Hiroshi Nishikawa

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/10033020/publications.pdf

Version: 2024-02-01

233	2,995	30	44
papers	citations	h-index	g-index

159585 243625

239	239	239	1328
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Low-pressure Cu-Cu bonding using in-situ surface-modified microscale Cu particles for power device packaging. Scripta Materialia, 2016, 120, 80-84.	5.2	112
2	Correlation between microstructure and mechanical properties of Snâ€"Biâ€"X solders. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 831-839.	5.6	96
3	Influence of Joining Conditions on Bonding Strength of Joints: Efficacy of Low-Temperature Bonding Using Cu Nanoparticle Paste. Journal of Electronic Materials, 2013, 42, 1260-1267.	2.2	88
4	Interfacial reaction between Sn-0.7Cu (-Ni) solder and Cu substrate. Journal of Electronic Materials, 2006, 35, 1127-1132.	2.2	82
5	Thermally stable Cu 3 Sn/Cu composite joint for high-temperature power device. Scripta Materialia, 2016, 110, 101-104.	5.2	77
6	Formation and growth of intermetallic compound layers at the interface during laser soldering using Snâ€"Ag Cu solder on a Cu Pad. Journal of Materials Processing Technology, 2015, 215, 6-11.	6.3	70
7	Microstructural and mechanical properties of Snâ€"Agâ€"Cu lead-free solders with minor addition of Ni and/or Co. Journal of Materials Science, 2008, 43, 3643-3648.	3.7	61
8	Improvement of High-Temperature Performance of Zn-Sn Solder Joint. Journal of Electronic Materials, 2010, 39, 1241-1247.	2.2	61
9	Low temperature solid-state bonding using Sn-coated Cu particles for high temperature die attach. Journal of Alloys and Compounds, 2017, 695, 2165-2172.	5.5	60
10	Effects of Joining Conditions on Joint Strength of Cu/Cu Joint Using Cu Nanoparticle Paste. The Open Surface Science Journal, 2010, 3, 60-64.	2.0	58
11	Improvement in the mechanical properties of eutectic Sn58Bi alloy by 0.5 and 1â€¯wt% Zn addition before and after thermal aging. Journal of Alloys and Compounds, 2018, 765, 1243-1252.	5.5	56
12	Effects of cyanide and dissolved oxygen concentration on biological Au recovery. Journal of Biotechnology, 2006, 124, 545-551.	3.8	53
13	Silver nanoporous sheet for solid-state die attach in power device packaging. Scripta Materialia, 2014, 92, 43-46.	5.2	50
14	Electrical Characteristics of a New Class of Conductive Adhesive. Materials Transactions, 2005, 46, 2276-2281.	1.2	48
15	Effects of Ti addition on the microstructure, mechanical properties and electrical resistivity of eutectic Sn58Bi alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 744, 560-569.	5.6	48
16	A treatment of carbonaceous wastes using thermal plasma with steam. Vacuum, 2004, 73, 589-593.	3.5	47
17	Microscale Ag particle paste for sintered joints in high-power devices. Materials Letters, 2015, 161, 231-233.	2.6	47
18	Sn-3.0Ag-0.5Cu/Sn-58Bi composite solder joint assembled using a low-temperature reflow process for PoP technology. Materials and Design, 2019, 183, 108144.	7.0	47

