

# Kazuhiro Nogita

## List of Publications by Year in descending order

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218  
papers

7,542  
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43973

48  
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225  
docs citations

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times ranked

3699  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Atomic insights into the ordered solid solutions of Ni and Au in $\hat{\text{I}}\text{-Cu}_6\text{Sn}_5$ . <i>Acta Materialia</i> , 2022, 224, 117513.   | 3.8 | 3         |
| 2  | Investigation on the Solidification and Phase Transformation in Pb-Free Solders Using In Situ Synchrotron Radiography and Diffraction: A Review. <i>Acta Metallurgica Sinica (English Letters)</i> , 2022, 35, 49-66.                          | 1.5 | 2         |
| 3  | The effect of Ni on the growth morphology of primary $\hat{\text{I}}^2$ -phase in an In-35 $\hat{\text{A}}\text{wt}\%\text{Sn}$ alloy. <i>Journal of Alloys and Compounds</i> , 2022, 897, 163172.   | 2.8 | 7         |
| 4  | In Situ Observation of Liquid Solder Alloys and Solid Substrate Reactions Using High-Voltage Transmission Electron Microscopy. <i>Materials</i> , 2022, 15, 510.   | 1.3 | 3         |
| 5  | The Effects of Temperature and Solute Diffusion on Volume Change in Sn-Bi Solder Alloys. <i>Jom</i> , 2022, 74, 1739-1750.   | 0.9 | 8         |
| 6  | Systematic investigation of the effect of Ni concentration in Cu-xNi/Sn couples for high temperature soldering. <i>Acta Materialia</i> , 2022, 226, 117661.  | 3.8 | 14        |
| 7  | Controlling the distribution of porosity during transient liquid phase bonding of Sn-based solder joint. <i>Materials Today Communications</i> , 2022, 31, 103248.   | 0.9 | 1         |
| 8  | Properties of Sn-3 $\hat{\text{A}}\text{wt}\%\text{Ag}$ -5 $\hat{\text{A}}\text{wt}\%\text{Cu}$ alloys with $\text{Cu}_6\text{Sn}_5$ intermetallics grain refined by Mg. <i>Materials Today Communications</i> , 2022, 31, 103221.             | 0.9 | 6         |
| 9  | Liquid/Solid Interaction of Sn-58Bi/Sn-3.0Ag-0.5Cu Dissimilar Joints during Soldering at Low Temperature by In-Situ Synchrotron Imaging. <i>Jom</i> , 2022, 74, 2760-2769.   | 0.9 | 2         |
| 10 | Hydrogen sorption behaviour of Mg-5wt.%La alloys after the initial hydrogen absorption process. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 16132-16143.   | 3.8 | 7         |
| 11 | Effect of Kaolin Geopolymer Ceramics Addition on the Microstructure and Shear Strength of Sn-3.0Ag-0.5Cu Solder Joints during Multiple Reflow. <i>Materials</i> , 2022, 15, 2758.  | 1.3 | 3         |
| 12 | Na-modified cast hypo-eutectic Mg $\hat{\text{A}}\text{Mg}_2\text{Si}$ alloys for solid-state hydrogen storage. <i>Journal of Power Sources</i> , 2022, 538, 231538.   | 4.0 | 10        |
| 13 | Investigation of the Effects of Surface Finish and Reflow Conditions on the Microstructure and Mechanical Properties of Sn-based Solders. , 2022, , .  |     | 0         |
| 14 | Comparison of the Mechanical Properties of Conventional Pb-free Solders and Eutectic Sn-Bi Solder. , 2022, , .   |     | 2         |
| 15 | Maximum Fluidity Length of Commercial Solder Alloys and the Effects of Ni and Co in Sn-0.7wt%Cu Solder Alloys. , 2022, , .   |     | 0         |
| 16 | Origin of Primary $\text{Cu}_6\text{Sn}_5$ in Hypoeutectic Solder Alloys and a Method of Suppression to Improve Mechanical Properties. <i>Journal of Electronic Materials</i> , 2021, 50, 710-722.   | 1.0 | 9         |
| 17 | Effect of Ni, Zn, Au, Sb and In on the Suppression of the $\text{Cu}_3\text{Sn}$ Phase in Sn-10 $\hat{\text{A}}\text{wt}\%\text{Cu}$ Alloys. <i>Journal of Electronic Materials</i> , 2021, 50, 881-892.                                       | 1.0 | 4         |
| 18 | Evaluation of wave-like nucleation events in Al-4%Si alloys with addition of TiB $\hat{\text{A}}\text{Ti}$ particles by time-resolved and in-situ observation. <i>Keikinzoku/Journal of Japan Institute of Light Metals</i> , 2021, 71, 22-29. | 0.1 | 0         |

