

Amauri Garcia

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|--------------------|-------------------------|----------------|-----------------|
| 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 | Investigation on machinability in turning of as-cast and T6 heat-treated Al-(3, 7, 12%)Si-0.6%Mg alloys. <i>Journal of Manufacturing Processes</i> , 2022 , 75, 514-526 | 5 | 1 |
| 356 | The Roles of Ni and Co in Dendritic Growth and Tensile Properties of Fe-Containing Al ₈₀ Si ₁₀ Cu ₅ Zn Scraps under Slow and Fast Solidification Cooling. <i>Advanced Engineering Materials</i> , 2022 , 24, 2270013 | 3.5 | |
| 355 | NbB refining capability: Effects of slow and rapid solidification on dendritic spacings and grain sizes of a 6201 alloy. <i>Materials Letters</i> , 2022 , 315, 131960 | 3.3 | 0 |
| 354 | Influences of alloying elements and dendritic spacing on the corrosion behavior of Al ₈₀ Si ₁₀ Ag alloys. <i>Journal of Materials Research and Technology</i> , 2021 , 15, 5880-5893 | 5.5 | 2 |
| 353 | Modifications on solidification thermal parameters, microstructure and hardness induced by Cu additions to a hypereutectic Zn 8Al alloy. <i>Materials Characterization</i> , 2021 , 174, 110936 | 3.9 | 1 |
| 352 | Solidification microstructure-dependent hydrogen generation behavior of Al ₈₀ Sn and Al ₈₀ Fe alloys in alkaline medium. <i>International Journal of Hydrogen Energy</i> , 2021 , 46, 12654-12671 | 6.7 | 0 |
| 351 | Tailoring microstructure and microhardness of Zn ₄₀ wt.%Mg ₄₀ (0.5wt.%Mn, 0.5wt.%Ca) alloys by solidification cooling rate. <i>Transactions of Nonferrous Metals Society of China</i> , 2021 , 31, 1031-1048 | 3.3 | 4 |
| 350 | Interfacial heat transfer and microstructural analyses of a Bi- 5% Sb lead-free alloy solidified against Cu, Ni and low-C steel substrates. <i>Journal of Alloys and Compounds</i> , 2021 , 860, 158553 | 5.7 | 0 |
| 349 | Effect of Bi content on microstructure and corrosion behaviour of Zn ₈₀ Al ₁₀ (Bi) alloys. <i>Corrosion Engineering Science and Technology</i> , 2021 , 56, 461-472 | 1.7 | 0 |
| 348 | Corrosion behavior of an Al ₈₀ Sn ₁₀ Zn alloy: Effects of solidification microstructure characteristics. <i>Journal of Materials Research and Technology</i> , 2021 , 12, 257-263 | 5.5 | 3 |
| 347 | Relationship between Microstructure Evolution and Tensile Properties of AlSi10Mg Alloys with Varying Mg Content and Solidification Cooling Rates. <i>Metals</i> , 2021 , 11, 1019 | 2.3 | 3 |
| 346 | Microstructure features and mechanical/electrochemical behavior of directionally solidified Al ₈₀ wt.%Cu ₁₀ wt.%Ni alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2021 , 31, 1529-1549 | 3.3 | 4 |
| 345 | Electrochemical corrosion behaviour of Sn ₄₀ Sb solder alloys: the roles of alloy Sb content and type of intermetallic compound. <i>Corrosion Engineering Science and Technology</i> , 2021 , 56, 11-21 | 1.7 | 0 |
| 344 | Interface evaluation of a Bi ₄₀ Zn eutectic solder alloy: Effects of different substrate materials on thermal contact conductance. <i>International Journal of Thermal Sciences</i> , 2021 , 160, 106685 | 4.1 | 2 |
| 343 | Mechanical Properties, Microstructural Features, and Correlations with Solidification Rates of Al ₈₀ Cu ₁₀ Si Ultrafine Eutectic Alloys. <i>Advanced Engineering Materials</i> , 2021 , 23, 2001177 | 3.5 | 1 |
| 342 | Evaluating Microstructure, Wear Resistance and Tensile Properties of Al-Bi(-Cu, -Zn) Alloys for Lightweight Sliding Bearings. <i>Metals</i> , 2021 , 11, 153 | 2.3 | 1 |
| 341 | Ag-containing aluminum-silicon alloys as an alternative for as-cast components of electric vehicles. <i>Materials Research Express</i> , 2021 , 8, 016527 | 1.7 | 2 |

