Amauri Garcia

List of Publications by Citations

357 papers	8,071 citations	49 h-index	68 g-index
370 ext. papers	8,972 ext. citations	3.6 avg, IF	6.27 L-index

#	Paper	IF	Citations
357	Correlation between unsteady-state solidification conditions, dendrite spacings, and mechanical properties of Al-Cu alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2000**, 31, 3167-3178	2.3	145
356	Determination of transient interfacial heat transfer coefficients in chill mold castings. *Journal of Alloys and Compounds*, **2001**, 319, 174-186	5.7	142
355	Effects of Zr content on microstructure and corrosion resistance of Tiâ30Nbâ2r casting alloys for biomedical applications. *Electrochimica Acta*, **2008**, 53, 2809-2817	6.7	136
354	Microstructure and mechanical properties of Snâ3i, Snâ4g and Snâ2n lead-free solder alloys. *Journal of Alloys and Compounds*, **2013**, 572, 97-106	5.7	135
353	Heat flow parameters affecting dendrite spacings during unsteady-state solidification of Sn-Pb and Al-Cu alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2003**, 34, 995-1006	2.3	125
352	Effect of dendritic arm spacing on mechanical properties and corrosion resistance of Al 9 Wt Pct Si and Zn 27 Wt Pct Al alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2006**, 37, 2525-2538	2.3	117
351	Electrochemical corrosion behavior of a Tiâ35Nb alloy for medical prostheses. *Electrochimica Acta*, **2008**, 53, 4867-4874	6.7	115
350	Macrostructural and microstructural development in Alâ5i alloys directionally solidified under unsteady-state conditions. *Journal of Alloys and Compounds*, **2004**, 381, 168-181	5.7	110
349	Modeling dendritic structure and mechanical properties of Znâ4l alloys as a function of solidification conditions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2002**, 325, 103-111	5.3	107
348	Solidification thermal parameters affecting the columnar-to-equiaxed transition. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2002**, 33, 2107-2118	2.3	103
347	Electrochemical behavior of centrifuged cast and heat treated Tiâ2u alloys for medical applications. *Electrochimica Acta*, **2010**, 55, 759-770	6.7	102
346	Mathematical modeling and optimization strategies (genetic algorithm and knowledge base) applied to the continuous casting of steel. *Engineering Applications of Artificial Intelligence*, **2003**, 16, 511-527	7.2	97
345	The role of macrostructural morphology and grain size on the corrosion resistance of Zn and Al castings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 402, 22-32	5.3	91
344	The roles of macrosegregation and of dendritic array spacings on the electrochemical behavior of an Alâ4.5wt.% Cu alloy. *Electrochimica Acta*, **2007**, 52, 3265-3273	6.7	89
343	Mechanical properties of Snâ2n lead-free solder alloys based on the microstructure array. *Materials Characterization*, **2010**, 61, 212-220	3.9	88
342	The effect of the dendritic microstructure on the corrosion resistance of Znâ4l alloys. *Journal of Alloys and Compounds*, **2005**, 397, 179-191	5.7	88
341	Mechanical properties as a function of microstructure and solidification thermal variables of Alâ5i castings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 421, 245-253	5.3	86

340	Cellular growth during transient directional solidification of hypoeutectic Alâ Fe alloys. *Journal of Alloys and Compounds*, **2009**, 470, 589-599	5.7	77
339	Influence of melt convection on the columnar to equiaxed transition and microstructure of downward unsteady-state directionally solidified Snâ Pb alloys. *Journal of Alloys and Compounds*, **2004**, 384, 217-226	5.7	76
338	Effects of eutectic modification and T4 heat treatment on mechanical properties and corrosion resistance of an Alâ wt%Si casting alloy. *Materials Chemistry and Physics*, **2007**, 106, 343-349	4.4	72
337	Microstructure, corrosion behaviour and microhardness of a directionally solidified Snâ Cu solder alloy. *Electrochimica Acta*, **2011**, 56, 8891-8899	6.7	71