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|----|--|-----|-----------|
| 19 | Effects of Surface Finish on Sn-3.0Ag-0.5Cu Solder Joint Microstructure and Strength. Journal of Electronic Materials, 2021, 50, 855-868.  | 1.0 | 7         |
| 20 | Microstructure Evolution of Ag/TiO <sub>2</sub> Thin Film. Magnetochemistry, 2021, 7, 14.  | 1.0 | 2         |
| 21 | In-situ observation of high-temperature Pb-free electric interconnections by synchrotron microradiography. Materials Letters, 2021, 291, 129520.   | 1.3 | 3         |
| 22 | Microstructure, thermal behavior and joint strength of Sn-0.7Cu-1.5Bi/electroless nickel immersion gold (ENIG). Journal of Materials Research and Technology, 2021, 12, 1700-1714.                             | 2.6 | 8         |
| 23 | Interfacial reactions between Ga and Cu-xNi (x=0, 2, 6, 10, 14) substrates and the strength of Cu-xNi/Ga/Cu-xNi joints. Intermetallics, 2021, 133, 107168.   | 1.8 | 6         |
| 24 | Rapid fabrication of tin-copper anodes for lithium-ion battery applications. Journal of Alloys and Compounds, 2021, 867, 159031.   | 2.8 | 9         |
| 25 | The effect of Na addition on the first hydrogen absorption kinetics of cast hypoeutectic Mg-Al alloys. International Journal of Hydrogen Energy, 2021, 46, 27096-27106.  | 3.8 | 10        |
| 26 | Re-evaluation of the mechanical properties and creep resistance of commercial magnesium die-casting alloy AE44. Journal of Magnesium and Alloys, 2021, 9, 1537-1545.   | 5.5 | 16        |
| 27 | Peritectic phase formation kinetics of directionally solidifying Sn-Cu alloys within a broad growth rate regime. Acta Materialia, 2021, 220, 117295.   | 3.8 | 13        |
| 28 | The Effect of Ni and Bi Additions on the Solderability of Sn-0.7Cu Solder Coatings. Journal of Electronic Materials, 2020, 49, 1-12.   | 1.0 | 23        |
| 29 | Properties of CuGa <sub>2</sub> Formed Between Liquid Ga and Cu Substrates at Room Temperature. Journal of Electronic Materials, 2020, 49, 128-139.  | 1.0 | 29        |
| 30 | The effect of Bi on the microstructure, electrical, wettability and mechanical properties of Sn-0.7Cu-0.05Ni alloys for high strength soldering. Materials and Design, 2020, 186, 108281.                      | 3.3 | 35        |
| 31 | Evidence of Copper Separation in Lithiated Cu <sub>6</sub> Sn <sub>5</sub> Lithium-Ion Battery Anodes. ACS Applied Energy Materials, 2020, 3, 141-145.   | 2.5 | 14        |
| 32 | Direct observation of the Ni stabilising effect in interfacial (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> intermetallic compounds. Materialia, 2020, 9, 100530.  | 1.3 | 8         |
| 33 | Electrochemically enhanced Cu <sub>6</sub> Sn <sub>5</sub> anodes with tailored crystal orientation and ordered atomic arrangements for lithium-ion battery applications. Acta Materialia, 2020, 201, 341-349. | 3.8 | 5         |
| 34 | On the distribution of the trace elements V and Cr in an Al-Zn-Si alloy coating on a steel substrate. Materialia, 2020, 11, 100669.  | 1.3 | 2         |
| 35 | A rational interpretation of solidification microstructures in the Mg-rich corner of the Mg-Al-La system. Journal of Alloys and Compounds, 2020, 844, 156068.  | 2.8 | 4         |
| 36 | Effect of Na and Cooling Rate on the Activation of Mg-Ni Alloys for Hydrogen Storage. Journal of Nanoscience and Nanotechnology, 2020, 20, 5192-5200.  | 0.9 | 4         |

