Petre-Flaviu Gostin

List of Publications by Year
in descending order

30 papers	999 citations	516215 16 h-index	476904 29 g-index
30 all docs	30 docs citations	30 times ranked	1053 citing authors

#	Article	IF	Citations
1	Designing biocompatible Ti-based metallic glasses for implant applications. Materials Science and Engineering C, 2013, 33, 875-883.	3.8	178
2	Tribological and corrosion properties of Alâ€“12Si produced by selective laser melting. Journal of Materials Research, 2014, 29, 2044-2054.	1.2	138
3	Comparison of the corrosion of bulk amorphous steel with conventional steel. Corrosion Science, 2010, 52, 273-281.	3.0	80
4	Effect of surface finishing of a Zr-based bulk metallic glass on its corrosion behaviour. Corrosion Science, 2010, 52, 1711-1720.	3.0	70
5	Surface treatment, corrosion behavior, and apatiteâ€forming ability of Tiâ€45Nb implant alloy. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 269-278.	1.6	64
6	Acid corrosion process of Fe-based bulk metallic glass. Corrosion Science, 2012, 62, 112-121.	3.0	45
7	Effect of indium (In) on corrosion and passivity of a beta-type Tiâ€“Nb alloy in Ringer's solution. Applied Surface Science, 2015, 335, 213-222.	3.1	44
8	Interactions between mechanically generated defects and corrosion phenomena of Zr-based bulk metallic glasses. Acta Materialia, 2012, 60, 2300-2309.	3.8	42
9	Chemical nanoroughening of Ti40Nb surfaces and its effect on human mesenchymal stromal cell response. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2014, 102, 31-41.	1.6	40
10	Characterization of corrosion phenomena of Zrâ€“Tiâ€“Cuâ€“Alâ€“Ni metallic glass by SEM and TEM. Materials Characterization, 2010, 61, 1000-1008.	1.9	38
11	Electrochemical deposition of hydroxyapatite on beta-Ti-40Nb. Surface and Coatings Technology, 2016, 294, 186-193.	2.2	38
12	Nano-porous surface states of Tiâ€“Yâ€“Alâ€“Co phase separated metallic glass. Intermetallics, 2009, 17, 1120-1123.	1.8	33
13	Oxidation treatments of beta-type Ti-40Nb for biomedical use. Surface and Coatings Technology, 2016, 302, 88-99.	2.2	30
14	Designing new biocompatible glassâ€forming Ti_{75â€}_xZr₁₀Nb_xSi₁₅ (xâ€‰=â€‰0, 15) alloys: corrosion, passivity, and apatite formation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 27-38.	1.6	23
15	Comparing the pitting corrosion behavior of prominent Zr-based bulk metallic glasses. Journal of Materials Research, 2015, 30, 233-241.	1.2	19
16	The impact of surface morphology on the magnetovolume transition in magnetocaloric LaFe_{11.8}Si_{1.2}. APL Materials, 2016, 4, 106101.	2.2	16
17	Comparing the corrosion behaviour of Zr66/Ti66â€“Nb13Cu8Ni6.8Al6.2 bulk nanostructure-dendrite composites. Intermetallics, 2008, 16, 1179-1184.	1.8	12
18	Polarization Studies of Zr-Based Bulk Metallic Glasses for Electrochemical Machining. Journal of the Electrochemical Society, 2014, 161, E66-E73.	1.3	12

#	Article	IF	Citations
19	Stress corrosion cracking of a Zr-based bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 681-690.	2.6	12
20	XPS and AES sputterâ€depth profiling at surfaces of biocompatible passivated Tiâ€based alloys: concentration quantification considering chemical effects. Surface and Interface Analysis, 2014, 46, 683-688.	0.8	11
21	Corrosion behavior of the bulk glassy (Fe_{44.3}Cr₅Co₅Mo_{12.8}Mn_{11.2}C_{15.8}B_{5.9} alloy. Journal of Materials Research, 2009, 24, 1471-1479.	1.8	9
22	In Situ Electrochemical Analysis during Deformation of a Zrâ€Based Bulk Metallic Glass: A Sensitive Tool Revealing Early Shear Banding. Advanced Engineering Materials, 2015, 17, 1532-1535.	1.6	8
23	In-Situ Synchrotron X-ray Characterization of Corrosion Products in Zr Artificial Pits in Simulated Physiological Solutions. Journal of the Electrochemical Society, 2017, 164, C1003-C1012.	1.3	8
24	Stress-Corrosion Interactions in Zr-Based Bulk Metallic Glasses. Metals, 2015, 5, 1262-1278.	1.0	7
25	Corrosion of a Zr-based Bulk Metallic Glass with Different Surface Finishing States. ECS Transactions, 2009, 16, 1-7.	0.3	5
26	Corrosion Fatigue Studies on a Bulk Glassy Zr-Based Alloy under Three-Point Bending. Frontiers in Materials, 2017, 3, .	1.2	5
27	In Situ Synchrotron Xâ€Ray Diffraction Characterization of Corrosion Products of a Tiâ€Based Metallic Glass for Implant Applications. Advanced Healthcare Materials, 2018, 7, e1800338.	3.9	4
28	The Influence of Partial Replacement of Cu with Ga on the Corrosion Behavior of Ti₄₀Zr₁₀Cu₃₆Pd₁₄ÂMetallic Glasses. Journal of the Electrochemical Society, 2019, 166, C485-C491.	1.3	4
29	X-ray Diffraction Computed Nanotomography Applied to Solve the Structure of Hierarchically Phase-Separated Metallic Glass. ACS Nano, 2021, 15, 2386-2398.	7.3	4
30	Microstructure and mechanical properties of a newly developed high strength Mg54.7Cu11.5Ag3.3Gd5.5Sc25 alloy. Intermetallics, 2014, 45, 84-88.	1.8	0