#	Article	IF	Citations
19	Effects of In and Ni Addition on Microstructure of Sn-58Bi Solder Joint. Journal of Electronic Materials, 2014, 43, 4158-4170.	2.2	46
20	Interaction behavior between the additives and Sn in Snâ€“3.0Agâ€“0.5Cu-based solder alloys and the relevant joint solderability. Journal of Alloys and Compounds, 2009, 472, 530-534.	5.5	45
21	Morphology and growth pattern transition of intermetallic compounds between Cu and Sn-3.5Ag containing a small amount of additives. Journal of Electronic Materials, 2006, 35, 2081-2087.	2.2	43
22	Mechanical properties versus temperature relation of individual phases in Snâ€“3.0Agâ€“0.5Cu lead-free solder alloy. Microelectronics Reliability, 2009, 49, 296-302.	1.7	42
23	Impact strength of Snâ€“3.0Agâ€“0.5Cu solder bumps during isothermal aging. Microelectronics Reliability, 2014, 54, 1583-1591.	1.7	42
24	Additive Effect of Kirkendall Void Formation in Sn-3.5Ag Solder Joints on Common Substrates. Journal of Electronic Materials, 2008, 37, 45-50.	2.2	39
25	Effects of Silver Coating Covered with Copper Filler on Electrical Resistivity of Electrically Conductive Adhesives. Materials Transactions, 2010, 51, 1785-1789.	1.2	39
26	Transient liquid phase bonding of Snâ€“Bi solder with added Cu particles. Journal of Materials Science: Materials in Electronics, 2016, 27, 4232-4244.	2.2	38
27	Effects of bonding temperature on microstructure, fracture behavior and joint strength of Ag nanoporous bonding for high temperature die attach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 645, 264-272.	5.6	36
28	Dealloying of Cu-Zr-Ti Bulk Metallic Glass in Hydrofluoric Acid Solution. Materials Transactions, 2009, 50, 1255-1258.	1.2	35
29	The newly developed Snâ€“Biâ€“Zn alloy with a low melting point, improved ductility, and high ultimate tensile strength. Materialia, 2019, 6, 100300.	2.7	35
30	Thermomigration induced microstructure and property changes in Sn-58Bi solders. Materials and Design, 2019, 166, 107619.	7.0	35
31	The shear strength of transient liquid phase bonded Snâ€“Bi solder joint with added Cu particles. Advanced Powder Technology, 2016, 27, 1000-1005.	4.1	34
32	Improvements in mechanical properties of Snâ€“Bi alloys with addition of Zn and In. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 813, 141131.	5.6	31
33	Microstructures analysis and quantitative strengthening evaluation of powder metallurgy Tiâ€“Fe binary extruded alloys with (Î±+Î²)-dual-phase. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140708.	5.6	27
34	Interfacial reaction, ball shear strength and fracture surface analysis of lead-free solder joints prepared using cobalt nanoparticle doped flux. Journal of Alloys and Compounds, 2017, 695, 981-990.	5.5	26
35	Characterization of Coâ€“Sn intermetallic compounds in Snâ€“3.0Agâ€“0.5Cuâ€“0.5Co lead-free solder alloy. Materials Letters, 2008, 62, 2257-2259.	2.6	25
36	Fabrication of nanoporous silver and microstructural change during dealloying of melt-spun Alâ€“20Âat.%Ag in hydrochloric acid. Journal of Materials Science, 2013, 48, 5645-5652.	3.7	24

#	Article	IF	Citations
37	Interfacial Reaction between Sn–Ag–Co Solder and Metals. Materials Transactions, 2005, 46, 2394-2399.	1.2	23
38	Intermetallic compound growth between Sn-Cu-Cr lead-free solder and Cu substrate. Microelectronics Reliability, 2019, 99, 62-73.	1.7	23
39	Investigation of FeCoNiCu properties: Thermal stability, corrosion behavior, wettability with Sn-3.0Ag-0.5Cu and interlayer formation of multi-element intermetallic compound. Applied Surface Science, 2021, 546, 148931.	6.1	23
40	Morphology and Pull Strength of Sn-Ag(-Co) Solder Joint with Copper Pad. Journal of Electronic Materials, 2007, 36, 1137-1143.	2.2	22
41	Intermetallic compound formation and mechanical property of Sn-Cu-xCr/Cu lead-free solder joint. Journal of Alloys and Compounds, 2017, 728, 992-1001.	5.5	22
42	Effect of Substrates on Fracture Mechanism and Process Optimization of Oxidationâ€"Reduction Bonding with Copper Microparticles. Journal of Electronic Materials, 2019, 48, 2263-2271.	2.2	22
43	Effect of Solvent Evaporation and Shrink on Conductivity of Conductive Adhesive. Materials Transactions, 2005, 46, 704-708.	1.2	21
44	Effect of DC steam plasma on gasifying carbonized waste. Vacuum, 2006, 80, 1311-1315.	3.5	21
45	Effects of Trace Elements in Copper Fillers on the Electrical Properties of Conductive Adhesives. Journal of Electronic Materials, 2010, 39, 115-123.	2.2	21
46	Characterization of moderately halotolerant selenate- and tellurite-reducing bacteria isolated from brackish areas in Osaka. Bioscience, Biotechnology and Biochemistry, 2018, 82, 173-181.	1.3	19
47	Fabrication of Nanoporous Cu Sheet and Application to Bonding for High-Temperature Applications. Journal of Electronic Materials, 2020, 49, 2151-2158.	2.2	19
48	GHTA Welding Experiments under Simulated Space Environment in Flying Laboratory.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2000, 18, 228-235.	0.5	18
49	Estimation Method for Liquidus Temperature of Lead-Free Solder Using Differential Scanning Calorimetry Profiles. Journal of Electronic Materials, 2009, 38, 2610-2616.	2.2	18
50	Pressureless sintering bonding using hybrid microscale Cu particle paste on ENIG, pure Cu and pre-oxidized Cu substrate by an oxidationâ€"reduction process. Journal of Materials Science: Materials in Electronics, 2017, 28, 5554-5561.	2.2	18
51	Wetting characteristics of Snâ€"Agâ€"Cu solder on Pd-based metallic glass. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 148, 124-127.	3.5	17
52	In-situ observation of fluxless soldering of Sn-3.0Ag-0.5Cu/Cu under a formic acid atmosphere. Materials Chemistry and Physics, 2020, 239, 122309.	4.0	17
53	Low-pressure micro-silver sintering with the addition of indium for high-temperature power chips attachment. Journal of Materials Research and Technology, 2021, 15, 4541-4553.	5.8	17
54	Novel transient liquid phase bonding method using In-coated Cu sheet for high-temperature die attach. Materials Research Bulletin, 2022, 149, 111713.	5.2	17

