

Conrado R M Afonso

List of Publications by Year in descending order

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91
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236925

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94
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times ranked

1966
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#	ARTICLE	IF	CITATIONS
1	New insights into the hardening and pitting corrosion mechanisms of thermally aged duplex stainless steel at 475ÅÅ°C: A comparative study between 2205 and 2101 steels. <i>Journal of Materials Science and Technology</i> , 2022, 98, 123-135.	10.7	26
2	Experimental assessment of low-temperature martensite transformations in Ni-rich polycrystalline Niâ€“Ti alloys. <i>Journal of Materials Research and Technology</i> , 2022, 18, 4990-5004.	5.8	3
3	Anodic growth and pre-calcification on Î²-Ti-40Nb alloy: Effects on elastic modulus, electrochemical properties, and bioactivity. <i>Ceramics International</i> , 2022, 48, 27575-27589.	4.8	7
4	An exploratory study of TiO2-based multicomponent nanotubes on TiFeNbSn ultrafine eutectic alloy. <i>Surface and Coatings Technology</i> , 2021, 407, 126765.	4.8	3
5	Fundamental studies of magneto-optical borogermanate glasses and derived optical fibers containing Tb3+. <i>Journal of Materials Research and Technology</i> , 2021, 11, 312-327.	5.8	25
6	Impact of Zr content on the nanostructure, mechanical, and tribological behaviors of Î²-Ti-Nb-Zr ternary alloy coatings. <i>Thin Solid Films</i> , 2021, 721, 138565.	1.8	12
7	Magneto-optical borogermanate glasses and fibers containing Tb3+. <i>Scientific Reports</i> , 2021, 11, 9906.	3.3	23
8	The Effect of Solution Heat Treatment Time on the Phase Formation and Selected Mechanical Properties of Ti-25Ta-xZr Alloys for Application as Biomaterials. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 5905-5913.	2.5	9
9	Production and characterization of laser cladding coating of Fe66Co7Nb4B23 (at.%) gas-atomized and ball-milled powders. <i>Journal of Materials Research and Technology</i> , 2021, 14, 2267-2280.	5.8	4
10	Assessment of anodization conditions and annealing temperature on the microstructure, elastic modulus, and wettability of Î²-Ti40Nb alloy. <i>Thin Solid Films</i> , 2021, 737, 138949.	1.8	8
11	Effect of Ni addition on bainite microstructure of low-carbon special bar quality steels and its influence on CCT diagrams. <i>Journal of Materials Research and Technology</i> , 2021, 15, 1266-1283.	5.8	9
12	Severe plastic deformation and different surface treatments on the biocompatible Ti13Nb13Zr and Ti35Nb7Zr5Ta alloys: Microstructural and phase evolutions, mechanical properties, and bioactivity analysis. <i>Journal of Alloys and Compounds</i> , 2020, 812, 152116.	5.5	20
13	Ultrafine eutectic coatings from Fe-Nb-B powder using laser cladding. <i>Materials Characterization</i> , 2020, 160, 110080.	4.4	12
14	New compositions of Feâ€“Coâ€“Nbâ€“Bâ€“Y BMG with wide supercooled liquid range, over 100 K. <i>Journal of Materials Research and Technology</i> , 2020, 9, 9174-9181.	5.8	9
15	Effects of Mg addition on the phase formation, morphology, and mechanical and tribological properties of Ti-Nb-Mg immiscible alloy coatings produced by magnetron co-sputtering. <i>Surface and Coatings Technology</i> , 2020, 400, 126070.	4.8	6
16	Characterization, corrosion resistance and hardness of rapidly solidified Niâ€“Nb alloys. <i>Journal of Alloys and Compounds</i> , 2020, 829, 154529.	5.5	12
17	Effects of laser surface melting on crystallographic texture, microstructure, elastic modulus and hardness of Tiâˆ“30Nbâˆ“4Sn alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2020, 30, 392-404.	4.2	9
18	The Effect of Solution Heat Treatment Temperature on Phase Transformations, Microstructure and Properties of Ti-25Ta-xZr Alloys Used as a Biomaterial. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2410-2417.	2.5	13