336	Microstructural and hardness investigation of an aluminumâ opper alloy processed by laser surface melting. *Materials Characterization*, **2003**, 50, 249-253	3.9	70
335	The effects of cell spacing and distribution of intermetallic fibers on the mechanical properties of hypoeutectic Alâ Fe alloys. *Materials Chemistry and Physics*, **2010**, 119, 272-278	4.4	69
334	Dendritic Arm Spacing Affecting Mechanical Properties and Wear Behavior of Al-Sn and Al-Si Alloys Directionally Solidified under Unsteady-State Conditions. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2010**, 41, 972-984	2.3	68
333	Mechanical properties of Snâ Ag lead-free solder alloys based on the dendritic array and Ag3Sn morphology. *Journal of Alloys and Compounds*, **2013**, 562, 194-204	5.7	67
332	Effect of silicon content on microstructure and electrochemical behavior of hypoeutectic Alâ Si alloys. *Materials Letters*, **2008**, 62, 365-369	3.3	64
331	Modeling of solidification in twin-roll strip casting. *Journal of Materials Processing Technology*, **2000**, 102, 33-39	5.3	64
330	Microstructural development during transient directional solidification of hypermonotectic Alâ Bi alloys. *Materials & Design*, **2010**, 31, 4584-4591		63
329	Cellular/Dendritic Transition and Microstructure Evolution during Transient Directional Solidification of Pb-Sb Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2008**, 39, 2161-2174	2.3	62
328	Interfacial heat transfer coefficients and solidification of an aluminum alloy in a rotary continuous caster. *International Journal of Heat and Mass Transfer*, **2009**, 52, 451-459	4.9	61
327	Corrosion resistance of directionally solidified Alâ Cuâ Si and Alâ Cuâ Si alloys castings. *Materials & Design*, **2011**, 32, 3832-3837		61
326	Electrochemical corrosion response of a low carbon heat treated steel in a NaCl solution. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2009**, 60, 804-812	1.6	59
325	Cellular/dendritic transition during unsteady-state unidirectional solidification of Snâ Pb alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2003**, 347, 59-69	5.3	59
324	The columnar to equiaxed transition during solidification of Snâ Pb alloys. *Journal of Alloys and Compounds*, **2003**, 351, 126-134	5.7	59
323	The effect of cooling rate on the dendritic spacing and morphology of Ag3Sn intermetallic particles of a SnAg solder alloy. *Materials & Design*, **2011**, 32, 3008-3012		57

322	The effect of melt temperature profile on the transient metal/mold heat transfer coefficient during solidification. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2005**, 408, 317-325	5.3	57
321	Effect of solution time in T6 heat treatment on microstructure and hardness of a directionally solidified Alâ Siâ u alloy. *Journal of Alloys and Compounds*, **2016**, 683, 485-494	5.7	57
320	Cellular spacings in unsteady-state directionally solidified Snâ b alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 361, 111-118	5.3	56
319	The correlation between dendritic microstructure and mechanical properties of directionally solidified hypoeutectic Al-Ni alloys. *Metals and Materials International*, **2010**, 16, 39-49	2.4	55
318	Secondary dendrite arm spacing and solute redistribution effects on the corrosion resistance of Alâ 0wt% Sn and Alâ 0wt% Zn alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 420, 179-186	5.3	54
317	EIS and potentiodynamic polarization studies on immiscible monotectic Alâ h alloys. *Electrochimica Acta*, **2013**, 102, 436-445	6.7	53
316	Mechanical properties as a function of thermal parameters and microstructure of Znâ l castings. *Journal of Materials Processing Technology*, **2003**, 143-144, 703-709	5.3	53
315	Electrochemical corrosion characterization of Alâ i alloys in a dilute sodium chloride solution. *Electrochimica Acta*, **2010**, 55, 4078-4085	6.7	52
314	Influence of melt convection on dendritic spacings of downward unsteady-state directionally solidified Alâ u alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 383, 271-282	5.3	52
