

Wislei Riuper OsÃ³rio

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Effects of Zr content on microstructure and corrosion resistance of Ti-30Nb-Zr casting alloys for biomedical applications. <i>Electrochimica Acta</i> , 2008, 53, 2809-2817.	5.2	171
2	Microstructure and mechanical properties of Sn-Bi, Sn-Ag and Sn-Zn lead-free solder alloys. <i>Journal of Alloys and Compounds</i> , 2013, 572, 97-106.	5.5	164
3	Electrochemical corrosion behavior of a Ti-35Nb alloy for medical prostheses. <i>Electrochimica Acta</i> , 2008, 53, 4867-4874.	5.2	145
4	Effect of dendritic arm spacing on mechanical properties and corrosion resistance of Al 9 Wt Pct Si and Zn 27 Wt Pct Al alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2006, 37, 2525-2538.	2.2	129
5	Electrochemical behavior of centrifuged cast and heat treated Ti-Cu alloys for medical applications. <i>Electrochimica Acta</i> , 2010, 55, 759-770.	5.2	125
6	The role of macrostructural morphology and grain size on the corrosion resistance of Zn and Al castings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 402, 22-32.	5.6	123
7	Modeling dendritic structure and mechanical properties of Zn-Al alloys as a function of solidification conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002, 325, 103-111.	5.6	119
8	The roles of macrosegregation and of dendritic array spacings on the electrochemical behavior of an Al-4.5wt.% Cu alloy. <i>Electrochimica Acta</i> , 2007, 52, 3265-3273.	5.2	112
9	The effect of the dendritic microstructure on the corrosion resistance of Zn-Al alloys. <i>Journal of Alloys and Compounds</i> , 2005, 397, 179-191.	5.5	104
10	Mechanical properties of Sn-Zn lead-free solder alloys based on the microstructure array. <i>Materials Characterization</i> , 2010, 61, 212-220.	4.4	103
11	Mechanical properties as a function of microstructure and solidification thermal variables of Al-Si castings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 421, 245-253.	5.6	101
12	Microstructure, corrosion behaviour and microhardness of a directionally solidified Sn-Cu solder alloy. <i>Electrochimica Acta</i> , 2011, 56, 8891-8899.	5.2	87
13	Effect of silicon content on microstructure and electrochemical behavior of hypoeutectic Al-Si alloys. <i>Materials Letters</i> , 2008, 62, 365-369.	2.6	83
14	Effects of eutectic modification and T4 heat treatment on mechanical properties and corrosion resistance of an Al-9wt%Si casting alloy. <i>Materials Chemistry and Physics</i> , 2007, 106, 343-349.	4.0	82
15	Mechanical properties of Sn-Ag lead-free solder alloys based on the dendritic array and Ag ₃ Sn morphology. <i>Journal of Alloys and Compounds</i> , 2013, 562, 194-204.	5.5	78
16	Electrochemical corrosion response of a low carbon heat treated steel in a NaCl solution. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2009, 60, 804-812.	1.5	75
17	Corrosion resistance of directionally solidified Al-6Cu-1Si and Al-8Cu-3Si alloys castings. <i>Materials & Design</i> , 2011, 32, 3832-3837.	5.1	70
18	EIS and potentiodynamic polarization studies on immiscible monotectic Al-In alloys. <i>Electrochimica Acta</i> , 2013, 102, 436-445.	5.2	69

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19	The effect of cooling rate on the dendritic spacing and morphology of Ag ₃ Sn intermetallic particles of a SnAg solder alloy. <i>Materials & Design</i> , 2011, 32, 3008-3012.	5.1	66
20	Secondary dendrite arm spacing and solute redistribution effects on the corrosion resistance of Al-10wt% Sn and Al-20wt% Zn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 420, 179-186.	5.6	61