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19	Effect of friction spot welding parameters on the joint formation and mechanical properties of Al to Cu. <i>Welding in the World, Le Soudage Dans Le Monde</i> , 2019, 63, 33-41.	2.5	11
20	Effect of Thermomechanical Treatments on the Phases, Microstructure, Microhardness and Young's Modulus of Ti-25Ta-Zr Alloys. <i>Materials</i> , 2019, 12, 3210.	2.9	30
21	Characterization of phases, tensile properties, and fracture toughness in aircraft-grade aluminum alloys. <i>Material Design and Processing Communications</i> , 2019, 1, e79.	0.9	8
22	Mechanical Properties and the Microstructure of Ti-35Nb-10Ta-xFe Alloys Obtained by Powder Metallurgy for Biomedical Applications. <i>Metals</i> , 2019, 9, 76.	2.3	14
23	Microstructure assessment at high temperature in NiCoCrAlY overlay coating obtained by laser metal deposition. <i>Journal of Materials Research and Technology</i> , 2019, 8, 1761-1772.	5.8	26
24	Slow and rapid cooling of Al-Cu-Si ultrafine eutectic composites: Interplay of cooling rate and microstructure in mechanical properties. <i>Journal of Materials Research</i> , 2019, 34, 1381-1394.	2.6	14
25	Processing, As-Cast Microstructure and Wear Characteristics of a Monotectic Al-Bi-Cu Alloy. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1201-1212.	2.5	12
26	Experimental study and thermodynamic computational simulation of phase transformations in centrifugal casting bimetallic pipe of API 5L X65Q steel and Inconel 625 alloy. <i>Journal of Manufacturing Processes</i> , 2018, 32, 318-326.	5.9	11
27	Phosphate glasses via coacervation route containing CdFe ₂ O ₄ nanoparticles: structural, optical and magnetic characterization. <i>Dalton Transactions</i> , 2018, 47, 5771-5779.	3.3	14
28	Microstructural Evolution of HSLA ISO 3183 X80M (API 5L X80) Friction Stir Welded Joints. <i>Metals and Materials International</i> , 2018, 24, 1120-1132.	3.4	12
29	Growth mechanisms of Ca- and P-rich MAO films in Ti-15Zr-xMo alloys for osseointegrative implants. <i>Surface and Coatings Technology</i> , 2018, 344, 373-382.	4.8	46
30	Microstructure characterization of a directionally solidified Mg-12wt.%Zn alloy: Equiaxed dendrites, eutectic mixture and type/ morphology of intermetallics. <i>Materials Chemistry and Physics</i> , 2018, 204, 105-131.	4.0	13
31	A new SERS substrate based on niobium lead-pyrophosphate glasses obtained by Ag ⁺ /Na ⁺ ion exchange. <i>Sensors and Actuators B: Chemical</i> , 2018, 277, 347-352.	7.8	13
32	Mechanical and thermal properties of friction-stir welded joints of high density polyethylene using a non-rotational shoulder tool. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 97, 2489-2499.	3.0	31
33	Nanostructural characterization of sputter deposited Ti-Nb coatings by automated crystallographic orientation mapping. <i>Thin Solid Films</i> , 2018, 661, 92-97.	1.8	4
34	Effect of Rapid Solidification on Microstructure and Elastic Modulus of Ti-Nb-3Fe Alloys for Implant Applications. <i>Advanced Engineering Materials</i> , 2017, 19, 1600370.	3.5	13
35	Influence of Nb content on the structure, morphology, nanostructure, and properties of titanium-niobium magnetron sputter deposited coatings for biomedical applications. <i>Surface and Coatings Technology</i> , 2017, 326, 424-428.	4.8	25
36	From Porous to Dense Nanostructured Ti alloys through High-Pressure Torsion. <i>Scientific Reports</i> , 2017, 7, 13618.	3.3	24