313	Mathematical model for the unidirectional solidification of metals: II. Massive molds. *Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science*, **1979**, 10, 85-92		52
312	Microstructural evolution during upward and downward transient directional solidification of hypomonotectic and monotectic Alâ i alloys. *Journal of Alloys and Compounds*, **2009**, 480, 485-493	5.7	51
311	Mathematical model for the unidirectional solidification of metals: I. cooled molds. *Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science*, **1978**, 9, 449-457		50
310	Design of mechanical properties of a Zn27Al alloy based on microstructure dendritic array spacing. *Materials & Design*, **2007**, 28, 2425-2430		49
309	The roles of cellular and dendritic microstructural morphologies on the corrosion resistance of Pbâ b alloys for lead acid battery grids. *Journal of Power Sources*, **2008**, 175, 595-603	8.9	49
308	The use of artificial intelligence technique for the optimisation of process parameters used in the continuous casting of steel. *Applied Mathematical Modelling*, **2002**, 26, 1077-1092	4.5	49
307	Numerical modeling and optimization of zone refining. *Journal of Alloys and Compounds*, **2000**, 298, 299-305	5.7	49
306	Dendritic solidification microstructure affecting mechanical and corrosion properties of a Zn4Al alloy. *Journal of Materials Science*, **2005**, 40, 4493-4499	4.3	47
305	The use of a heuristic search technique for the optimization of quality of steel billets produced by continuous casting. *Engineering Applications of Artificial Intelligence*, **2001**, 14, 229-238	7.2	47

304	Tensile properties and related microstructural aspects of hypereutectic Al-Si alloys directionally solidified under different melt superheats and transient heat flow conditions. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 685, 235-243	5.3	46
303	Cellular/dendritic arrays and intermetallic phases affecting corrosion and mechanical resistances of an AlâMgâSi alloy. *Journal of Alloys and Compounds*, **2016**, 673, 220-230	5.7	46
302	Electrochemical behavior of a lead-free SnAg solder alloy affected by the microstructure array. *Materials & Design*, **2011**, 32, 4763-4772		46
301	The effects of a eutectic modifier on microstructure and surface corrosion behavior of Al-Si hypoeutectic alloys. *Journal of Solid State Electrochemistry*, **2007**, 11, 1421-1427	2.6	46
300	Microstructural Development in Al-Ni Alloys Directionally Solidified under Unsteady-State Conditions. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2008**, 39, 1712-1726	2.3	46
299	Electrochemical behavior of a lead-free SnâCu solder alloy in NaCl solution. *Corrosion Science*, **2014**, 80, 71-81	6.8	45
298	Macrosegregation and microstructure dendritic array affecting the electrochemical behaviour of ternary AlâCuâSi alloys. *Electrochimica Acta*, **2011**, 56, 8412-8421	6.7	45
297	Design of mechanical properties of Al-alloys chill castings based on the metal/mold interfacial heat transfer coefficient. *International Journal of Thermal Sciences*, **2012**, 51, 145-154	4.1	44
296	Numerical and experimental investigation of microporosity formation in a ternary AlâCuâSi alloy. *Journal of Alloys and Compounds*, **2010**, 503, 31-39	5.7	44
295	Wetting Behavior and Mechanical Properties of Sn-Zn and Sn-Pb Solder Alloys. *Journal of Electronic Materials*, **2009**, 38, 2405-2414	1.9	44
294	Relationship between spacing of eutectic colonies and tensile properties of transient directionally solidified Al-Ni eutectic alloy. *Journal of Alloys and Compounds*, **2018**, 733, 59-68	5.7	43
293	The role of Cu-based intermetallics on the pitting corrosion behavior of SnâCu, TiâCu and AlâCu alloys. *Electrochimica Acta*, **2012**, 77, 189-197	6.7	43
292	Analytical, numerical, and experimental analysis of inverse macrosegregation during upward unidirectional solidification of Al-Cu alloys. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2004**, 35, 285-297	2.5	43
