Mariana Calin

List of Publications by Year
in descending order

43 papers	2,187 citations	304368 22 h-index	253896 43 g-index
44 all docs	44 docs citations	44 times ranked	1991 citing authors

#	Article	IF	Citations
1	Selective laser melting of in situ titaniumâ€“titanium boride composites: Processing, microstructure and mechanical properties. Acta Materialia, 2014, 76, 13-22.	3.8	483
2	Effect of Powder Particle Shape on the Properties of In Situ Tiâ€“TiB Composite Materials Produced by Selective Laser Melting. Journal of Materials Science and Technology, 2015, 31, 1001-1005.	5.6	201
3	Designing biocompatible Ti-based metallic glasses for implant applications. Materials Science and Engineering C, 2013, 33, 875-883.	3.8	178
4	Thermal stability and phase transformations of martensitic Tiâ€“Nb alloys. Science and Technology of Advanced Materials, 2013, 14, 055004.	2.8	107
5	Nanostructured Î²-phase Tiâ€“31.0Feâ€“9.0Sn and sub-Î¼m structured Tiâ€“39.3Nbâ€“13.3Zrâ€“10.7Ta alloys for biomedical applications: Microstructure benefits on the mechanical and corrosion performances. Materials Science and Engineering C, 2012, 32, 2418-2425.	3.8	90
6	Giant thermal expansion and Î±-precipitation pathways in Ti-alloys. Nature Communications, 2017, 8, 1429.	5.8	81
7	Production of Porous Î²-Type Tiâ€“40Nb Alloy for Biomedical Applications: Comparison of Selective Laser Melting and Hot Pressing. Materials, 2013, 6, 5700-5712.	1.3	77
8	Elastic softening of Î²-type Tiâ€“Nb alloys by indium (In) additions. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 162-174.	1.5	73
9	Phase transformations and mechanical properties of biocompatible Tiâ€“16.1Nb processed by severe plastic deformation. Journal of Alloys and Compounds, 2015, 628, 434-441.	2.8	67
10	Composition-dependent magnitude of atomic shuffles in Tiâ€“Nb martensites. Journal of Applied Crystallography, 2014, 47, 1374-1379.	1.9	65
11	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
12	Factors influencing the elastic moduli, reversible strains and hysteresis loops in martensitic Tiâ€“Nb alloys. Materials Science and Engineering C, 2015, 48, 511-520.	3.8	63
13	Thermal stability and latent heat of Nbâ€“rich martensitic Ti-Nb alloys. Journal of Alloys and Compounds, 2017, 697, 300-309.	2.8	60
14	Nanocrystallization of Al-Ni-Y and Al-Ni-Nd Metallic Glasses. Materials Science Forum, 1998, 269-272, 749-754.	0.3	56
15	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
16	Electrochemical deposition of hydroxyapatite on beta-Ti-40Nb. Surface and Coatings Technology, 2016, 294, 186-193.	2.2	38
17	Tailoring the Bain strain of martensitic transformations in Ti Nb alloys by controlling the Nb content. International Journal of Plasticity, 2016, 85, 190-202.	4.1	31
18	New Mg-Ca-Zn amorphous alloys: Biocompatibility, wettability and mechanical properties. Materialia, 2020, 12, 100799.	1.3	26

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19	Nanocrystalline body-centred cubic beta-titanium alloy processed by high-pressure torsion. International Journal of Materials Research, 2009, 100, 1662-1667.	0.1	25
20	Micro-patterning by thermoplastic forming of Ni-free Ti-based bulk metallic glasses. Materials and Design, 2017, 120, 204-211.	3.3	25
21	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.	3.8	25
22	Tailoring biocompatible Ti-Zr-Nb-Hf-Si metallic glasses based on high-entropy alloys design approach. Materials Science and Engineering C, 2021, 121, 111733.	3.8	25
23	Mechanical Alloying of Î²â€Type Tiâ€“Nb for Biomedical Applications. Advanced Engineering Materials, 2013, 15, 262-268.	1.6	24
24	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
25	Metal release and cell biological compatibility of betaâ€type Tiâ€40Nb containing indium. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 1686-1697.	1.6	23
26	Insights into the surface and biocompatibility aspects of laser shock peened Ti-22Nb alloy for orthopedic implant applications. Applied Surface Science, 2022, 586, 152816.	3.1	23
27	Mechanical and Corrosion Behavior of New Generation Ti-45Nb Porous Alloys Implant Devices. Technologies, 2016, 4, 33.	3.0	22
28	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.	2.8	20
29	Superhydrophilic nanostructured surfaces of beta Ti 29Nb alloy for cardiovascular stent applications. Surface and Coatings Technology, 2020, 396, 125965.	2.2	18
30	Thermomechanical processing of In-containing Î²-type Ti-Nb alloys. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 283-291.	1.5	17
31	Micropatterning kinetics of different glass-forming systems investigated by thermoplastic net-shaping. Scripta Materialia, 2017, 137, 127-131.	2.6	16
32	Routes to control diffusive pathways and thermal expansion in Ti-alloys. Scientific Reports, 2020, 10, 3045.	1.6	16
33	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.	1.1	15
34	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
35	Deformation-induced nanoscale high-temperature phase separation in Coâ€“Fe alloys at room temperature. Applied Physics Letters, 2007, 90, 201908.	1.5	10
36	Effects of thermomechanical history and environment on the fatigue behavior of (Î²)-Ti-Nb implant alloys. MATEC Web of Conferences, 2018, 165, 06001.	0.1	10

#	Article	IF	Citations
37	Synthesis of new glassy Mg-Ca-Zn alloys with exceptionally low Young's Modulus: Exploring near eutectic compositions. Scripta Materialia, 2019, 173, 139-143.	2.6	7
38	Fatigue properties of a new generation ÃŸ-type Ti-Nb alloy for osteosynthesis with an industrial standard surface condition. International Journal of Fatigue, 2017, 103, 147-156.	2.8	6
39	Thermal oxidation behavior of glass-forming Tiâ€“Zrâ€“(Nb)â€“Si alloys. Journal of Materials Research, 2016, 31, 1264-1274.	1.2	5
40	Thermal Stability and Crystallization Kinetics of Ti₄₀Zr₁₀Cu₃₄Pd₁₄Sn<sub>2</su Bulk Metallic Glass. Solid State Phenomena, 0, 188, 3-10.		
41	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
42	New Cu-Free Ti-Based Composites with Residual Amorphous Matrix. Materials, 2016, 9, 331.	1.3	2
43	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.	0.3	2