#	Article	IF	Citations
55	Solderability of Bulk Metallic Glasses Using Lead-Free Solders. Materials Transactions, 2009, 50, 1326-1329.	1.2	16
56	Properties of Phenolic-Based Ag-Filled Conductive Adhesive Affected by Different Coupling Agents. Journal of Adhesion, 2013, 89, 847-858.	3.0	16
57	Pressureless Bonding by Micro-Sized Silver Particle Paste for High-Temperature Electronic Packaging. Materials Transactions, 2016, 57, 1209-1214.	1.2	16
58	Laser-assisted selective fusing of thermal sprayed Ni-based self-fluxing alloys by using high-power diode lasers. Optics and Laser Technology, 2018, 100, 317-324.	4.6	16
59	Improved mechanical properties induced by In and In & Zn double additions to eutectic Sn58Bi alloy. Journal of Materials Science: Materials in Electronics, 2019, 30, 7423-7434.	2.2	16
60	Intermetallics Evolution in Sn-3.5Ag Based Lead-Free Solder Matrix on an OSP Cu Finish. Journal of Electronic Materials, 2007, 36, 1630-1634.	2.2	15
61	Copper-Filled Electrically Conductive Adhesives with Enhanced Shear Strength. Journal of Materials Engineering and Performance, 2014, 23, 3371-3378.	2.5	15
62	Microstructure and mechanical properties of Snâ€"1.0Agâ€"0.5Cu solder with minor Zn additions. Journal of Materials Science: Materials in Electronics, 2019, 30, 11914-11922.	2.2	15
63	Novel polarity effect on intermetallic compound thickness changes during electromigration in Cu/Sn-3.0Ag-0.5Cu/Cu solder joints. Journal of Applied Physics, 2019, 126, .	2.5	15
64	Interfacial transformation of preoxidized Cu microparticles in a formic-acid atmosphere for pressureless Cuâ€"Cu bonding. Journal of Materials Science: Materials in Electronics, 2020, 31, 14635-14644.	2.2	15
65	Electrodeposition of nanocrystalline Cu for Cu-Cu direct bonding. Journal of the Taiwan Institute of Chemical Engineers, 2022, 132, 104127.	5.3	15
66	High-Temperature Resistant Intermetallic Compound Joints for Si Chips and Cu Substrates. Journal of Electronic Materials, 2010, 39, 2274-2280.	2.2	14
67	Surfactant-Free Synthesis of Copper Particles for Electrically Conductive Adhesive Applications. Journal of Electronic Materials, 2012, 41, 2527-2532.	2.2	14
68	Effect of Zn Addition on Interfacial Reactions Between Sn-Bi Solder and Cu Substrate. Materials Transactions, 2016, 57, 1272-1276.	1.2	14
69	Wettability, interfacial reactions, and impact strength of Snâ€"3.0Agâ€"0.5Cu solder/ENIG substrate used for fluxless soldering under formic acid atmosphere. Journal of Materials Science, 2020, 55, 3107-3117.	3.7	14
70	Effect of different copper fillers on the electrical resistivity of conductive adhesives. Journal of Materials Science: Materials in Electronics, 2011, 22, 538-544.	2.2	13
71	Microstructural characterization of Ni-based self-fluxing alloy after selective surface-engineering using diode laser. Applied Surface Science, 2018, 442, 726-735.	6.1	13
72	Preferred orientation of Bi and effect of Sn-Bi microstructure on mechanical and thermomechanical properties in eutectic Sn-Bi alloy. Materialia, 2019, 6, 100309.	2.7	13

