	Effect of silver in thermal treatments of Fe-Mn-C degradable metals: Implications for stent processing. <i>Bioactive Materials</i> , 2022, 12, 30-41.	8.6	3
36	Thermal Cycling Stability of Cr-N Thin Films Deposited on Stainless Steel. <i>High Temperature Materials and Processes</i> , 2007, 26, .	0.6	1