Mariana Calin

List of Publications by Year in Descending Order

43 papers	1,556 citations	18 h-index	39 g-index
44 ext. papers	1,873 ext. citations	4.9 avg, IF	4.45 L-index

#	Paper	IF	Citations
43	Insights into the surface and biocompatibility aspects of laser shock peened Ti-22Nb alloy for orthopedic implant applications. *Applied Surface Science*, **2022**, 152816	6.7	1
42	Tailoring biocompatible Ti-Zr-Nb-Hf-Si metallic glasses based on high-entropy alloys design approach. *Materials Science and Engineering C*, **2021**, 121, 111733	8.3	8
41	Superhydrophilic nanostructured surfaces of beta Ti 29Nb alloy for cardiovascular stent applications. *Surface and Coatings Technology*, **2020**, 396, 125965	4.4	7
40	New Mg-Ca-Zn amorphous alloys: Biocompatibility, wettability and mechanical properties. *Materialia*, **2020**, 12, 100799	3.2	15
39	Routes to control diffusive pathways and thermal expansion in Ti-alloys. *Scientific Reports*, **2020**, 10, 3045	4.9	5
38	The Influence of Partial Replacement of Cu with Ga on the Corrosion Behavior of Ti40Zr10Cu36Pd14 Metallic Glasses. *Journal of the Electrochemical Society*, **2019**, 166, C485-C491	3.9	0
37	Tuning the glass forming ability and mechanical properties of Ti-based bulk metallic glasses by Ga additions. *Journal of Alloys and Compounds*, **2019**, 793, 552-563	5.7	10
36	Synthesis of new glassy Mg-Ca-Zn alloys with exceptionally low Young's Modulus: Exploring near eutectic compositions. *Scripta Materialia*, **2019**, 173, 139-143	5.6	5
35	Thermomechanical processing of In-containing type Ti-Nb alloys. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 79, 283-291	4.1	10
34	Metal release and cell biological compatibility of beta-type Ti-40Nb containing indium. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2018**, 106, 1686-1697	3.5	10
33	Effects of thermomechanical history and environment on the fatigue behavior of (Ti-Nb implant alloys. *MATEC Web of Conferences*, **2018**, 165, 06001	0.3	3
32	Effects of new beta-type Ti-40Nb implant materials, brain-derived neurotrophic factor, acetylcholine and nicotine on human mesenchymal stem cells of osteoporotic and non osteoporotic donors. *PLoS ONE*, **2018**, 13, e0193468	3.7	10
31	Micro-patterning by thermoplastic forming of Ni-free Ti-based bulk metallic glasses. *Materials and Design*, **2017**, 120, 204-211	8.1	17
30	Micropatterning kinetics of different glass-forming systems investigated by thermoplastic net-shaping. *Scripta Materialia*, **2017**, 137, 127-131	5.6	10
29	Fatigue properties of a new generation type Ti-Nb alloy for osteosynthesis with an industrial standard surface condition. *International Journal of Fatigue*, **2017**, 103, 147-156	5	5
28	Hierarchical surface patterning of Ni- and Be-free Ti- and Zr-based bulk metallic glasses by thermoplastic net-shaping. *Materials Science and Engineering C*, **2017**, 73, 398-405	8.3	14
27	Thermal stability and latent heat of Nb ich martensitic Ti-Nb alloys. *Journal of Alloys and Compounds*, **2017**, 697, 300-309	5.7	35