291	The effect of solidification variables on tertiary dendrite arm spacing in unsteady-state directional solidification of SnâPb and AlâCu alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 373, 131-138	5.3	43
290	Electrochemical corrosion parameters of as-cast AlâFe alloys in a NaCl solution. *Corrosion Science*, **2010**, 52, 2979-2993	6.8	42
289	Microstructure, tensile properties and wear resistance correlations on directionally solidified Al-Sn-(Cu; Si) alloys. *Journal of Alloys and Compounds*, **2017**, 695, 3621-3631	5.7	41
288	Effects of cell size and macrosegregation on the corrosion behavior of a dilute PbâSb alloy. *Journal of Power Sources*, **2006**, 162, 696-705	8.9	40
287	Cooling thermal parameters, microstructure, segregation and hardness in directionally solidified AlâSn-(Si;Cu) alloys. *Materials & Design*, **2015**, 72, 31-42		39

286	Alloy composition and metal/mold heat transfer efficiency affecting inverse segregation and porosity of as-cast Alâ□u alloys. *Materials & Design*, **2009**, 30, 2090-2098		39
285	High cooling rate cells, dendrites, microstructural spacings and microhardness in a directionally solidified Alâ□gâ□i alloy. *Journal of Alloys and Compounds*, **2015**, 636, 145-149	5.7	38
284	Microstructure and electrochemical corrosion behavior of a Pbâ□ wt%Sn alloy for lead-acid battery components. *Journal of Power Sources*, **2009**, 192, 724-729	8.9	38
283	Cellular to dendritic transition during transient solidification of a eutectic Snâ□.7 wt%Cu solder alloy. *Materials Chemistry and Physics*, **2012**, 132, 203-209	4.4	37
282	Thermal Parameters, Microstructure, and Mechanical Properties of Directionally Solidified Sn-0.7 wt.%Cu Solder Alloys Containing 0 ppm to 1000 ppm Ni. *Journal of Electronic Materials*, **2013**, 42, 179-191	1.9	37
281	Thermal parameters and microstructure during transient directional solidification of a monotectic Alâ□i alloy. *Journal of Alloys and Compounds*, **2009**, 475, 347-351	5.7	37
280	Microstructure features affecting mechanical properties and corrosion behavior of a hypoeutectic Alâ□i alloy. *Materials & Design*, **2010**, 31, 4485-4489		37
279	Melt characteristics and solidification growth direction with respect to gravity affecting the interfacial heat transfer coefficient of chill castings. *Materials & Design*, **2009**, 30, 3592-3601		36
278	Characterization of Dendritic Microstructure, Intermetallic Phases, and Hardness of Directionally Solidified Al-Mg and Al-Mg-Si Alloys. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2015**, 46, 3342-3355	2.3	35
277	Microstructural development and mechanical properties of a near-eutectic directionally solidified Snâ□i solder alloy. *Materials Characterization*, **2015**, 107, 43-53	3.9	35
276	On array models theoretical predictions versus measurements for the growth of cells and dendrites in the transient solidification of binary alloys. *Philosophical Magazine*, **2011**, 91, 1705-1723	1.6	35
275	Combined effects of Ag content and cooling rate on microstructure and mechanical behavior of Snâ□gâ□u solders. *Materials & Design*, **2013**, 45, 377-383		33
274	Globular-to-needle Zn-rich phase transition during transient solidification of a eutectic Snâ□%Zn solder alloy. *Materials Letters*, **2009**, 63, 1314-1316	3.3	33
273	Investigation of intermetallics in hypoeutectic Alâ□e alloys by dissolution of the Al matrix. *Intermetallics*, **2009**, 17, 753-761	3.5	33
272	Microstructure and solidification thermal parameters in thin strip continuous casting of a stainless steel. *Journal of Materials Processing Technology*, **2004**, 150, 255-262	5.3	32
271	Evaluation of solder/substrate thermal conductance and wetting angle of Snâ□.7wt%Cuâ□(0â□.1wt%Ni) solder alloys. *Materials Letters*, **2015**, 142, 163-167	3.3	31
270	The effects of Zn segregation and microstructure length scale on the corrosion behavior of a directionally solidified Mg-25 wt.%Zn alloy. *Journal of Alloys and Compounds*, **2017**, 723, 649-660	5.7	31