21	Electrochemical corrosion characterization of Al-Ni alloys in a dilute sodium chloride solution. <i>Electrochimica Acta</i> , 2010, 55, 4078-4085.	5.2	60
22	Macrosegregation and microstructure dendritic array affecting the electrochemical behaviour of ternary Al-Cu-Si alloys. <i>Electrochimica Acta</i> , 2011, 56, 8412-8421.	5.2	60
23	The roles of cellular and dendritic microstructural morphologies on the corrosion resistance of Pb-Sb alloys for lead acid battery grids. <i>Journal of Power Sources</i> , 2008, 175, 595-603.	7.8	59
24	Electrochemical behavior of a lead-free SnAg solder alloy affected by the microstructure array. <i>Materials & Design</i> , 2011, 32, 4763-4772.	5.1	58
25	Electrochemical behavior of a lead-free Sn-Cu solder alloy in NaCl solution. <i>Corrosion Science</i> , 2014, 80, 71-81.	6.6	58
26	The role of Cu-based intermetallics on the pitting corrosion behavior of Sn-Cu, Ti-Cu and Al-Cu alloys. <i>Electrochimica Acta</i> , 2012, 77, 189-197.	5.2	57
27	The effects of a eutectic modifier on microstructure and surface corrosion behavior of Al-Si hypoeutectic alloys. <i>Journal of Solid State Electrochemistry</i> , 2007, 11, 1421-1427.	2.5	56
28	Wetting Behavior and Mechanical Properties of Sn-Zn and Sn-Pb Solder Alloys. <i>Journal of Electronic Materials</i> , 2009, 38, 2405-2414.	2.2	54
29	The effects of porosity on mechanical behavior and water absorption of an environmentally friendly cement mortar with recycled rubber. <i>Construction and Building Materials</i> , 2017, 151, 534-545.	7.2	54
30	Effects of spheroid and fiber-like waste-tire rubbers on interrelation of strength-to-porosity in rubberized cement and mortars. <i>Construction and Building Materials</i> , 2015, 95, 525-536.	7.2	52
31	Effects of cell size and macrosegregation on the corrosion behavior of a dilute Pb-Sb alloy. <i>Journal of Power Sources</i> , 2006, 162, 696-705.	7.8	51
32	Design of mechanical properties of a Zn ₂₇ Al alloy based on microstructure dendritic array spacing. <i>Materials & Design</i> , 2007, 28, 2425-2430.	5.1	51
33	Dendritic solidification microstructure affecting mechanical and corrosion properties of a Zn ₄ Al alloy. <i>Journal of Materials Science</i> , 2005, 40, 4493-4499.	3.7	50
34	Electrochemical corrosion parameters of as-cast Al-Fe alloys in a NaCl solution. <i>Corrosion Science</i> , 2010, 52, 2979-2993.	6.6	47
35	Microstructure features affecting mechanical properties and corrosion behavior of a hypoeutectic Al-Ni alloy. <i>Materials & Design</i> , 2010, 31, 4485-4489.	5.1	45
36	The effects of Zn segregation and microstructure length scale on the corrosion behavior of a directionally solidified Mg-25wt.%Zn alloy. <i>Journal of Alloys and Compounds</i> , 2017, 723, 649-660.	5.5	43

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37	Microstructure and electrochemical corrosion behavior of a Pb-1wt%Sn alloy for lead-acid battery components. <i>Journal of Power Sources</i> , 2009, 192, 724-729.	7.8	41
38	Globular-to-needle Zn-rich phase transition during transient solidification of a eutectic Sn-9%Zn solder alloy. <i>Materials Letters</i> , 2009, 63, 1314-1316.	2.6	39
39	Microstructural modification by laser surface remelting and its effect on the corrosion resistance of an Al-9wt%Si casting alloy. <i>Applied Surface Science</i> , 2008, 254, 2763-2770.	6.1	38