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| 340 | On the Transient Atomic/Heat Diffusion in Cylinders and Spheres with Phase Change: A Method to Derive Closed-Form Solutions. <i>International Journal of Mathematics and Mathematical Sciences</i> , 2021 , 2021, 1-19 | 0.8 | 1 |
| 339 | Microstructural and segregation effects affecting the corrosion behavior of a high-temperature Bi-Ag solder alloy in dilute chloride solution. <i>Journal of Applied Electrochemistry</i> , 2021 , 51, 769-780 | 2.6 | 1 |
| 338 | Metal/mold thermal conductance affecting ultrafine scale microstructures in aluminum eutectic alloys. <i>Case Studies in Thermal Engineering</i> , 2021 , 26, 101144 | 5.6 | 0 |
| 337 | Tailoring microstructure and tensile properties of Mg-Si alloys varying solidification cooling rate and Si content. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 825, 141905 | 5.3 | 0 |
| 336 | Towards a morphological control of Mg ₂ Si and superior tensile properties of high-Zn Mg-0.6Si (-Zn) alloys. <i>Materials Letters</i> , 2021 , 299, 130084 | 3.3 | 1 |
| 335 | Comparing the roles of Sb and Bi on microstructures and application properties of the Al-15% Si alloy. <i>Journal of Alloys and Compounds</i> , 2021 , 878, 160343 | 5.7 | 6 |
| 334 | Multiple linear regression approach to predict tensile properties of Sn-Ag-Cu (SAC) alloys. <i>Materials Letters</i> , 2021 , 304, 130587 | 3.3 | 2 |
| 333 | Effect of cooling rate on microstructure and microhardness of hypereutectic Al ₃ Ni alloy. <i>Archives of Civil and Mechanical Engineering</i> , 2021 , 21, 1 | 3.4 | 3 |
| 332 | Plate-like growth in a eutectic Bi ₃ Ni alloy: effects of morphological microstructure evolution and Bi ₃ Ni intermetallic phase on tensile properties. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 4940-4950 | 5.5 | 3 |
| 331 | Microstructure Growth Morphologies, Macrosegregation, and Microhardness in Bi ₃ B Thermal Interface Alloys. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901592 | 3.5 | 8 |
| 330 | Microstructure characterization and tensile properties of directionally solidified Sn-52 wt% Bi-1wt% Sb and Sn-52wt% Bi-2wt% Sb alloys. <i>Materials Characterization</i> , 2020 , 166, 110445 | 3.9 | 2 |
| 329 | A comparison of experimental time-secondary dendritic spacing and coarsening models for Al-Si-Cu alloys. <i>Journal of Manufacturing Processes</i> , 2020 , 54, 14-18 | 5 | 6 |
| 328 | Length scale of solidification microstructure tailoring corrosion resistance and microhardness in T6 heat treatment of an Al ₃ Mg alloy. <i>Corrosion Engineering Science and Technology</i> , 2020 , 55, 471-479 | 1.7 | 5 |
| 327 | Effects of solidification thermal parameters and Bi doping on silicon size, morphology and mechanical properties of Al-15wt.% Si-3.2wt.% Bi and Al-18wt.% Si-3.2wt.% Bi alloys. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 3460-3470 | 5.5 | 7 |
| 326 | The effects of Cr addition on microstructure, hardness and tensile properties of as-cast Al ₃ 8wt.%Cu ₂ (Cr) alloys. <i>Journal of Materials Research and Technology</i> , 2020 , 9, 6620-6631 | 5.5 | 11 |
| 325 | Effects of cobalt and solidification cooling rate on intermetallic phases and tensile properties of a -Cu, -Zn, -Fe containing Al-Si alloy. <i>International Journal of Advanced Manufacturing Technology</i> , 2020 , 107, 717-730 | 3.2 | 6 |
| 324 | Effect of Microstructure Features on the Corrosion Behavior of the Sn-2.1 wt%Mg Solder Alloy. <i>Electronic Materials Letters</i> , 2020 , 16, 276-292 | 2.9 | 3 |
| 323 | Dendritic Spacing/Columnar Grain Diameter of Al ₃ Mg ₃ Zn Alloys Affecting Hardness, Tensile Properties, and Dry Sliding Wear in the As-Cast/Heat-Treated Conditions. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901145 | 3.5 | 3 |