269	Microstructural modification by laser surface remelting and its effect on the corrosion resistance of an Alâ□wt%Si casting alloy. *Applied Surface Science*, **2008**, 254, 2763-2770	6.7	31

268	Thermosolutal convective effects on dendritic array spacings in downward transient directional solidification of Alâ Si alloys. *Journal of Alloys and Compounds*, **2005**, 403, 228-238	5.7	31
267	On macrosegregation in ternary Alâ uâ Si alloys: numerical and experimental analysis. *Scripta Materialia*, **2004**, 50, 407-411	5.6	31
266	Growth direction and Si alloying affecting directionally solidified structures of Alâ uâ Si alloys. *Materials Science and Technology*, **2015**, 31, 1103-1112	1.5	30
265	Microstructure, phases morphologies and hardness of a Biâ Ag eutectic alloy for high temperature soldering applications. *Materials & Design*, **2014**, 58, 482-490		30
264	Snâ 0.7 wt%Cuâ (xNi) alloys: Microstructureâ mechanical properties correlations with solder/substrate interfacial heat transfer coefficient. *Journal of Alloys and Compounds*, **2015**, 632, 274-285	5.7	30
263	Cellular growth during transient directional solidification of Pbâ Sb alloys. *Journal of Alloys and Compounds*, **2006**, 422, 227-238	5.7	30
262	The effect of microstructure length scale on dry sliding wear behaviour of monotectic Al-Bi-Sn alloys. *Journal of Alloys and Compounds*, **2016**, 689, 767-776	5.7	30
261	Inter-relation of Microstructural Features and Dry Sliding Wear Behavior of Monotectic Alâ Bi and Alâ Pb Alloys. *Tribology Letters*, **2014**, 55, 111-120	2.8	29
260	Mechanical and corrosion resistances of a Snâ 0.7 wt.%Cu lead-free solder alloy. *Microelectronics Reliability*, **2014**, 54, 1392-1400	1.2	29
259	Complex eutectic growth and Bi precipitation in ternary Sn-Bi-Cu and Sn-Bi-Ag alloys. *Journal of Alloys and Compounds*, **2017**, 691, 600-605	5.7	29
258	The interrelation between mechanical properties, corrosion resistance and microstructure of Pbâ Sn casting alloys for lead-acid battery components. *Journal of Power Sources*, **2010**, 195, 621-630	8.9	29
257	Tertiary dendrite arm spacing during downward transient solidification of Alâ Cu and Alâ Si alloys. *Materials Letters*, **2006**, 60, 1871-1874	3.3	29
256	Electrochemical behavior of Zn-rich Znâ Cu peritectic alloys affected by macrosegregation and microstructural array. *Electrochimica Acta*, **2012**, 76, 218-228	6.7	28
255	Microstructural development and mechanical properties of hypereutectic Snâ Cu solderalloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2013**, 568, 195-201	5.3	28
254	The effects of microstructure and intermetallic phases of directionally solidified Alâ e alloys on microhardness. *Materials Letters*, **2012**, 89, 291-295	3.3	28
253	Application of a Solidification Mathematical Model and a Genetic Algorithm in the Optimization of Strand Thermal Profile Along the Continuous Casting of Steel. *Materials and Manufacturing Processes*, **2005**, 20, 421-434	4.1	28
252	Application of a heuristic search technique for the improvement of spray zones cooling conditions in continuously cast steel billets. *Applied Mathematical Modelling*, **2006**, 30, 104-115	4.5	28
251	Metalâ mold heat transfer coefficients during horizontal and vertical Unsteady-State solidification of Alâ Cu and Snâ Pb Alloys. *Inverse Problems in Science and Engineering*, **2004**, 12, 279-296	1.3	28

250	Interconnection of thermal parameters, microstructure and mechanical properties in directionally solidified Snâ5b lead-free solder alloys. *Materials Characterization*, **2015**, 106, 52-61	3.9	27
249	Microstructureâwear behavior correlation on a directionally solidified Alâh monotectic alloy. *Tribology International*, **2013**, 66, 182-186	4.9	27
248	Laser remelting of Alâ1.5 wt%Fe alloy surfaces: Numerical and experimental analyses. *Optics and Lasers in Engineering*, **2011**, 49, 490-497	4.6	27
247	Experimental analysis of the columnar-to-equiaxed transition in directionally solidified Alâ5i and Alâ5n alloys. *Materials Letters*, **2007**, 61, 2135-2138	3.3	27