40	Mechanical and corrosion resistances of a Sn-0.7wt.%Cu lead-free solder alloy. <i>Microelectronics Reliability</i> , 2014, 54, 1392-1400.	1.7	36
41	Evaluation of efficiency factor of a self-compacting lightweight concrete with rubber and expanded clay contents. <i>Construction and Building Materials</i> , 2020, 257, 119573.	7.2	35
42	Dendritic Microstructure Affecting Mechanical Properties and Corrosion Resistance of an Al-9 wt% Si Alloy. <i>Materials and Manufacturing Processes</i> , 2007, 22, 328-332.	4.7	33
43	The interrelation between mechanical properties, corrosion resistance and microstructure of Pb-Sn casting alloys for lead-acid battery components. <i>Journal of Power Sources</i> , 2010, 195, 621-630.	7.8	32
44	Electrochemical behavior of Zn-rich Zn-Cu peritectic alloys affected by macrosegregation and microstructural array. <i>Electrochimica Acta</i> , 2012, 76, 218-228.	5.2	32
45	Electrochemical behavior and compressive strength of Al-Cu/xCu composites in NaCl solution. <i>Journal of Solid State Electrochemistry</i> , 2021, 25, 1303-1317.	2.5	32
46	Electrochemical corrosion of Pb-1wt% Sn and Pb-2.5wt% Sn alloys for lead-acid battery applications. <i>Journal of Power Sources</i> , 2009, 194, 1120-1127.	7.8	30
47	The effects of Ag content and dendrite spacing on the electrochemical behavior of Pb-Ag alloys for Pb-acid battery components. <i>Journal of Power Sources</i> , 2013, 238, 324-335.	7.8	29
48	EIS Investigation of the Corrosion Behavior of Steel Bars Embedded into Modified Concretes with Eggshell Contents. <i>Metals</i> , 2022, 12, 417.	2.3	28
49	EIS parameters and cell spacings of an Al-Bi alloy in NaCl solution. <i>Electrochimica Acta</i> , 2013, 108, 781-787.	5.2	27
50	Microstructural array and solute content affecting electrochemical behavior of Sn Ag and Sn Bi alloys compared with a traditional Sn Pb alloy. <i>Materials Chemistry and Physics</i> , 2019, 223, 410-425.	4.0	27
51	Corrosion behavior of hypoeutectic Al-Cu alloys in H ₂ SO ₄ and NaCl solutions. <i>Acta Metallurgica Sinica (English Letters)</i> , 2009, 22, 241-246.	2.9	26
52	The Holes of Zn Phosphate and Hot Dip Galvanizing on Electrochemical Behaviors of Multi-Coatings on Steel Substrates. <i>Metals</i> , 2022, 12, 863.	2.3	26
53	The roles of Al ₂ Cu and of dendritic refinement on surface corrosion resistance of hypoeutectic Al-Cu alloys immersed in H ₂ SO ₄ . <i>Journal of Alloys and Compounds</i> , 2007, 443, 87-93.	5.5	25
54	Effects of the longitudinal and transversal structural grain morphologies upon the corrosion resistance of zinc and aluminium specimens. <i>Revista De Metalurgia</i> , 2005, 41, 176-180.	0.5	25

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55	Comparison of electrochemical performance of as-cast Pb-1wt.% Sn and Pb-1wt.% Sb alloys for lead-acid battery components. Journal of Power Sources, 2010, 195, 1726-1730.	7.8	24
56	Distinct Al/Si composites affecting its densification and mechanical behavior. Journal of Alloys and Compounds, 2018, 757, 434-447.	5.5	24
57	Cell/dendrite transition and electrochemical corrosion of Pb-Sb alloys for lead-acid battery applications. Journal of Power Sources, 2011, 196, 6567-6572.	7.8	21
58	Fresh and Hardened States of Distinctive Self-Compacting Concrete with Marble- and Phyllite-Powder Aggregate Contents. Journal of Materials in Civil Engineering, 2020, 32, .	2.9	20
59	Hot corrosion resistance of a Pb-Sb alloy for lead acid battery grids. Journal of Power Sources, 2008, 185, 1471-1477.	7.8	19