#	Article	IF	Citations
73	A Computational Thermodynamics-Assisted Development of Sn-Bi-In-Ga Quaternary Alloys as Low-Temperature Pb-Free Solders. Materials, 2019, 12, 631.	2.9	13
74	Interface design and the strengthening-ductility behavior of tetra-needle-like ZnO whisker reinforced Sn1.0Ag0.5Cu composite solders prepared with ultrasonic agitation. Materials and Design, 2021, 210, 110038.	7.0	13
75	Transient Liquid Phase Bonding of Magnesium Alloy AZ31 Using Cu Coatings and Cu Coatings with Sn Interlayers. Metals, 2018, 8, 60.	2.3	12
76	Suppressed Growth of (Fe, Cr, Co, Ni, Cu)Sn2 Intermetallic Compound at Interface between Sn-3.0Ag-0.5Cu Solder and FeCoNiCrCu0.5 Substrate during Solid-state Aging. Scientific Reports, 2019, 9, 10210.	3.3	12
77	Isolation and Characterization of Facultative-Anaerobic Antimonate-Reducing Bacteria. Microorganisms, 2020, 8, 1435.	3.6	12
78	The influence of porosity and pore shape on the thermal conductivity of silver sintered joint for die attach. Materials Today Communications, 2021, 29, 102772.	1.9	12
79	Three-dimensional interface and property of SnPb solder joint under extreme thermal shocking. Science and Technology of Welding and Joining, 2022, 27, 186-196.	3.1	12
80	Effect of Ni or Co Addition to Sn-Ag Solder on Microstructure and Joint Strength at Interface. Materials Transactions, 2008, 49, 1518-1523.	1.2	11
81	Brazing Graphite to Aluminum Nitride for Thermal Dissipation Purpose. Advanced Engineering Materials, 2017, 19, 1600876.	3.5	11
82	Microstructure and mechanical properties of the Inâ€“48Snâ€“xAg low-temperature alloy. Journal of Materials Science, 2020, 55, 10824-10832.	3.7	11
83	Effect of Cu addition on the microstructure and mechanical properties of Inâ€“Sn-based low-temperature alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 804, 140785.	5.6	11
84	Enhancement of Au Dissolution by Microorganisms Using an Accelerating Cathode Reaction. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2009, 40, 39-44.	2.1	10
85	Electrical reliability of different alloying content on copper alloy fillers in electrically conductive adhesives. Journal of Materials Science: Materials in Electronics, 2011, 22, 735-740.	2.2	10
86	Ball shear strength and fracture modes of lead-free solder joints prepared using nickel nanoparticle doped flux. Electronic Materials Letters, 2015, 11, 452-456.	2.2	10
87	Effect of temperature and substrate on shear strength of the joints formed by sintering of micro-sized Ag particle paste without pressure. Journal of Materials Science: Materials in Electronics, 2017, 28, 7292-7301.	2.2	10
88	Effect of FeCoNiCrCu0.5 High-entropy-alloy Substrate on Sn Grain Size in Sn-3.0Ag-0.5Cu Solder. Scientific Reports, 2019, 9, 3658.	3.3	10
89	Novel interface regulation of Sn1.0Ag0.5Cu composite solders reinforced with modified ZrO2: Microstructure and mechanical properties. Journal of Materials Science and Technology, 2022, 125, 157-170.	10.7	10
90	Effect of Iron Plating Conditions on Reaction in Molten Lead-Free Solder. Materials Transactions, 2004, 45, 741-746.	1.2	9

#	Article	IF	Citations
91	Influence of post-curing and coupling agents on polyurethane based copper filled electrically conductive adhesives. Journal of Materials Science: Materials in Electronics, 2013, 24, 2077-2081.	2.2	9
92	Investigation of Formation and Growth Behavior of Cu/Al Intermetallic Compounds during Isothermal Aging. Transactions of the Japan Institute of Electronics Packaging, 2014, 7, 1-7.	0.4	9
93	Improvement of Joint Reliability of Sn-Ag-Cu Solder Bumps on Cu by a Laser Process. Materials Transactions, 2015, 56, 1025-1029.	1.2	9
94	Thermal stability of low-temperature sintered joint using Sn-coated Cu particles during isothermal aging at 250â€‰Â°C. Journal of Materials Science: Materials in Electronics, 2017, 28, 12606-12616.	2.2	9
95	Influence of ENIG defects on shear strength of pressureless Ag nanoparticle sintered joint under isothermal aging. Microelectronics Reliability, 2017, 76-77, 420-425.	1.7	9
96	Low temperature bonding with high shear strength using micro-sized Ag particle paste for power electronic packaging. Journal of Materials Science: Materials in Electronics, 2018, 29, 3800-3807.	2.2	9
97	Heat input properties of hollow cathode arc as a welding heat source. Journal Physics D: Applied Physics, 2005, 38, 3451-3456.	2.8	8
98	Electrical property of conductive adhesives using silver-coated copper filler. , 2008, , .		8
99	Thin film joining for high-temperature performance of power semi-conductor devices. Microelectronics Reliability, 2010, 50, 220-227.	1.7	8
100	Low-Temperature Auâ€“Au Bonding Using Nanoporous Auâ€“Ag Sheets. Japanese Journal of Applied Physics, 2013, 52, 050204.	1.5	8
101	Reliability of Ag Nanoporous Bonding Joint for High Temperature Die Attach under Temperature Cycling. Materials Transactions, 2016, 57, 1192-1196.	1.2	8
102	Corrosion and Leaching Behaviours of Sn-0.7Cu-0.05Ni Lead-Free Solder in 3.5â€‰wt.% NaCl Solution. International Journal of Corrosion, 2018, 2018, 1-11.	1.1	8
103	Effect of copper over-pad metallization on reliability of aluminum wire bonds. Microelectronics Reliability, 2019, 99, 168-176.	1.7	8
104	Fabrication of NiO/ZrO2 nanocomposites using ball milling-pyrolysis method. Vacuum, 2021, 191, 110370.	3.5	8
105	Estimation of the Thermal Fatigue Resistance and Creep Properties of the Co/Ni-Bearing SAC305 Lead-Free Solders by the Strain Rate Change Tensile Test. Materials Transactions, 2008, 49, 1503-1507.	1.2	7
106	Electrical Properties of Pre-Alloyed Cu-P Containing Electrically Conductive Adhesive. Journal of Adhesion, 2010, 86, 807-815.	3.0	7
107	Effect of porous copper on the properties of electrically conductive adhesives. Journal of Materials Science: Materials in Electronics, 2015, 26, 7771-7779.	2.2	7
108	Improvement in Thermomechanical Reliability of Low Cost Sn-Based BGA Interconnects by Cr Addition. Metals, 2018, 8, 586.	2.3	7