246	Evaluation of heat transfer coefficients along the secondary cooling zones in the continuous casting of steel billets. *Inverse Problems in Science and Engineering*, **2006**, 14, 687-700	1.3	27
245	Monotectic Alâ8iâ5n alloys directionally solidified: Effects of Bi content, growth rate and cooling rate on the microstructural evolution and hardness. *Journal of Alloys and Compounds*, **2015**, 653, 243-254	5.7	26
244	Dendritic Microstructure Affecting Mechanical Properties and Corrosion Resistance of an Al-9 wt% Si Alloy. *Materials and Manufacturing Processes*, **2007**, 22, 328-332	4.1	26
243	Cooling thermal parameters and microstructure features of directionally solidified ternary Snâ8iâ(Cu,Ag) solder alloys. *Materials Characterization*, **2016**, 114, 30-42	3.9	25
242	The effects of Ag content and dendrite spacing on the electrochemical behavior of Pbâ4g alloys for Pb-acid battery components. *Journal of Power Sources*, **2013**, 238, 324-335	8.9	25
241	Assessment of a new model for heat flow during unidirectional solidification of metals. *International Journal of Heat and Mass Transfer*, **1980**, 23, 773-782	4.9	25
240	Cu and Ag additions affecting the solidification microstructure and tensile properties of Sn-Bi lead-free solder alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 705, 325-334	5.3	24
239	The application of a new solidification heat flow model to splat cooling. *Journal of Materials Science* , **1981**, 16, 1643-1653	4.3	24
238	Plate-like cell growth during directional solidification of a Znâ0wt%Sn high-temperature lead-free solder alloy. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2014**, 182, 29-36	3.1	23
237	Interrelation of cell spacing, intermetallic compounds and hardness on a directionally solidified Alâ1.0Feâ1.0Ni alloy. *Materials & Design*, **2013**, 51, 342-346		23
236	Electrochemical corrosion of Pbâ1wt% Sn and Pbâ2.5wt% Sn alloys for lead-acid battery applications. *Journal of Power Sources*, **2009**, 194, 1120-1127	8.9	23
235	A solidification heat transfer model and a neural network based algorithm applied to the continuous casting of steel billets and blooms. *Modelling and Simulation in Materials Science and Engineering*, **2005**, 13, 1071-1087	2	23
234	Effects of the longitudinal and transversal structural grain morphologies upon the corrosion resistance of zinc and aluminium specimens. *Revista De Metalurgia*, **2005**, 41, 176-180	0.4	23
233	Interconnection of Zn content, macrosegregation, dendritic growth, nature of intermetallics and hardness in directionally solidified Mgâ2n alloys. *Journal of Alloys and Compounds*, **2016**, 662, 1-10	5.7	22

232	Assessment of Tertiary Dendritic Growth and Its Effects on Mechanical Properties of Directionally Solidified Sn-0.7Cu-xAg Solder Alloys. *Journal of Electronic Materials*, **2014**, 43, 1347-1361	1.9	22
231	Microstructural development of hypoeutectic Znâ(10â20)wt%Sn solder alloys and impacts of interphase spacing and macrosegregation pattern on hardness. *Journal of Alloys and Compounds*, **2015**, 647, 989-996	5.7	22
230	Effects of cell morphology and macrosegregation of directionally solidified Zn-rich Znâ□u alloys on the resulting microhardness. *Materials Letters*, **2012**, 80, 106-109	3.3	22
229	EIS parameters and cell spacings of an Alâ□i alloy in NaCl solution. *Electrochimica Acta*, **2013**, 108, 781-787	5.7	22
228	Corrosion behavior of hypoeutectic Al-Cu alloys in H2SO4 and NaCl solutions. *Acta Metallurgica Sinica (English Letters)*, **2009**, 22, 241-246	2.5	22
227	Microstructural development in Alâ□n alloys directionally solidified under transient heat flow conditions. *Materials Chemistry and Physics*, **2008**, 109, 87-98	4.4	22
226	Experimental impurity segregation and numerical analysis based on variable solute distribution coefficients during multi-pass zone refining of aluminum. *Journal of Crystal Growth*, **2008**, 310, 1274-1280	1.6	22