60	Electrochemical corrosion behavior of gas atomized Al-Ni alloy powders. Electrochimica Acta, 2012, 69, 371-378.	5.2	19
61	Electrochemical corrosion behaviour of a Ti steel and a SAE 1020 steel in a 0.5% NaCl solution. Materials and Corrosion - Werkstoffe Und Korrosion, 2010, 61, 407-411.	1.5	18
62	The effects of tertiary dendrite arm spacing and segregation on the corrosion behavior of a Pb-Sb alloy for lead-acid battery components. Journal of Power Sources, 2012, 207, 183-190.	7.8	18
63	Morphology and size effects on densification and mechanical behavior of sintered powders from Al-Si and Al-Cu casting alloys. Journal of Alloys and Compounds, 2019, 786, 717-732.	5.5	18
64	Electrochemical behaviour of a Pb-Sb alloy in 0.5M NaCl and 0.5M H2SO4 solutions. Materials & Design, 2012, 34, 660-665.	5.1	15
65	Electrochemical and Mechanical Behavior of Lead-Silver and Lead-Bismuth Casting Alloys for Lead-Acid Battery Components. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4255-4267.	2.2	15
66	Electrolyte features and microstructure affecting the electrochemical performance of a Pb-Sb alloy for lead-acid battery components. Electrochimica Acta, 2011, 56, 8457-8462.	5.2	14
67	Compaction pressure and Si content effects on compressive strengths of Al/Si/Cu alloy composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 770, 138547.	5.6	14
68	The Role of Macrostructural and Microstructural Morphologies on the Corrosion Resistance of Zn and a Zn-4% Al Alloy. Materials and Manufacturing Processes, 2007, 22, 341-345.	4.7	13
69	The influences of macrosegregation, intermetallic particles, and dendritic spacing on the electrochemical behavior of hypoeutectic Al-Cu alloys. Microscopy Research and Technique, 2007, 70, 928-937.	2.2	13
70	Corrosion Performance Based on the Microstructural Array of Al-Based Monotectic Alloys in a NaCl Solution. Journal of Materials Engineering and Performance, 2014, 23, 333-341.	2.5	13
71	Immersion Corrosion of Sn-Ag and Sn-Bi Alloys as Successors to Sn-Pb Alloy with Electronic and Jewelry Applications. Corrosion, 2016, 72, 1064-1080.	1.1	11
72	Interrelation of wettability-microstructure-tensile strength of lead-free Sn-Ag and Sn-Bi solder alloys. Science and Technology of Welding and Joining, 2016, 21, 429-437.	3.1	11

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73	Performance of New Pb-Bi Alloys for Pb-Acid Battery Applications: EIS and Polarization Study. <i>Journal of Materials Engineering and Performance</i> , 2016, 25, 2211-2221.	2.5	11
74	Experimental analysis of corrosion resistance on columnar to equiaxed transition region of as cast structures of Al-Cu alloys. <i>Materials Science and Technology</i> , 2008, 24, 1433-1437.	1.6	10
75	Effect of sintering time on corrosion behavior of an Ag/Al/Nb/Ti/Zn alloy system. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155039.	5.5	10
76	Corrosion behavior of an Al-Si casting and a sintered Al/Si composite immersed into biodiesel and blends. <i>Fuel Processing Technology</i> , 2020, 202, 106360.	7.2	9
77	Microstructural and Hardness Evaluations of a Centrifuged Sn-22Pb Casting Alloy Compared with a Lead-Free SnAg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 1880-1892.	2.2	8
78	Alternative method to improve the ethyl valerate yield using an immobilised <i>Burkholderia cepacia</i> lipase. <i>Journal of Microencapsulation</i> , 2019, 36, 327-337.	2.8	8
79	Different immersion periods and aqueous solutions effects upon the corrosion resistance of zinc and aluminium specimens. <i>Revista De Metalurgia</i> , 2005, 41, 160-164.	0.5	8