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|----|---|-----|-----------|
| 37 | Microstructure and growth kinetic study in Sn-Cu transient liquid phase sintering solder paste. Journal of Materials Science: Materials in Electronics, 2020, 31, 11077-11094.  | 1.1 | 7         |
| 38 | Reducing Cracking in Solder Joint Interfacial Cu <sub>6</sub> Sn <sub>5</sub> with Modified Reflow Profile. Transactions of the Japan Institute of Electronics Packaging, 2020, 13, E19-004-1-E19-004-11.                         | 0.3 | 4         |
| 39 | Intermetallic formation mechanisms and properties in room-temperature Ga soldering. Journal of Alloys and Compounds, 2020, 826, 154221.   | 2.8 | 17        |
| 40 | Interfacial Reactions between Ga and Cu-10Ni Substrate at Low Temperature. ACS Applied Materials & Interfaces, 2020, 12, 21045-21056.   | 4.0 | 19        |
| 41 | Atom locations of minor dopants and their roles in the stabilization of Cu <sub>6</sub> Sn <sub>5</sub> intermetallic compound. Journal of Applied Physics, 2020, 127, 153701.  | 0.9 | 7         |
| 42 | The Effects of Trace Sb and Zn Additions on Cu <sub>6</sub> Sn <sub>5</sub> Lithium-Ion Battery Anodes. Journal of Nanoscience and Nanotechnology, 2020, 20, 5182-5191.   | 0.9 | 3         |
| 43 | Atom locations in a Ni doped $\hat{\text{I}}\text{-(Cu,Ni)}_6\text{Sn}_5$ intermetallic compound. Scripta Materialia, 2019, 158, 1-5.   | 2.6 | 22        |
| 44 | Effects of Ni and Cu Antisite Substitution on the Phase Stability of CuGa <sub>2</sub> from Liquid Ga/Cu-Ni Interfacial Reaction. ACS Applied Materials & Interfaces, 2019, 11, 32523-32532.                                      | 4.0 | 10        |
| 45 | The effects of Ni on inhibiting the separation of Cu during the lithiation of Cu <sub>6</sub> Sn <sub>5</sub> lithium-ion battery anodes. Journal of Power Sources, 2019, 440, 227085.  | 4.0 | 12        |
| 46 | Inhibition of cracking in Cu <sub>6</sub> Sn <sub>5</sub> intermetallic compounds at the interface of lead-free solder joint by controlling the reflow cooling conditions. , 2019, , .  |     | 1         |
| 47 | Role of Bi, Sb and In in microstructure formation and properties of Sn-0.7Cu-0.05Ni-X BGA interconnections. , 2019, , .   |     | 2         |
| 48 | Characterisation of lithium-ion battery anodes fabricated via in-situ Cu <sub>6</sub> Sn <sub>5</sub> growth on a copper current collector. Journal of Power Sources, 2019, 415, 50-61.   | 4.0 | 34        |
| 49 | Experimental Determination of the Sn-Cu-Ni Phase Diagram for Pb-Free Solder Applications. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2019, 50, 502-516.                     | 1.0 | 12        |
| 50 | Al <sub>8</sub> Mn <sub>5</sub> Particle Settling and Interactions with Oxide Films in Liquid AZ91 Magnesium Alloys. Jom, 2019, 71, 2235-2244.  | 0.9 | 20        |
| 51 | In situ studies revealing dendrite and eutectic growth during the solidification of Sn-0.7Cu-0.5Ag Pb-free solder alloy. Journal of Alloys and Compounds, 2019, 797, 804-810.   | 2.8 | 16        |
| 52 | Temperature dependency of the growth rate of (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> on Cu-xNi substrates. IOP Conference Series: Materials Science and Engineering, 2019, 701, 012007.  | 0.3 | 3         |
| 53 | Effect of Zn addition on Cu <sub>3</sub> Sn formation in Sn-10Cu alloys. IOP Conference Series: Materials Science and Engineering, 2019, 701, 012009.   | 0.3 | 3         |
| 54 | Influence of cooling conditions on the interfacial Cu <sub>6</sub> Sn <sub>5</sub> intermetallic compound in Sn-37Pb/Cu solder joints during reflow. IOP Conference Series: Materials Science and Engineering, 2019, 701, 012006. | 0.3 | 0         |