#	Article	IF	Citations
109	Microstructure Evolution and Shear Strength of Tin-Indium-xCu/Cu Joints. Metals, 2022, 12, 33.	2.3	7
110	Fluxless joining of aluminium alloy to steel by laser irradiation method. Welding International, 2009, 23, 316-322.	0.7	6
111	Explanation of impact load curve in ball impact test in relation to thermal aging. Microelectronics Reliability, 2013, 53, 2005-2011.	1.7	6
112	Effect of substrate metallization on the impact strength of Sn-Ag-Cu solder bumps fabricated in a formic acid atmosphere. , 2017, , .		6
113	Biosynthesis of bismuth selenide nanoparticles using chalcogen-metabolizing bacteria. Applied Microbiology and Biotechnology, 2019, 103, 8853-8861.	3.6	6
114	Electromigration behavior of silver thin film fabricated by electron-beam physical vapor deposition. Journal of Materials Science, 2021, 56, 9769-9779.	3.7	6
115	Microstructure of Interface between Sn-Cu Solder with Ni and Cu Plate. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2006, 70, 427-433.	0.4	5
116	Improved Joint Strength with Sintering Bonding Using Microscale Cu Particles by an Oxidation-Reduction Process. , 2016, , .		5
117	Effect of magnetic flux density on Sn crystallographic orientation in a solder joint system. Journal of Materials Science: Materials in Electronics, 2016, 27, 3710-3714.	2.2	5
118	Transmission Electron Microscopy Investigation on the Oxidation Behavior of Electroless Ni/Immersion Au Surface Finish at 250 Â°C. Journal of Nanoscience and Nanotechnology, 2017, 17, 8522-8527.	0.9	5
119	High Reliability Sintered Silver-Indium Bonding with Anti-Oxidation Property for High Temperature Applications. , 2018, , .		5
120	A Cu-Cu Bonding Method Using Preoxidized Cu Microparticles under Formic Acid Atmosphere. , 2019, , .		5
121	Effect of surface potential distribution on corrosion behavior of Cu/Al interface in Cu wire bonding applications. Microelectronics Reliability, 2020, 113, 113942.	1.7	5
122	Fundamental Characteristics of GHTA under Low Pressure.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2000, 18, 272-279.	0.5	5
123	A Review of Ag Paste Bonding for Automotive Power Device Packaging. Journal of the Microelectronics and Packaging Society, 2015, 22, 15-23.	0.1	5
124	Surface modification of Cu electroplated layers for Cuâ€“Sn transient liquid phase bonding. Materials Chemistry and Physics, 2022, 277, 125621.	4.0	5
125	Effect of Low Bi Content on Reliability of Sn-Bi Alloy Joints Before and After Thermal Aging. Jom, 2022, 74, 1751-1759.	1.9	5
126	Characteristics of Hollow Cathode Arc Plasma as a Heat Source. Investigation into Melting Mechanism Focusing on Electron Density and Temperature.. IEEJ Transactions on Fundamentals and Materials, 2003, 123, 35-42.	0.2	4