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37	An assessment of microstructure and properties of laser clad coatings of ultrafine eutectic Ti-Fe-Nb-Sn composite for implants. <i>Surface and Coatings Technology</i> , 2017, 328, 161-171.	4.8	11
38	On the Process-Related Rivet Microstructural Evolution, Material Flow and Mechanical Properties of Ti-6Al-4V/GFRP Friction-Riveted Joints. <i>Materials</i> , 2017, 10, 184.	2.9	11
39	Laser Cladding of Fe-based Metallic Glass/ MoS_2 Self-lubricating Composites: Effect of Power and Scanning Speed. <i>Materials Research</i> , 2017, 20, 836-841.	1.3	3
40	Metallic Glass Formation Upon Rapid Solidification of $\text{Fe}_{60}\text{Cr}_8\text{Nb}_8\text{B}_{24}$ (at%) Alloy through LASER Cladding and Remelting. <i>Materials Research</i> , 2017, 20, 580-587.	1.3	9
41	Enhancement of Mechanical Properties of Aluminum and 2124 Aluminum Alloy by the Addition of Quasicrystalline Phases. <i>Materials Research</i> , 2016, 19, 74-79.	1.3	27
42	Effect of Cr Additions on Ferrite Recrystallization and Austenite Formation in Dual-Phase Steels Heat Treated in the Intercritical Temperature Range. <i>Materials Research</i> , 2016, 19, 258-266.	1.3	12
43	Ti-Nb thin films deposited by magnetron sputtering on stainless steel. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016, 34, .	2.1	18
44	Assessment of microstructure of alloy Inconel 686 dissimilar weld claddings. <i>Journal of Alloys and Compounds</i> , 2016, 684, 628-642.	5.5	48
45	Effect of thermal aging at $475\text{ }^\circ\text{C}$ on the properties of lean duplex stainless steel 2101. <i>Materials Characterization</i> , 2016, 114, 211-217.	4.4	45
46	Microstructural and mechanical properties analysis of extruded Sn-0.7Cu solder alloy. <i>Journal of Materials Research and Technology</i> , 2015, 4, 84-92.	5.8	19
47	Influence of phase transformations on dynamical elastic modulus and anelasticity of beta Ti-Nb-Fe alloys for biomedical applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 46, 184-196.	3.1	50
48	Microstructure development and mechanical properties of rapidly solidified Ti-Fe and Ti-Fe-Bi alloys. <i>Materials and Design</i> , 2015, 86, 221-229.	7.0	14
49	Effects of composition and heat treatment on the mechanical behavior of Ti-Cu alloys. <i>Materials & Design</i> , 2014, 55, 1006-1013.	5.1	77
50	Formation of Fe-based glassy matrix composite coatings by laser processing. <i>Surface and Coatings Technology</i> , 2014, 240, 336-343.	4.8	56
51	Au and Pd nanoparticles supported on CeO_2 , TiO_2 , and Mn_2O_3 oxides. <i>Applied Surface Science</i> , 2014, 315, 490-498.	6.1	19
52	Nonlinear Optical Properties of Tungsten Lead-Pyrophosphate Glasses Containing Metallic Copper Nanoparticles. <i>Plasmonics</i> , 2013, 8, 1667-1674.	3.4	37
53	Microstructure evolution and mechanical properties of Al-Zn-Mg-Cu alloy reprocessed by spray-forming and heat treated at peak aged condition. <i>Journal of Alloys and Compounds</i> , 2013, 579, 169-173.	5.5	67
54	New insight on the solidification path of an alloy 625 weld overlay. <i>Journal of Materials Research and Technology</i> , 2013, 2, 228-237.	5.8	142

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55	Microstructure study of Al 7050 alloy reprocessed by spray forming and hot-extrusion and aged at 121Å°C. Intermetallics, 2013, 43, 182-187.	3.9	25
56	Formation and microstructure of Ni62- x Nb38Ti x (x = 3, 6, 10 at.%) bulk metallic glasses. International Journal of Materials Research, 2012, 103, 1096-1101.	0.3	5
57	Rapid solidification of an Al-5Ni alloy processed by spray forming. Materials Research, 2012, 15, 779-785.	1.3	8
58	Aspectos metalÃrgicos de revestimentos dissimilares com a superliga Å base de nÃquel inconel 625. Soldagem E Inspecao, 2012, 17, 251-263.	0.6	27
59	Study of La2ÃxCa _x CuO ₄ perovskites for the low temperature water gas shift reaction. Applied Catalysis A: General, 2012, 413-414, 85-93.	4.3	22
60	Electrochemical corrosion behavior of gas atomized Al-Fe-Ni alloy powders. Electrochimica Acta, 2012, 69, 371-378.	5.2	19
61	Amorphous phase formation by spray forming of alloys [(Fe0.6Co0.4)0.75B0.2Si0.05]96Nb4 and Fe66B30Nb4 modified with Ti. Journal of Alloys and Compounds, 2011, 509, S148-S154.	5.5	13
62	Microstructure of directionally solidified Ti-Fe eutectic alloy with low interstitial and high mechanical strength. Journal of Crystal Growth, 2011, 333, 40-47.	1.5	24
63	Effects of double aging heat treatment on the microstructure, Vickers hardness and elastic modulus of Ti-Nb alloys. Materials Characterization, 2011, 62, 673-680.	4.4	87
64	Microstructure, corrosion behaviour and microhardness of a directionally solidified Sn-Cu solder alloy. Electrochimica Acta, 2011, 56, 8891-8899.	5.2	87
65	Correlations between aging heat treatment, % phase precipitation and mechanical properties of a cast Ti-Nb alloy. Materials & Design, 2011, 32, 2387-2390.	5.1	57
66	Hexagonal martensite decomposition and phase precipitation in Ti-Cu alloys. Materials & Design, 2011, 32, 4608-4613.	5.1	55
67	Characterization of Glass Forming Alloy Fe _{43.2} Co _{28.8} B _{19.2} Si _{4.8} Nb ₄ Processed by Spray Forming and Wedge Mold Casting Techniques. Materials Science Forum, 2011, 691, 23-26.	0.3	7
68	Fracture toughness of ISO 3183 X80M (API 5L X80) steel friction stir welds. Engineering Fracture Mechanics, 2010, 77, 2937-2945.	4.3	64
69	High resolution transmission electron microscopy study of the hardening mechanism through phase separation in a Ti-35Nb-7Zr-5Ta alloy for implant applications. Acta Biomaterialia, 2010, 6, 1625-1629.	8.3	74
70	Effect of the addition of Ta on microstructure and properties of Ti-Nb alloys. Journal of Alloys and Compounds, 2010, 504, 330-340.	5.5	39
71	Microstructural characterization of a laser remelted coating of Al91Fe4Cr3Ti2 quasicrystalline alloy. Scripta Materialia, 2009, 61, 709-712.	5.2	28
72	Effect of cooling rate on Ti-Cu eutectoid alloy microstructure. Materials Science and Engineering C, 2009, 29, 1023-1028.	7.3	71