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| 322 | Application of a Phase Field Model to Multicomponent Al-Cu-Si alloys. <i>Materials Research</i> , 2020 , 23, | 1.5 | 2 |
| 321 | Effects of cooling rate and microstructure scale on wear resistance of unidirectionally solidified Al-3.2wt.%Bi-(1; 3) wt.%Pb alloys. <i>Materials Today Communications</i> , 2020 , 25, 101659 | 2.5 | 2 |
| 320 | Purification of naphthalene by zone refining: Mathematical modelling and optimization by swarm intelligence-based techniques. <i>Separation and Purification Technology</i> , 2020 , 234, 116089 | 8.3 | 2 |
| 319 | The application of numerical and analytical approaches for the determination of thermophysical properties of Al-Bi-Mg alloys. <i>Continuum Mechanics and Thermodynamics</i> , 2020 , 32, 1231-1244 | 3.5 | 7 |
| 318 | Transition from high cooling rate cells to dendrites in directionally solidified Al-Sn-(Pb) alloys. <i>Materials Today Communications</i> , 2020 , 25, 101490 | 2.5 | 2 |
| 317 | Effects of Silver Content and Cooling Rate on Electrical Conductivity and Tensile Properties of Al-Si(-Ag) Alloys. <i>Journal of Materials Engineering and Performance</i> , 2020 , 29, 6849-6860 | 1.6 | 2 |
| 316 | Characterization of microstructure and wear resistance of a monotectic Al-Bi-Zn alloy. <i>Journal of Physics and Chemistry of Solids</i> , 2020 , 147, 109631 | 3.9 | 5 |
| 315 | The role of eutectic colonies in the tensile properties of a Sn-Zn eutectic solder alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020 , 776, 138959 | 5.3 | 8 |
| 314 | Morphology of Intermetallics Tailoring Tensile Properties and Quality Index of a Eutectic Al-Bi-Ni Alloy. <i>Advanced Engineering Materials</i> , 2020 , 22, 2000503 | 3.5 | 2 |
| 313 | Galvanic corrosion analysis of a Bi-Zn solder alloy coupled to Ni and Cu substrates. <i>Corrosion Engineering Science and Technology</i> , 2020 , 55, 729-738 | 1.7 | |
| 312 | Microstructure, phase morphology, eutectic coupled zone and hardness of Al Co alloys. <i>Materials Characterization</i> , 2020 , 169, 110617 | 3.9 | 3 |
| 311 | Correlation between unsteady-state solidification thermal parameters and microstructural growth of Zn-B mass% Al and Zn-B mass% Al-Bi tribological alloys. <i>Journal of Thermal Analysis and Calorimetry</i> , 2020 , 139, 1741-1761 | 4.1 | 4 |
| 310 | Interplay of Wettability, Interfacial Reaction and Interfacial Thermal Conductance in Sn-0.7Cu Solder Alloy/Substrate Couples. <i>Journal of Electronic Materials</i> , 2020 , 49, 173-187 | 1.9 | 5 |
| 309 | Measurement and interrelation of length scale of dendritic microstructures, tensile properties, and machinability of Al-9 wt% Si-(1 wt% Bi) alloys. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 105, 1391-1410 | 3.2 | 5 |
| 308 | Assessing microstructure and mechanical behavior changes in a Sn-Sb solder alloy induced by cooling rate. <i>Journal of Alloys and Compounds</i> , 2019 , 809, 151780 | 5.7 | 6 |
| 307 | Effects of Macrosegregation and Microstructure on the Corrosion Resistance and Hardness of a Directionally Solidified Zn-5.0wt.%Mg Alloy. <i>Materials Research</i> , 2019 , 22, | 1.5 | 5 |
| 306 | The Roles of Mn and Ni Additions to Fe-Contaminated Al in Neutralizing Fe and Stabilizing the Cellular α -Al Microstructure. <i>Journal of Sustainable Metallurgy</i> , 2019 , 5, 561-580 | 2.7 | 6 |
| 305 | Thermal analysis during solidification of an Al-Cu eutectic alloy: interrelation of thermal parameters, microstructure and hardness. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019 , 137, 983-996 | 4.1 | 12 |

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| 304 | Cellular-to-Dendritic and Dendritic-to-Cellular Morphological Transitions in a Ternary Al-Mg-Si Alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019 , 529, 012018 | 0.4 | 7 |