#	Article	IF	Citations
127	Effect of Bonding Temperature on the Joining of Ti-6Al-4V Alloy Using Cu Coatings and Sn Interlayers. Journal of Materials Engineering and Performance, 2017, 26, 407-417.	2.5	4
128	Effect of Thermal Aging on the Impact Strength of Soldered Bumps under Formic Acid Atmosphere. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2017, 35, 127s-131s.	0.5	4
129	Microstructure and mechanical properties of indiumâ€“bismuth alloys for low melting-temperature solder. Journal of Materials Science: Materials in Electronics, 2018, 29, 16460-16468.	2.2	4
130	Fabrication and characterization of nanoporous copper through chemical dealloying of cold-rolled and annealed Mnâ€“Cu alloy. Journal of Porous Materials, 2021, 28, 1823-1836.	2.6	4
131	Measurement of erosion of stainless steel by molten lead-free solder using micro-focus X-ray CT system. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2009, 27, 214s-218s.	0.5	4
132	Adhesion Mechanism between Mold Resin and Sputtered Stainless Steel Ground Films for Electromagnetic Wave Shield Packages. Materials Transactions, 2022, 63, 766-775.	1.2	4
133	High-strength Snâ€“Bi-based low-temperature solders with high toughness designed via high-throughput thermodynamic modelling¹. Science and Technology of Welding and Joining, 2022, 27, 572-578.	3.1	4
134	Nano-Scale Mechanical Responses of Sn-Ag Based Lead-free Solders. , 2007, , .		3
135	Coarsening of Bi phase and intermetallic layer thickness in Sn-58Bi-X (X=In and Ni) solder joint. , 2013, , .		3
136	Low-temperature gold-gold bonding using selective formation of nanoporous powders for bump interconnects. , 2014, , .		3
137	Fabrication and Performance Evaluation of Carbon-based Stretchable RFID Tags on Textile Substrates. , 2018, , .		3
138	Interfacial reaction behavior and mechanical properties of pure aluminum and magnesium alloy dissimilar materials fabricated by hot press and heat treatment. Materials Characterization, 2019, 157, 109879.	4.4	3
139	Microstructure and Property Changes in Cu/Sn-58Bi/Cu Solder Joints During Thermomigration. , 2019, , .		3
140	Surface Modification of Tetra-needle like ZnO (T-ZnO) and Characterization of Interface Between Sn1.0Ag0.5Cu and NiO Decorated T-ZnO. , 2021, , .		3
141	Fundamental Characteristics of Hollow Cathode Arc Welding.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2002, 20, 47-52.	0.5	3
142	Development of Lead-free Solder and Emerging Trend of New Joining Material. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2012, 81, 45-57.	0.1	3
143	Effect of Zn Addition on Interfacial Reactions and Mechanical Properties Between Eutectic Sn58Bi Solder and ENIG Substrate. Journal of Nanoscience and Nanotechnology, 2020, 20, 106-112.	0.9	3
144	Effect of Aging Conditions on Impact Strength of Sn-3.5 Based Solder Joint. , 2007, , .		2

#	Article	IF	Citations
145	Evaluation of Absorbed Impact Energy of Sn-3.0Ag-0.5Cu (-xCo) Solder Joints with Co-P Plating a Using Ball Impact Test. Transactions of the Japan Institute of Electronics Packaging, 2010, 3, 18-23.	0.4	2
146	Solderability of metallic glass. Welding International, 2011, 25, 505-508.	0.7	2
147	Relationship between bonding conditions and strength for joints using a Au nanoporous sheet. , 2014, , .		2
148	Effect of joining conditions on the joint strength of Ag nanoporous bonding. , 2014, , .		2
149	Improved low temperature gold-gold bonding using nanoporous powder bump using vacuum ultraviolet irradiation pre-treatment. , 2015, , .		2
150	Low temperature bonding using microscale Cu particles coated with thin Sn layers at 200 Â°C. , 2016, , .		2
151	Inkjet-printed antenna-electronics interconnections in passive UHF RFID tags. , 2017, , .		2
152	Effect of Surface Potential Distribution on Corrosion Behavior of SnAgCu Solder/Cu Substrate Interface. Solid State Phenomena, 0, 273, 77-82.	0.3	2
153	Shear properties of In-Bi alloy joints with Cu substrates during thermal aging. Microelectronics Reliability, 2018, 88-90, 795-800.	1.7	2
154	Development of Low-Temperature, Pressureless Copper-to-Copper Bonding by Microfluidic Electroless Interconnection Process. , 2018, , .		2
155	Effects of In and Zn Double Addition on Eutectic Sn-58Bi Alloy. , 2019, , .		2
156	Mechanical and microstructural enhancements of Ag microparticle-sintered joint by ultrasonic vibration. Journal of Materials Science: Materials in Electronics, 2020, 31, 21711-21722.	2.2	2
157	Observation of void formation patterns in SnAg films undergoing electromigration and simulation using random walk methods. Scientific Reports, 2021, 11, 8668.	3.3	2
158	Large-area and low-cost Cuâ€“Cu bonding with cold spray deposition, oxidation, and reduction processes under low-temperature conditions. Journal of Materials Science: Materials in Electronics, 2021, 32, 20461-20473.	2.2	2
159	Enhancement of solderability of Cu60Zr30Ti10 bulk metallic glass by dealloying in hydrofluoric acid solution. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 147s-150s.	0.5	2
160	Microstructure of Transient Liquid Phase Sintering Joint by Sn-Coated Cu Particles for High Temperature Packaging. International Symposium on Microelectronics, 2015, 2015, 000449-000452.	0.0	2
161	Effects of minor alloying additive on the shear strength of Sn-58Bi solder joint. International Symposium on Microelectronics, 2013, 2013, 000100-000103.	0.0	2
162	Effect of Various Parameters on the Shear Strength of Solid-State Nanoporous Cu Bonding in Cuâ€“Cu Disks for Power Device Packaging. Journal of Electronic Materials, 2022, 51, 3851-3862.	2.2	2