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|----|--|-----|-----------|
| 55 | Interfacial reactions between different Sn-based lead-free solder alloys and CuNi substrates. IOP Conference Series: Materials Science and Engineering, 2019, 701, 012008.                       | 0.3 | 1         |
| 56 | Solidification path and microstructure evolution of Mg-3Al-14La alloy: Implications for the Mg-rich corner of the Mg-Al-La phase diagram. Journal of Alloys and Compounds, 2019, 784, 527-534.   | 2.8 | 7         |
| 57 | Relationship between free solder thickness to the solderability of Sn-0.7Cu-0.05Ni solder coating during soldering. Journal of Materials Science: Materials in Electronics, 2019, 30, 3669-3677. | 1.1 | 14        |
| 58 | Characterising the polymorphic phase transformation at a localised point on a Cu <sub>6</sub> Sn <sub>5</sub> grain. Materials Characterization, 2018, 138, 113-119.                             | 1.9 | 37        |
| 59 | Influence of Bi Addition on Wettability and Mechanical Properties of Sn-0.7Cu Solder Alloy. Solid State Phenomena, 2018, 273, 27-33.   | 0.3 | 12        |
| 60 | The effects of precipitation strengthening and solid solution strengthening on strain rate sensitivity of lead-free solders: Review. Microelectronics Reliability, 2018, 84, 170-180.            | 0.9 | 25        |
| 61 | PM-26 Atomic insights into the Ni-stabilized hexagonal $\hat{\imath}$ -(Cu,Ni) <sub>6</sub> Sn <sub>5</sub> intermetallic compound. Microscopy (Oxford, England), 2018, 67, i48-i48.             | 0.7 | 0         |
| 62 | Imaging the Polymorphic Transformation in a Single Cu <sub>6</sub> Sn <sub>5</sub> Grain in a Solder Joint. Materials, 2018, 11, 2229.   | 1.3 | 15        |
| 63 | STEM Analysis of Atom Location in (Cu, Au, Ni) <sub>6</sub> Sn <sub>5</sub> Intermetallic Compounds. Solid State Phenomena, 2018, 273, 95-100.   | 0.3 | 0         |
| 64 | Influence of Ni on the refinement and twinning of primary Cu <sub>6</sub> Sn <sub>5</sub> in Sn-0.7Cu-0.05Ni. Intermetallics, 2018, 102, 34-45.  | 1.8 | 27        |
| 65 | Suppression of Cu <sub>3</sub> Sn in the Sn-10Cu peritectic alloy by the addition of Ni. Journal of Alloys and Compounds, 2018, 766, 1003-1013.  | 2.8 | 19        |
| 66 | Effect of Trace Phosphorus on the Dross Formation in Tin-Copper-Nickel Wave Solder. Solid State Phenomena, 2018, 273, 9-13.  | 0.3 | 2         |
| 67 | Effect of reflow conditions on the intermetallic layer in solder joints. , 2018, , .   |     | 3         |
| 68 | Optimization of Ni and Bi levels in Sn-0.7Cu-xNi-yBi solders for improved interconnection reliability. , 2018, , .   |     | 4         |
| 69 | Synchrotron Radiography of Sn-0.7Cu-0.05Ni Solder Solidification. Solid State Phenomena, 2018, 273, 66-71.   | 0.3 | 2         |
| 70 | Ga-Based Alloys in Microelectronic Interconnects: A Review. Materials, 2018, 11, 1384.   | 1.3 | 77        |
| 71 | In situ imaging of microstructure formation in electronic interconnections. Scientific Reports, 2017, 7, 40010.  | 1.6 | 43        |
| 72 | Cu <sub>6</sub> Sn <sub>5</sub> crystal growth mechanisms during solidification of electronic interconnections. Acta Materialia, 2017, 126, 540-551.   | 3.8 | 81        |