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73	Aging response of the Tiâ€“35Nbâ€“7Zrâ€“5Ta and Tiâ€“35Nbâ€“7Ta alloys. Journal of Alloys and Compounds, 2007, 433, 207-210.	5.5	85
74	Influence of cooling rate on microstructure of Tiâ€“Nb alloy for orthopedic implants. Materials Science and Engineering C, 2007, 27, 908-913.	7.3	118
75	Spray forming of glass former Fe ₆₃ Nb ₁₀ Al ₄ Si ₃ B ₂₀ alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 449-451, 884-889.	5.6	23
76	In-situ crystallization of amorphous Fe ₇₃ xNb _x Al ₄ Si ₃ B ₂₀ alloys through synchrotron radiation. Journal of Non-Crystalline Solids, 2006, 352, 3404-3409.	3.1	12
77	Soft Magnetic Properties of Amorphous Fe _{73-x} Nb _x Al ₄ Si ₃ B ₂₀ Alloys. Journal of Metastable and Nanocrystalline Materials, 2005, 24-25, 431-434.	0.1	0
78	Gas Atomization of Nanocrystalline Fe ₆₃ Nb ₁₀ Al ₄ Si ₃ B ₂₀ Alloy. Journal of Metastable and Nanocrystalline Materials, 2004, 20-21, 175-182.	0.1	4
79	Spray forming of the glass former Fe ₈₃ Zr _{3.5} Nb _{3.5} B ₉ Cu ₁ alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 375-377, 571-576.	5.6	14
80	Amorphous phase partitioning in FeCo-based metallic glass alloys. Journal of Non-Crystalline Solids, 2004, 348, 250-257.	3.1	15
81	Microstructure of Spray Formed Fe ₈₃ Nb ₄ ZrTiB ₉ Cu ₂ Alloy. Materials Science Forum, 2003, 416-418, 388-394.	0.3	3
82	Microstructural Characterization of Spray Deposited Al-Y-Ni-Co-Zr Alloy and Al-Y-Ni-Co-Zr + SiC_p<sub>t</sub>; Metal Matrix Composite. Materials Science Forum, 2002, 403, 95-100.	0.3	2
83	Amorphous phase formation during spray forming of Al ₈₄ Y ₃ Ni ₈ Co ₄ Zr ₁ alloy. Journal of Non-Crystalline Solids, 2001, 284, 134-138.	3.1	30
84	Amorphous phase formation in spray deposited AlYNiCo and AlYNiCoZr alloys. Scripta Materialia, 2001, 44, 1625-1628.	5.2	35
85	Effects of Composition on Solidification Microstructure of Cast Titanium Alloys. Materials Science Forum, 0, 649, 183-188.	0.3	8
86	Effects of Cooling Rate and Sn Addition on the Microstructure of Ti-Nb-Sn Alloys. Solid State Phenomena, 0, 172-174, 190-195.	0.3	11
87	Overspray Powder Characterization of Fe-Based Glassy Alloy. Materials Science Forum, 0, 727-728, 468-475.	0.3	3
88	Evaluation of the Corrosion Resistant Weld Cladding Deposited by the TIG Cold Wire Feed Process. Materials Science Forum, 0, 783-786, 2822-2827.	0.3	5
89	Rapid Solidification and Laser Cladding of Gas Atomized Ni-Nb-Sn Bulk Metallic Glass. Materials Science Forum, 0, 899, 311-316.	0.3	2
90	Effect of Fe Addition on Microstructure and Properties of Powder Metallurgy Ti ₃₅ Nb ₁₀ Ta Alloy. Materials Science Forum, 0, 899, 206-211.	0.3	2

#	ARTICLE	IF	CITATIONS
91	CARACTERIZAÇÃfO MICROESTRUTURAL DA INTERFACE DE TUBO BIMETÃLICO CENTRIFUGADO. , 0, , .		0