| 303 | Transient directional solidification of a eutectic Al ₈₅ Si ₁₅ Ni alloy: Macrostructure, microstructure, dendritic growth and hardness. <i>Materialia</i> , 2019 , 7, 100358 | 3.2 | 11 |
| 302 | Near-eutectic Zn-Mg alloys: Interrelations of solidification thermal parameters, microstructure length scale and tensile/corrosion properties. <i>Current Applied Physics</i> , 2019 , 19, 582-598 | 2.6 | 16 |
| 301 | Correlation between microstructure and corrosion behaviour of Bi-Zn solder alloys. <i>Corrosion Engineering Science and Technology</i> , 2019 , 54, 362-368 | 1.7 | 10 |
| 300 | Dendritic and eutectic growth of Sn _{80.5} wt.%Cu solders with low alloying Al levels. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2019 , 233, 1733-1737 | 1.3 | 1 |
| 299 | Dependence of Surface Tension and Viscosity on Temperature in Multicomponent Alloys 2019 , | | 3 |
| 298 | Sn-Bi(-Ga) TIM Alloys: Microstructure, Tensile Properties, Wettability and Interfacial Reactions. <i>Journal of Electronic Materials</i> , 2019 , 48, 4773-4788 | 1.9 | 1 |
| 297 | Modeling the Transport of Hazardous Colloidal Suspensions of Nanoparticles Within Soil of Landfill Layers Considering Multicomponent Interactions. <i>Journal of Sustainable Metallurgy</i> , 2019 , 5, 581-593 | 2.7 | 2 |
| 296 | Determination of heat capacity of pure metals, compounds and alloys by analytical and numerical methods. <i>Thermochimica Acta</i> , 2019 , 682, 178418 | 2.9 | 7 |
| 295 | Dendritic Spacing and Macrosegregation Affecting Microhardness of an Al-Si-Mg Alloy Solidified Under Unsteady State Conditions. <i>Materials Research</i> , 2019 , 22, | 1.5 | 2 |
| 294 | On the prediction of temperature-dependent viscosity of multicomponent liquid alloys. <i>Continuum Mechanics and Thermodynamics</i> , 2019 , 31, 1369-1385 | 3.5 | 7 |
| 293 | Sn-Mg lead-free solder alloy: Effect of solidification thermal parameters on microstructural features and microhardness. <i>Materials Research Express</i> , 2019 , 6, 126562 | 1.7 | 0 |
| 292 | The application of an analytical model to solve an inverse heat conduction problem: Transient solidification of a Sn-Sb peritectic solder alloy on distinct substrates. <i>Journal of Manufacturing Processes</i> , 2019 , 48, 164-173 | 5 | 8 |
| 291 | Experimental study of the evolution of tertiary dendritic arms and microsegregation in directionally solidified Al ₈₅ Si ₁₅ Cu alloys castings. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 1515-1521 | 5.5 | 12 |
| 290 | Effects of Melt Superheating on the Microstructure and Tensile Properties of a Ternary Al-15 Wt Pct Si-1.5 Wt Pct Mg Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 1308-1322 | 2.3 | 9 |
| 289 | 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 | 1.6 | 11 |
| 288 | Horizontally Solidified Al ₈₅ wt%Cu _{10.5} wt%Mg) Alloys: Tailoring Thermal Parameters, Microstructure, Microhardness, and Corrosion Behavior. <i>Acta Metallurgica Sinica (English Letters)</i> , 2019 , 32, 695-709 | 2.5 | 15 |
| 287 | Wetting behavior of Sn ₈₀ Ag ₁₀ Cu and Sn ₈₀ Bi ₁₀ Al alloys: insights into factors affecting cooling rate. <i>Journal of Materials Research and Technology</i> , 2019 , 8, 1581-1586 | 5.5 | 3 |

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| 286 | Tailoring Morphology and Size of Microstructure and Tensile Properties of Sn-5.5 wt.%Sb-1 wt.%(Cu,Ag) Solder Alloys. <i>Journal of Electronic Materials</i> , 2018 , 47, 1647-1657 | 1.9 | 3 |
| 285 | A comparative analysis of microstructural features, tensile properties and wettability of hypoperitectic and peritectic Sn-Sb solder alloys. <i>Microelectronics Reliability</i> , 2018 , 81, 150-158 | 1.2 | 15 |