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|----|---|-----|-----------|
| 73 | Reply to "Comments on "Evidence of the hydrogen release mechanism in bulk MgH <sub>2</sub> "™. Scientific Reports, 2017, 7, 43720.  | 1.6 | 0         |
| 74 | Real time X-ray imaging of soldering processes at the SPring-8 synchrotron. , 2017, , .   |     | 0         |
| 75 | Effects of Bi in Sn-Cu based lead-free solder alloys and interconnects. , 2017, , .   |     | 7         |
| 76 | Effect of trace Na additions on the hydriding kinetics of hypo-eutectic Mg-Ni alloys. International Journal of Hydrogen Energy, 2017, 42, 6851-6861.  | 3.8 | 10        |
| 77 | In-situ investigation of the hydrogen release mechanism in bulk Mg <sub>2</sub> NiH <sub>4</sub> . Journal of Power Sources, 2017, 341, 130-138.  | 4.0 | 55        |
| 78 | Anisotropic thermal expansion of Ni <sub>3</sub> Sn <sub>4</sub> , Ag <sub>3</sub> Sn, Cu <sub>3</sub> Sn, Cu <sub>6</sub> Sn <sub>5</sub> and $\beta$ -Sn. Intermetallics, 2017, 91, 50-64.  | 1.8 | 57        |
| 79 | Effect of impurity N <sub>2</sub> concentration on the hydriding kinetics of Na-doped Mg-Ni alloys. International Journal of Hydrogen Energy, 2017, 42, 366-375.  | 3.8 | 2         |
| 80 | Effects of Ni and TiO <sub>2</sub> additions in as-reflowed and annealed Sn <sub>0.7</sub> Cu solders on Cu substrates. Journal of Materials Processing Technology, 2017, 242, 235-245.   | 3.1 | 54        |
| 81 | Effects of Bismuth in Sn-Cu Based Solder Alloys and Interconnects. Transactions of the Japan Institute of Electronics Packaging, 2017, 10, E17-003-1-E17-003-7.   | 0.3 | 1         |
| 82 | Real-Time Observation of AZ91 Solidification by Synchrotron Radiography. Minerals, Metals and Materials Series, 2017, , 597-603.  | 0.3 | 2         |
| 83 | Suppression of Cu <sub>6</sub> Sn <sub>5</sub> in TiO <sub>2</sub> reinforced solder joints after multiple reflow cycles. Materials and Design, 2016, 108, 418-428.   | 3.3 | 57        |
| 84 | Effects of Trace Phosphorus in Sn-Cu-Ni Wave Solder Dross. Materials Science Forum, 2016, 857, 49-52.   | 0.3 | 4         |
| 85 | Effect of trace Na additions on the hydrogen absorption kinetics of Mg <sub>2</sub> Ni. Journal of Materials Research, 2016, 31, 1316-1327.   | 1.2 | 17        |
| 86 | In Situ TEM Observations of Cu <sub>6</sub> Sn <sub>5</sub> Polymorphic Transformations in Reaction Layers Between Sn-0.7Cu Solders and Cu Substrates. Jom, 2016, 68, 2871-2878.  | 0.9 | 23        |
| 87 | Suppression of Cu <sub>3</sub> Sn with Ni in High Cu Containing Sn-Cu Solder Alloys. Materials Science Forum, 2016, 857, 53-57.   | 0.3 | 3         |
| 88 | The influence of ageing on the stabilisation of interfacial (Cu,Ni) <sub>6</sub> (Sn,Zn) <sub>5</sub> and (Cu,Au,Ni) <sub>6</sub> Sn <sub>5</sub> intermetallics in Pb-free Ball Grid Array (BGA) solder joints. Journal of Alloys and Compounds, 2016, 685, 471-482. | 2.8 | 37        |
| 89 | Influence of Bi additions on the distinct $\beta$ -Sn grain structure of Sn-0.7Cu-0.05Ni-xBi (x = 0-4wt%). , 2016, , .  |     | 3         |
| 90 | Effect of Ni on the Formation and Growth of Primary Cu <sub>6</sub> Sn <sub>5</sub> Intermetallics in Sn-0.7wt.%Cu Solder Pastes on Cu Substrates During the Soldering Process. Journal of Electronic Materials, 2016, 45, 154-163.                                   | 1.0 | 51        |