80	Electrochemical Behavior of an Al-Fe-Ni Alloy Affected by Nano-Sized Intermetallic Particles. <i>Corrosion</i> , 2015, 71, 510-522.	1.1	6
81	Economic Method for Extraction/Purification of a <i>Burkholderia cepacia</i> Lipase with Potential Biotechnology Application. <i>Applied Biochemistry and Biotechnology</i> , 2019, 189, 1108-1126.	2.9	5
82	Silicon Content Affecting Corrosion Behavior of Al/Si Composites in a Biodiesel Blend. <i>Corrosion</i> , 2020, 76, 1109-1121.	1.1	5
83	Electrochemical Impedance Spectroscopy and Potentiodynamic Polarization Studies Affected by the Microstructure Array of a Monotectic Al-Pb Alloy in a NaCl Solution. <i>Corrosion</i> , 2014, 70, 1031-1042.	1.1	4
84	Mechanical performance and microstructure array of as-cast lead-silver and lead-bismuth alloys. <i>Journal of Power Sources</i> , 2014, 271, 124-133.	7.8	4
85	Superconducting evidence of a processed Nb ₂ GeC compound under a microwave heating. <i>Materials Chemistry and Physics</i> , 2017, 194, 219-223.	4.0	4
86	Designing a Microstructural Array Associated with Hardness of Dual-phase Cu-Zn Alloy Using Investment Casting. <i>Materials Research</i> , 2018, 21, .	1.3	4
87	Study of three distinct self-compacting concretes containing marble/granite powder and hooked-end steel fiber contents. <i>Journal of Composite Materials</i> , 2021, 55, 2823-2838.	2.4	4
88	Distinct heat treatments and powder size ratios affecting mechanical responses of Al/Si/Cu composites. <i>Journal of Composite Materials</i> , 2021, 55, 3589-3605.	2.4	4
89	Laser surface treatment of plasma-sprayed yttria-stabilized zirconia coatings. <i>Revista De Metalurgia</i> , 2005, 41, 154-159.	0.5	4
90	Corrosion Behavior of CW6MC Nickel Cast Alloy (Inconel 625) Welded by Shielded Metal Arc Welding. <i>Metals</i> , 2021, 11, 1286.	2.3	3

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91	A influÃªncia da macrosegregaÃ§Ã£o e da variaÃ§Ã£o dos espaÃ§amentos dendrÃaticos na resistÃªncia Ã corrosÃ£o da liga Al-4,5%Cu. Revista Materia, 2008, 13, 542-552.	0.2	2
92	Physical adsorption used to the immobilization of Burkholderia cepacia lipase into powder polymeric supports. Journal of Thermal Analysis and Calorimetry, 2022, 147, 3071-3081.	3.6	2
93	Efeitos da agitaÃ§Ã£o mecÃnica e de adiÃ§Ã£o de refinador de grÃo na microestrutura e propriedade mecÃnica de fundidos da liga Al-Sn. Revista Materia, 2009, 14, 906-917.	0.2	1
94	Woodardâ€Cody anomalous resistivity in a Nb5Ge3C0.3 superconductor compound. Physica B: Condensed Matter, 2016, 494, 82-85.	2.7	1
95	Designing sintering time for a TiSiC compound: a microwave and conventional comparison. International Journal of Advanced Manufacturing Technology, 2019, 104, 1561-1570.	3.0	1
96	Microstructural characterization and mechanical behavior of an AgAlNbTiZn complex composition alloy produced using powder metallurgy (P/M). Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 305-315.	5.6	1
97	CORRELAÃ§Ã£o ENTRE MICROESTRUTURA, RESISTÃNCIAS MECÃNICA E Ã€ CORROSÃ£o DA LIGA DE SOLDAGEM LIVRE DE CHUMBO Sn-0,7%Cu*. Tecnologia Em Metalurgia, Materiais E Mineracao, 2014, 11, 277-286.	0.2	1
98	Alternative Liquid-Assisted Sintering of Al/Cu Composites Using Selected Powders of As-Cast Al-Zn Alloy. Metals, 2022, 12, 962.	2.3	1
99	Improvement on the melt-texturing performance of a (Y,Ta)0.5BaO3â€CYBa2Cu3Oy composite with superconductor applications. Ceramics International, 2015, 41, 843-848.	4.8	0