| 284 | The use of computational thermodynamics for the determination of surface tension and Gibbs-Thomson coefficient of multicomponent alloys. <i>Continuum Mechanics and Thermodynamics</i> , 2018 , 30, 1145-1154 | 3.5 | 10 |
| 283 | Microstructure and Tensile/Corrosion Properties Relationships of Directionally Solidified Al-Cu-Ni Alloys. <i>Metals and Materials International</i> , 2018 , 24, 1058-1076 | 2.4 | 21 |
| 282 | Relationship between spacing of eutectic colonies and tensile properties of transient directionally solidified Al-Ni eutectic alloy. <i>Journal of Alloys and Compounds</i> , 2018 , 733, 59-68 | 5.7 | 43 |
| 281 | 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 | 4.4 | 10 |
| 280 | High Cooling Rate, Regular and Plate Like Cells in Sn-Ni Solder Alloys. <i>Advanced Engineering Materials</i> , 2018 , 20, 1701179 | 3.5 | 2 |
| 279 | An Alternative to the Recycling of Fe-Contaminated Al. <i>Journal of Sustainable Metallurgy</i> , 2018 , 4, 412-426 | 7 | 8 |
| 278 | The correlation of microstructure features, dry sliding wear behavior, hardness and tensile properties of Al-2wt%Mg-Zn alloys. <i>Journal of Alloys and Compounds</i> , 2018 , 764, 267-278 | 5.7 | 17 |
| 277 | Tailoring microstructure, tensile properties and fracture process via transient directional solidification of Zn-Sn alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 712, 127-132 | 5.3 | 12 |
| 276 | Cellular/dendritic transition, dendritic growth and microhardness in directionally solidified monophasic Sn-2%Sb alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2018 , 28, 1679-1686 | 3.3 | 7 |
| 275 | Transient Unidirectional Solidification, Microstructure and Intermetallics in Sn-Ni Alloys. <i>Materials Research</i> , 2018 , 21, | 1.5 | 5 |
| 274 | Tailoring of Microstructures and Tensile Properties in the Solidification of Al-11Si-(xCu) Brazing Alloys. <i>Metals</i> , 2018 , 8, 784 | 2.3 | 7 |
| 273 | On an expression for the growth of secondary dendrite arm spacing during non-equilibrium solidification of multicomponent alloys: Validation against ternary aluminum-based alloys. <i>Journal of Manufacturing Processes</i> , 2018 , 35, 634-650 | 5 | 14 |
| 272 | An artificial immune system algorithm applied to the solution of an inverse problem in unsteady inward solidification. <i>Advances in Engineering Software</i> , 2018 , 121, 178-187 | 3.6 | 7 |
| 271 | Effects of Solidification Thermal Parameters on Microstructure and Mechanical Properties of Sn-Bi Solder Alloys. <i>Journal of Electronic Materials</i> , 2017 , 46, 1754-1769 | 1.9 | 21 |
| 270 | Dendritic Growth, Solidification Thermal Parameters, and Mg Content Affecting the Tensile Properties of Al-Mg-1.5 Wt Pct Fe Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 1841-1855 | 2.3 | 14 |
| 269 | Dendritic Growth, Eutectic Features and Their Effects on Hardness of a Ternary Sn-Zn-Cu Solder Alloy. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017 , 30, 528-540 | 2.5 | 3 |

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| 268 | Tensile properties and related microstructural aspects of hypereutectic Al-Si alloys directionally solidified under different melt superheats and transient heat flow conditions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 685, 235-243 | 5.3 | 46 |
| 267 | Microstructure, tensile properties and wear resistance correlations on directionally solidified Al-Sn-(Cu; Si) alloys. <i>Journal of Alloys and Compounds</i> , 2017 , 695, 3621-3631 | 5.7 | 41 |
| 266 | Electrochemical Corrosion Behavior of as-cast Zn-rich Zn-Mg Alloys in a 0.06M NaCl Solution. <i>International Journal of Electrochemical Science</i> , 2017 , 5264-5283 | 2.2 | 18 |