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|-----|---|-----|-----------|
| 91  | Critical properties of Cu <sub>6</sub> Sn <sub>5</sub> in electronic devices: Recent progress and a review. Current Opinion in Solid State and Materials Science, 2016, 20, 55-76.  | 5.6 | 87        |
| 92  | Understanding the Origin of Li <sub>2</sub> MnO <sub>3</sub> Activation in Li-Rich Cathode Materials for Lithium-Ion Batteries. Advanced Functional Materials, 2015, 25, 7488-7496.                                       | 7.8 | 151       |
| 93  | Real-time synchrotron x-ray observations of equiaxed solidification of aluminium alloys and implications for modelling. IOP Conference Series: Materials Science and Engineering, 2015, 84, 012014.                       | 0.3 | 16        |
| 94  | <i>In Situ</i> Soldering Process Technique by Synchrotron X-Ray Imaging. Applied Mechanics and Materials, 2015, 754-755, 508-512.   | 0.2 | 3         |
| 95  | Evidence of the hydrogen release mechanism in bulk MgH <sub>2</sub> . Scientific Reports, 2015, 5, 8450.  | 1.6 | 66        |
| 96  | Electrochemical and Structural Study of Layered P2-Type Na <sub>2/3</sub> Ni <sub>1/3</sub> Mn <sub>2/3</sub> O <sub>2</sub> as Cathode Material for Sodium-Ion Battery. Chemistry - an Asian Journal, 2015, 10, 661-666. | 1.7 | 88        |
| 97  | Development of a microwave sintered TiO <sub>2</sub> reinforced Sn-0.7wt%Cu-0.05wt%Ni alloy. Materials and Design, 2015, 82, 136-147.   | 3.3 | 43        |
| 98  | Metallic tin recovery from wave solder dross. International Journal of Mineral Processing, 2015, 137, 98-105.   | 2.6 | 9         |
| 99  | In-situ synchrotron X-ray diffraction investigation of the hydriding and dehydriding properties of a cast Mg-Ni alloy. Journal of Alloys and Compounds, 2015, 636, 249-256.   | 2.8 | 23        |
| 100 | A real-time synchrotron X-ray study of primary phase nucleation and formation in hypoeutectic Al-Si alloys. Journal of Crystal Growth, 2015, 430, 122-137.  | 0.7 | 45        |
| 101 | Kinetics of the $\beta \rightarrow \beta'$ Transformation of Tin: Role of $\beta$ -Tin Nucleation. Crystal Growth and Design, 2015, 15, 5767-5773.  | 1.4 | 12        |
| 102 | The beneficial effect of Zn additions on the microstructure of SnCu and SnCuNi solder joints to Cu substrates. , 2015, , .  |     | 2         |
| 103 | Rapid Cu <sub>6</sub> Sn <sub>5</sub> growth at liquid Sn/solid Cu interfaces. Scripta Materialia, 2015, 100, 17-20.  | 2.6 | 56        |
| 104 | The influence of Ni and Zn additions on microstructure and phase transformations in Sn-0.7Cu/Cu solder joints. Acta Materialia, 2015, 83, 357-371.  | 3.8 | 119       |
| 105 | Tin pest in lead-free solders? Fundamental studies on the effect of impurities on phase transformation kinetics. , 2014, , .  |     | 8         |
| 106 | Effects of element addition on the $\beta \rightarrow \beta'$ transformation in tin. Philosophical Magazine Letters, 2014, 94, 53-62.   | 0.5 | 12        |
| 107 | Lead-free solders for solar and electric vehicles - Reflections on The Bridgestone World Solar Challenge 2013 in &#x201C;Arrow&#x201D;. , 2014, , .   |     | 0         |
| 108 | Solidification of Sn-0.7Cu-0.15Zn Solder: In Situ Observation. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 918-926.  | 1.1 | 23        |