26	Giant thermal expansion and precipitation pathways in Ti-alloys. *Nature Communications*, **2017**, 8, 1429	17.4	50
25	Designing new biocompatible glass-forming Ti75-x Zr10 Nbx Si15 (x = 0, 15) alloys: corrosion, passivity, and apatite formation. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2016**, 104, 27-38	3.5	18
24	Mechanical and Corrosion Behavior of New Generation Ti-45Nb Porous Alloys Implant Devices. *Technologies*, **2016**, 4, 33	2.4	16
23	Effect of Cu and Gd on Structural and Magnetic Properties of Fe-Co-B-Si-Nb Metallic Glasses. *Solid State Phenomena*, **2016**, 254, 60-64	0.4	1
22	Electrochemical deposition of hydroxyapatite on beta-Ti-40Nb. *Surface and Coatings Technology*, **2016**, 294, 186-193	4.4	26
21	Thermal oxidation behavior of glass-forming Ti-Zr-(Nb)-Si alloys. *Journal of Materials Research*, **2016**, 31, 1264-1274	2.5	2
20	Tailoring the Bain strain of martensitic transformations in TiNb alloys by controlling the Nb content. *International Journal of Plasticity*, **2016**, 85, 190-202	7.6	22
19	Phase transformations and mechanical properties of biocompatible Ti16.1Nb processed by severe plastic deformation. *Journal of Alloys and Compounds*, **2015**, 628, 434-441	5.7	46
18	Effect of indium (In) on corrosion and passivity of a beta-type TiNb alloy in Ringer's solution. *Applied Surface Science*, **2015**, 335, 213-222	6.7	26
17	Effect of Powder Particle Shape on the Properties of In Situ TiTiB Composite Materials Produced by Selective Laser Melting. *Journal of Materials Science and Technology*, **2015**, 31, 1001-1005	9.1	156
16	Factors influencing the elastic moduli, reversible strains and hysteresis loops in martensitic Ti-Nb alloys. *Materials Science and Engineering C*, **2015**, 48, 511-20	8.3	41
15	XPS and AES sputter-depth profiling at surfaces of biocompatible passivated Ti-based alloys: concentration quantification considering chemical effects. *Surface and Interface Analysis*, **2014**, 46, 683-688	1.5	10
14	Composition-dependent magnitude of atomic shuffles in TiNb martensites. *Journal of Applied Crystallography*, **2014**, 47, 1374-1379	3.8	42
13	Elastic softening of type Ti-Nb alloys by indium (In) additions. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 39, 162-74	4.1	54
12	Selective laser melting of in situ titaniumtitanium boride composites: Processing, microstructure and mechanical properties. *Acta Materialia*, **2014**, 76, 13-22	8.4	375
11	Mechanical Alloying of Type TiNb for Biomedical Applications. *Advanced Engineering Materials*, **2013**, 15, 262-268	3.5	17
10	Surface treatment, corrosion behavior, and apatite-forming ability of Ti-45Nb implant alloy. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2013**, 101, 269-78	3.5	52
9	Designing biocompatible Ti-based metallic glasses for implant applications. *Materials Science and Engineering C*, **2013**, 33, 875-83	8.3	142

8	Thermal stability and phase transformations of martensitic Ti-Nb alloys. *Science and Technology of Advanced Materials*, **2013**, 14, 055004	7.1	81
7	Production of Porous β-Type Ti-40Nb Alloy for Biomedical Applications: Comparison of Selective Laser Melting and Hot Pressing. *Materials*, **2013**, 6, 5700-5712	3.5	63
6	Nanostructured β-phase Ti-31.0Fe-9.0Sn and sub-β structured Ti-39.3Nb-13.3Zr-10.7Ta alloys for biomedical applications: Microstructure benefits on the mechanical and corrosion performances. *Materials Science and Engineering C*, **2012**, 32, 2418-2425	8.3	66
5	Thermal Stability and Crystallization Kinetics of Ti40Zr10Cu34Pd14Sn2 Bulk Metallic Glass. *Solid State Phenomena*, **2012**, 188, 3-10	0.4	1
4	Nanocrystalline body-centred cubic beta-titanium alloy processed by high-pressure torsion. *International Journal of Materials Research*, **2009**, 100, 1662-1667	0.5	16
3	Deformation-induced nanoscale high-temperature phase separation in Co-Fe alloys at room temperature. *Applied Physics Letters*, **2007**, 90, 201908	3.4	10
2	High-strength Cu-Ti-rich bulk metallic glasses and nano-composites. *International Journal of Materials Research*, **2003**, 94, 615-620		4
1	Nanocrystallization of Al-Ni-Y and Al-Ni-Nd Metallic Glasses. *Materials Science Forum*, **1998**, 269-272, 749-754	0.4	54