| 265 | Phase-Field Simulation of Microsegregation and Dendritic Growth During Solidification of Hypoeutectic Al-Cu alloys. <i>Materials Research</i> , 2017 , 20, 423-429 | 1.5 | 9 |
| 264 | Cu and Ag additions affecting the solidification microstructure and tensile properties of Sn-Bi lead-free solder alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 705, 325-334 | 5.3 | 24 |
| 263 | Interrelationship of thermal parameters, microstructure and microhardness of directionally solidified Bi-Zn solder alloys. <i>Microelectronics Reliability</i> , 2017 , 78, 100-110 | 1.2 | 10 |
| 262 | Upward and downward unsteady-state directional solidification of a hypoeutectic Al-3wt.%Mg alloy. <i>Ciência & Tecnologia Dos Materiais</i> , 2017 , 29, e65-e70 | | |
| 261 | Directional solidification of a Sn-0.2Ni solder alloy in water-cooled copper and steel molds: Related effects on the matrix micromorphology, nature of intermetallics and tensile properties. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 1039-1052 | 5.7 | 15 |
| 260 | The effects of Zn segregation and microstructure length scale on the corrosion behavior of a directionally solidified Mg-25 wt.%Zn alloy. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 649-660 | 5.7 | 31 |
| 259 | Directionally solidified dilute Zn-Mg alloys: Correlation between microstructure and corrosion properties. <i>Journal of Alloys and Compounds</i> , 2017 , 723, 536-547 | 5.7 | 14 |
| 258 | Complex eutectic growth and Bi precipitation in ternary Sn-Bi-Cu and Sn-Bi-Ag alloys. <i>Journal of Alloys and Compounds</i> , 2017 , 691, 600-605 | 5.7 | 29 |
| 257 | Primary Dendrite ARM Spacing Effects upon Mechanical Properties of an Al-Bi-Wt%Cu-Wt%Li Alloy. <i>Advanced Structured Materials</i> , 2017 , 215-229 | 0.6 | 5 |
| 256 | Correlation between microstructure and hardness of a Bi-1.5wt%Ag lead-free solder alloy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016 , 117, 012028 | 0.4 | |
| 255 | Application of Computational Thermodynamics to the Evolution of Surface Tension and Gibbs-Thomson Coefficient during Multicomponent Aluminum Alloy Solidification. <i>Materials Science Forum</i> , 2016 , 869, 416-422 | 0.4 | 4 |
| 254 | Solder/substrate interfacial thermal conductance and wetting angles of Bi-Ag solder alloys. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 1994-2003 | 2.1 | 12 |
| 253 | 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 | 1.6 | 8 |
| 252 | Thermal Parameters and Microstructural Development in Directionally Solidified Zn-Rich Zn-Mg Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 3052-3064 | 2.3 | 13 |
| 251 | Numerical and experimental modelling of two-dimensional unsteady heat transfer during inward solidification of square billets. <i>Applied Thermal Engineering</i> , 2016 , 96, 454-462 | 5.8 | 10 |

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| 250 | Interconnection of Zn content, macrosegregation, dendritic growth, nature of intermetallics and hardness in directionally solidified MgâZn alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 662, 1-10 | 5.7 | 22 |
| 249 | Cellular/dendritic arrays and intermetallic phases affecting corrosion and mechanical resistances of an AlâMgâBi alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 673, 220-230 | 5.7 | 46 |
| 248 | Evaluation of thermophysical properties of AlâSnâBi alloys based on computational thermodynamics and validation by numerical and experimental simulation of solidification. <i>Journal of Chemical Thermodynamics</i> , 2016 , 98, 9-20 | 2.9 | 6 |
| 247 | Cooling thermal parameters and microstructure features of directionally solidified ternary SnâBiâ(Cu,Ag) solder alloys. <i>Materials Characterization</i> , 2016 , 114, 30-42 | 3.9 | 25 |