225	Influence of refining time on nonmetallic inclusions in a low-carbon, silicon-killed steel. *Materials Characterization*, **2003**, 51, 301-308	3.9	22
224	Effects of Solidification Thermal Parameters on Microstructure and Mechanical Properties of Sn-Bi Solder Alloys. *Journal of Electronic Materials*, **2017**, 46, 1754-1769	1.9	21
223	Microstructure and Tensile/Corrosion Properties Relationships of Directionally Solidified Alâ□uâ□i Alloys. *Metals and Materials International*, **2018**, 24, 1058-1076	2.4	21
222	The effect of the growth rate on microsegregation: Experimental investigation in hypoeutectic Alâ□e and Alâ□u alloys directionally solidified. *Journal of Alloys and Compounds*, **2013**, 561, 193-200	5.7	21
221	Evaluation of heat transfer coefficients during upward and downward transient directional solidification of Alâ□i alloys. *Structural and Multidisciplinary Optimization*, **2006**, 31, 241-248	3.6	21
220	Investigation of nonmetallic inclusions in continuously cast carbon steel by dissolution of the ferritic matrix. *Materials Characterization*, **2002**, 48, 255-261	3.9	21
219	Cell/dendrite transition and electrochemical corrosion of Pbâ□b alloys for lead-acid battery applications. *Journal of Power Sources*, **2011**, 196, 6567-6572	8.9	20
218	Comparison of electrochemical performance of as-cast Pbâ□wt.% Sn and Pbâ□wt.% Sb alloys for lead-acid battery components. *Journal of Power Sources*, **2010**, 195, 1726-1730	8.9	20
217	The roles of Al2Cu and of dendritic refinement on surface corrosion resistance of hypoeutectic Alâ□u alloys immersed in H2SO4. *Journal of Alloys and Compounds*, **2007**, 443, 87-93	5.7	20
216	Modeling of macrosegregation and microporosity formation during transient directional solidification of aluminum alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 435-436, 150-157	5.3	20
215	Theoretical and experimental analysis of inverse segregation during unidirectional solidification of an Alâ□.2 wt.% Cu alloy. *Scripta Materialia*, **2003**, 49, 339-344	5.6	20

214	Alâ Fe hypoeutectic alloys directionally solidified under steady-state and unsteady-state conditions. *Journal of Alloys and Compounds*, **2010**, 504, 205-210	5.7	19
213	Electrochemical Corrosion Behavior of as-cast Zn-rich Zn-Mg Alloys in a 0.06M NaCl Solution. *International Journal of Electrochemical Science*, **2017**, 5264-5283	2.2	18
212	Influences of solute content, melt superheat and growth direction on the transient metal/mold interfacial heat transfer coefficient during solidification of Snâ Pb alloys. *Materials Chemistry and Physics*, **2008**, 111, 444-454	4.4	18
211	The correlation of microstructure features, dry sliding wear behavior, hardness and tensile properties of Al-2wt%Mg-Zn alloys. *Journal of Alloys and Compounds*, **2018**, 764, 267-278	5.7	17
210	Microstructure morphologies during the transient solidification of hypomonotectic and monotectic Alâ Pb alloys. *Journal of Alloys and Compounds*, **2011**, 509, 10098-10104	5.7	17
209	The application of computational thermodynamics and a numerical model for the determination of surface tension and GibbsâThomson coefficient of aluminum based alloys. *Thermochimica Acta*, **2011**, 523, 142-149	2.9	17
208	Correlation between dendrite arm spacing and microhardness during unsteady-state directional solidification of Alâ Ni alloys. *Philosophical Magazine Letters*, **2011**, 91, 337-343	1	17
207	Near-eutectic Zn-Mg alloys: Interrelations of solidification thermal parameters, microstructure length scale and tensile/corrosion properties. *Current Applied Physics*, **2019**, 19, 582-598	2.6	16
206	Cooling thermal parameters, microstructural spacing and mechanical properties in a directionally solidified hypereutectic Alâ Si alloy. *Philosophical Magazine Letters*, **2016**, 96, 228-237	1	16
205	A comparative analysis of microstructural features, tensile properties and wettability of hypoperitectic and peritectic Sn-Sb solder alloys. *Microelectronics Reliability*, **2018**, 81, 150-158	1.2	15
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