#	Article	IF	Citations
163	Robust shear strength of Cuâ€“Au joint on Au surface-finished Cu disks by solid-state nanoporous Cu bonding. Microelectronic Engineering, 2022, 260, 111807.	2.4	2
164	Application of Nd:YAG Laser to Aluminum Alloy Sorting. Materials Transactions, 2005, 46, 2641-2646.	1.2	1
165	Effective Electrode Work Functions in Helium Gas Tungsten Arc During Operation. Plasma Processes and Polymers, 2007, 4, S995-S998.	3.0	1
166	Micromechanical Responses of Sn-3.5Ag-xCo Lead-Free Solders by Nanoindentation. Materials Science Forum, 2008, 580-582, 209-212.	0.3	1
167	Using nano-porous Au-Ag sheets as a joint layer for low-temperature Au-Au bonding. , 2012, , .		1
168	Microstructure of lead-free solder bumps using laser reflow soldering. IOP Conference Series: Materials Science and Engineering, 2014, 61, 012038.	0.6	1
169	Thermal stability of electroless nickel/immersion gold surface finish for direct bond copper. , 2014, , .		1
170	Shear strength of Cu-to-Cu joints using mixed Ag particle paste. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2015, 33, 75s-78s.	0.5	1
171	Effect of isothermal aging on microstructure and joint strength of Ag nanoporous bonding for high temperature die attach. , 2015, , .		1
172	Reliability of copper wire bonds on a novel over-pad metallization. Japanese Journal of Applied Physics, 2015, 54, 05EC01.	1.5	1
173	Experimental study on antenna â€” IC interconnections for electro-textile RFID tags. , 2016, , .		1
174	Interfacial Reaction between Sn-Ag-Cu-Mg Solder and ENIG Substrate. Key Engineering Materials, 0, 701, 216-219.	0.4	1
175	Investigation of connecting techniques for high temperature application on power modules. , 2016, , .		1
176	Effect of indium on deformation of binary In-Bi alloys. , 2017, , .		1
177	The evaluation of mechanical properties of Sn58BiXTi solder by tensile test. , 2017, , .		1
178	Intermetallic compound formation and mechanical property of SN-CU-XCR/CU lead-free solder joint. , 2018, , .		1
179	Interfacial reaction of Sn-Ag-Cu-Ni solder/Cu joints by laser process. , 2018, , .		1
180	Textile-Integrated Stretchable Structures for Wearable Wireless Platforms. , 2018, , .		1

#	Article	IF	Citations
181	Low Temperature Flip Chip Bonding Using Squeegee-Embedded Au Nanoporous Bump Activated by VUV/O3 Treatment. Journal of Electronic Materials, 2018, 47, 5952-5958.	2.2	1
182	Improvement of Mechanical Properties of Zn-Added Sn58Bi Alloy by Zn Segregation on the Sn-Bi Phase Boundaries During Thermal Aging. , 2018, , .		1
183	Effects of In Content on the Microstructure and Mechanical Properties of Inâ€“Bi Alloys During Isothermal Aging. Metals, 2019, 9, 548.	2.3	1
184	Sintered Micro-Silver Paste Doped with Indium for Die Attachment Applications of Power ICs. , 2020, , .		1
185	The effect of solid-state nanoporous Cu bonding for power device. , 2021, , .		1
186	The reliability of ENIG joint bonded by In-coated Cu sheet. , 2021, , .		1
187	Interfacial Reaction between Sn-3.0Ag-0.5Cu Solder/Co-P Plating and Ni-Co-P Plating. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2011, 29, 142s-146s.	0.5	1
188	Model Analysis of Circumferential GTA Welding of Pipes.. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 1998, 16, 471-478.	0.5	1
189	Effect of Aluminum Clad Cu Wire Bonds on Power Cycle Lifetime for High Current Density Power Module Packages. Journal of Smart Processing, 2022, 11, 71-77.	0.1	1
190	Contact Angle Analysis and Intermetallic Compounds Formation Between Solders and Substrates under Formic acid Atmosphere. Journal of Advanced Joining Processes, 2022, , 100118.	2.7	1
191	Effect of isothermal aging on properties of In-48Sn and In-Sn-8Cu alloys. , 2022, , .		1
192	Ag die-attach paste modified by WC additive for high-temperature stability enhancement. , 2022, , .		1
193	The Contrasting and Statistics of Spreading Area Data in Soldering Wettability. , 2006, , .		0
194	Effects of Isothermal Aging on the Microstructure and Tensile Behavior of Sn-3.0Ag-0.5Cu-0.2Co Solder. Materials Science Forum, 2008, 580-582, 239-242.	0.3	0
195	Temperature dependence of mechanical properties of individual phases in Sn-3.0Ag-0.5Cu lead-free solder alloy. , 2008, , .		0
196	Effects of Joining Conditions on Cu/Cu Joint Using Chestnut-burr-like Micro-sized Ag Particles. Journal of Smart Processing, 2014, 3, 240-245.	0.1	0
197	Effect of isothermal aging on the growth behavior of Cu/Al intermetallic compounds. , 2014, , .		0
198	Microstructural change of Ag nanoporous bonding joint and interdiffusion of Cu / Ag during thermal aging. , 2014, , .		0