| 246 | Length scale of the dendritic microstructure affecting tensile properties of Alâ(Ag)â(Cu) alloys. <i>International Journal of Modern Physics B</i> , 2016 , 30, 1550261 | 1.1 | 6 |
| 245 | Cooling thermal parameters, microstructural spacing and mechanical properties in a directionally solidified hypereutectic AlâBi alloy. <i>Philosophical Magazine Letters</i> , 2016 , 96, 228-237 | 1 | 16 |
| 244 | Interrelation of wettabilityâmicrostructureâtensile strength of lead-free SnâAg and SnâBi solder alloys. <i>Science and Technology of Welding and Joining</i> , 2016 , 21, 429-437 | 3.7 | 10 |
| 243 | Effect of solution time in T6 heat treatment on microstructure and hardness of a directionally solidified AlâBiâCu alloy. <i>Journal of Alloys and Compounds</i> , 2016 , 683, 485-494 | 5.7 | 57 |
| 242 | The effect of microstructure length scale on dry sliding wear behaviour of monotectic Al-Bi-Sn alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 689, 767-776 | 5.7 | 30 |
| 241 | An alternative thermal approach to evaluate the wettability of solder alloys. <i>Applied Thermal Engineering</i> , 2016 , 107, 431-440 | 5.8 | 15 |
| 240 | Steady and unsteady state peritectic solidification. <i>Materials Science and Technology</i> , 2015 , 31, 105-114 | 1.5 | 9 |
| 239 | Cooling thermal parameters, microstructure, segregation and hardness in directionally solidified AlâSn-(Si;Cu) alloys. <i>Materials & Design</i> , 2015 , 72, 31-42 | | 39 |
| 238 | Characterization of Dendritic Microstructure, Intermetallic Phases, and Hardness of Directionally Solidified Al-Mg and Al-Mg-Si Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015 , 46, 3342-3355 | 2.3 | 35 |
| 237 | Microstructural development and mechanical properties of a near-eutectic directionally solidified SnâBi solder alloy. <i>Materials Characterization</i> , 2015 , 107, 43-53 | 3.9 | 35 |
| 236 | The Growth of Secondary Dendritic Arms in Directionally Solidified Al-Si-Cu Alloys: A Comparative Study with Binary Al-Si Alloys. <i>Applied Mechanics and Materials</i> , 2015 , 719-720, 102-105 | 0.3 | 12 |
| 235 | High cooling rate cells, dendrites, microstructural spacings and microhardness in a directionally solidified AlâMgâBi alloy. <i>Journal of Alloys and Compounds</i> , 2015 , 636, 145-149 | 5.7 | 38 |
| 234 | Growth direction and Si alloying affecting directionally solidified structures of AlâCuâBi alloys. <i>Materials Science and Technology</i> , 2015 , 31, 1103-1112 | 1.5 | 30 |
| 233 | Experimental and numerical analyses of laser remelted Snâ0.7 wt%Cu solder surfaces. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 3100-3107 | 2.1 | |

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| 232 | Interconnection of thermal parameters, microstructure and mechanical properties in directionally solidified Sn ₈₅ Pb ₁₅ lead-free solder alloys. <i>Materials Characterization</i> , 2015 , 106, 52-61 | 3.9 | 27 |
| 231 | Application of computational thermodynamics to the determination of thermophysical properties as a function of temperature for multicomponent Al-based alloys. <i>Thermochimica Acta</i> , 2015 , 619, 1-7 | 2.9 | 11 |
| 230 | An Effective Inverse Heat Transfer Procedure Based on Evolutionary Algorithms to Determine Cooling Conditions of a Steel Continuous Casting Machine. <i>Materials and Manufacturing Processes</i> , 2015 , 30, 414-424 | 4.1 | 13 |
| 229 | Evaluation of solder/substrate thermal conductance and wetting angle of Sn _{90.7} Cu _{8.1} Ni _{1.2} solder alloys. <i>Materials Letters</i> , 2015 , 142, 163-167 | 3.3 | 31 |
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| 158 | Corrosion resistance of directionally solidified Al-Cu-Si and Al-Cu-Si alloys castings. <i>Materials & Design</i> , 2011 , 32, 3832-3837 | | 61 |
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