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|-----|---|-----|-----------|
| 109 | Kinetics of the polymorphic phase transformation of Cu <sub>6</sub> Sn <sub>5</sub> . Acta Materialia, 2014, 69, 135-148.   | 3.8 | 48        |
| 110 | Ni segregation in the interfacial (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> intermetallic layer of Sn-0.7Cu-0.05Ni/Cu ball grid array (BGA) joints. Intermetallics, 2014, 54, 20-27.   | 1.8 | 24        |
| 111 | Comparison of solidification behavior between in situ observation and simulation of Fe-C-Si system. Journal of Alloys and Compounds, 2014, 613, 132-138.  | 2.8 | 8         |
| 112 | Hydrogen desorption of Mg-Mg <sub>2</sub> Ni hypo-eutectic alloys in air, Ar, CO <sub>2</sub> , N <sub>2</sub> and H <sub>2</sub> . Journal of Alloys and Compounds, 2013, 580, S140-S143.  | 2.8 | 7         |
| 113 | Real time synchrotron X-ray observations of solidification in hypoeutectic Al-Si alloys. Materials Characterization, 2013, 85, 134-140.   | 1.9 | 34        |
| 114 | Investigating the mechanical properties, creep and crack pattern of Cu <sub>6</sub> Sn <sub>5</sub> and (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> on diverse crystal planes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 566, 126-133. | 2.6 | 35        |
| 115 | Determination of the minimum Ni concentration to prevent the $\hat{1}$ to $\hat{1}+1$ polymorphic transformation of stoichiometric Cu <sub>6</sub> Sn <sub>5</sub> . Scripta Materialia, 2013, 68, 595-598.   | 2.6 | 26        |
| 116 | Phase stability and thermal expansion behavior of Cu <sub>6</sub> Sn <sub>5</sub> intermetallics doped with Zn, Au and In. Intermetallics, 2013, 43, 85-98.   | 1.8 | 41        |
| 117 | Influence of Composition on the Morphology of Primary Cu <sub>6</sub> Sn <sub>5</sub> in Sn-4Cu Alloys. Journal of Electronic Materials, 2013, 42, 256-262.   | 1.0 | 29        |
| 118 | Creep and Mechanical Properties of Cu <sub>6</sub> Sn <sub>5</sub> and (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> at Elevated Temperatures. Journal of Electronic Materials, 2013, 42, 304-311.   | 1.0 | 28        |
| 119 | XRD study of the kinetics of $\hat{1} \rightarrow \hat{1}+1$ transformations in tin. Philosophical Magazine, 2013, 93, 3627-3647.   | 1.7 | 27        |
| 120 | Real Time Synchrotron X-Ray Imaging for Nucleation and Growth of Cu <sub>6</sub> Sn <sub>5</sub> in Sn-7Cu-0.05Ni High Temperature Lead-Free Solder Alloys. Advanced Materials Research, 2012, 626, 200-204.  | 0.3 | 6         |
| 121 | Effect of Zn, Au, and In on the polymorphic phase transformation in Cu <sub>6</sub> Sn <sub>5</sub> intermetallics. Journal of Materials Research, 2012, 27, 2609-2614.   | 1.2 | 21        |
| 122 | A new phase in stoichiometric Cu <sub>6</sub> Sn <sub>5</sub> . Acta Materialia, 2012, 60, 6581-6591.   | 3.8 | 50        |
| 123 | Anisotropic mechanical properties of Cu <sub>6</sub> Sn <sub>5</sub> and (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> . Materials Letters, 2012, 86, 46-49.   | 1.3 | 67        |
| 124 | Development of high-temperature solders: Review. Microelectronics Reliability, 2012, 52, 1306-1322.   | 0.9 | 248       |
| 125 | Effect of Ni on phase stability and thermal expansion of Cu <sub>6-x</sub> Ni <sub>x</sub> Sn <sub>5</sub> (x=0, 0.5, 1, 1.5 and 2). Intermetallics, 2012, 26, 78-85.   | 1.8 | 65        |
| 126 | Growth orientations and mechanical properties of Cu <sub>6</sub> Sn <sub>5</sub> and (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> on poly-crystalline Cu. Journal of Alloys and Compounds, 2012, 536, 38-46.  | 2.8 | 56        |



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|-----|---|-----|-----------|
| 127 | Keikinzoku/Journal of Japan Institute of Light Metals, 2011, 34, 1-4.   |     |           |
| 128 | The influence of topological structure on bulk glass formation in Al-based metallic glasses. Scripta Materialia, 2011, 65, 755-758.   | 2.6 | 23        |
| 129 | Kinetics of the $\beta$ -phase transformation in Cu <sub>6</sub> Sn <sub>5</sub> . Scripta Materialia, 2011, 65, 922-925.   | 2.6 | 68        |
| 130 | Thermal expansion of Cu <sub>6</sub> Sn <sub>5</sub> and (Cu,Ni) <sub>6</sub> Sn <sub>5</sub> . Journal of Materials Research, 2011, 26, 2660-2664.   | 1.2 | 52        |
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| 132 | In situ investigation of unidirectional solidification in Sn <sub>0.7</sub> Cu and Sn <sub>0.7</sub> Cu <sub>0.06</sub> Ni. Acta Materialia, 2011, 59, 4043-4054.   | 3.8 | 56        |
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