#	Article	IF	Citations
199	Bonding process without pressure using a chestnut-burr-like particle paste for power electronics. , 2016, , .		0
200	Impact strength of Sn-Ag-Cu/Cu solder bumps formed by an induction heating method. , 2017, , .		0
201	Effect of bonding conditions on shear strength of joints at 200 Â°C using Sn-coated Cu particle. , 2017, , .		0
202	Failure analysis on Mobile Phone Batteries and Accessories. , 2018, , .		0
203	Control for Au-Ag Nanoporous Structure by Electrodeposition and Dealloying. , 2018, , .		0
204	Mechanical properties of Sn-Bi-In-Ga low melting temperature solder alloys. , 2018, , .		0
205	Recent progress in electronic interconnection. Microelectronics Reliability, 2019, 102, 113344.	1.7	0
206	Soldering Process. , 2019, , 191-201.		0
207	Electrode Formation Using Electrodeposition and Direct Bonding for 3D Integration. , 2019, , 589-604.		0
208	Bonding strength of Cu-to-Cu joints using Cu cold spray deposition by an oxidation and reduction process for power device package. , 2019, , .		0
209	Effect of bonding temperature on shear strength of joints using micro-sized Ag particles for high temperature packaging technology. , 2019, , .		0
210	The study of Sn-45Bi-2.6Zn alloy before and after thermal aging. , 2019, , .		0
211	Tin Whisker Growth Mechanism on Tin Plating of MLCCs Mounted with Sn-3.5Ag-8In-0.5Bi Solder in 30Â°C60%RH. , 2019, , .		0
212	Effect of 4.0 mass % Cu addition on microstructure and mechanical properties of In-48Sn alloy. , 2021, , .		0
213	The voids growth path on Sn-Ag thin film under high current density. , 2021, , .		0
214	Wettability Improvement of Solder in Fluxless Soldering under Formic Acid Atmosphere. , 2021, , .		0
215	Solderability of Metallic Glass. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2009, 78, 115-118.	0.1	0
216	Design and evaluation of metal powder with nano-particles for electrical conductive paste. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2009, 17, 51-54.	0.0	0

#	Article	IF	Citations
217	Reduction of Damage of Soldering Iron Tip by Addition of Co and Ni to Sn-Ag-Cu Lead-free Solder. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2009, 27, 209s-213s.	0.5	0
218	Corductive Filler for Technical Advantages of Conductive Adhesives. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2010, 79, 550-555.	0.1	0
219	A Review of Welding in Japan -Micro Joining-. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2011, 80, 458-460.	0.1	0
220	A Preface. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2015, 84, 178-178.	0.1	0
221	A Preface. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2016, 85, 331-331.	0.1	0
222	A Preface. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2017, 86, 431-431.	0.1	0
223	Effect of isothermal aging at 250 Â°C on shear strength of joints using Sn-Coated Cu particle paste for high-temperature application. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2017, 2017, 000202-000206.	0.2	0
224	A Preface. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2018, 87, 498-498.	0.1	0
225	Lead-Free High Temperature Bonding Processes for Next Generation Power Module Packaging. Journal of Smart Processing, 2018, 7, 28-31.	0.1	0
226	Bonding strength of Cu/Cu joints using sintering process of micro-sized Cu particles for high-temperature application. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2019, 2019, 000085-000090.	0.2	0
227	Recent Trends of Micro Joining. Yosetsu Gakkai Shi/Journal of the Japan Welding Society, 2020, 89, 366-375.	0.1	0
228	Sintered Joint Using Micro-Sized Ag Particles for High-Temperature Application. Journal of Smart Processing, 2020, 9, 259-263.	0.1	0
229	Effect of high-temperature storage at 300 Â°C on sintered layer using micro-sized Ag particles for high-temperature packaging technology. , 2020, , .		0
230	Synthesis of Hierarchical Structured Cuâ€"Sn Alloy Mesoparticles and Its Application of Cuâ€"Cu Joint Materials. Materials Transactions, 2022, 63, 794-799.	1.2	0
231	Sintered Bonding Process Using Surface Nanostructured Sheet. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2021, 72, 679-682.	0.2	0
232	Mechanical properties of Sn-Bi-Ag low-temperature Pb-free solders. , 2022, , .		0
233	Electromigration Comparison Study of Sn, Ag, and Cu Stripes Fabricated by Electron-Beam Physical Vapor Deposition. , 2022, , .		0