

Chunqing Wang

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220
papers

2,763
citations

27
h-index

40
g-index

331
ext. papers

3,495
ext. citations

3.8
avg, IF

5.41
L-index

#	Paper	IF	Citations
220	Growth behavior of Cu/Al intermetallic compounds and cracks in copper ball bonds during isothermal aging. <i>Microelectronics Reliability</i> , 2008 , 48, 416-424	1.2	164
219	Rapid pressureless low-temperature sintering of Ag nanoparticles for high-power density electronic packaging. <i>Scripta Materialia</i> , 2013 , 69, 789-792	5.6	102
218	NiTeO ₂ composite cathode material for hydrogen evolution reaction in alkaline electrolyte. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 13921-13932	6.7	76
217	Rapid formation of Cu/Cu ₃ Sn/Cu joints using ultrasonic bonding process at ambient temperature. <i>Applied Physics Letters</i> , 2013 , 102, 094104	3.4	58
216	Multiferroic properties of La and Mn co-doped BiFeO ₃ nanofibers by sol-gel and electrospinning technique. <i>Materials Letters</i> , 2013 , 90, 45-48	3.3	57
215	Formation mechanism and orientation of Cu ₃ Sn grains in Cu ₃ Sn intermetallic compound joints. <i>Materials Letters</i> , 2013 , 110, 137-140	3.3	54
214	Fabrication of interconnects using pressureless low temperature sintered Ag nanoparticles. <i>Materials Letters</i> , 2012 , 85, 61-63	3.3	53
213	Relationship between morphologies and orientations of Cu ₆ Sn ₅ grains in Sn _{3.0} Ag _{0.5} Cu solder joints on different Cu pads. <i>Materials Characterization</i> , 2014 , 88, 58-68	3.9	46
212	Recent Progress in Ohmic Contacts to Silicon Carbide for High-Temperature Applications. <i>Journal of Electronic Materials</i> , 2016 , 45, 267-284	1.9	44
211	Influence of aging treatment on deformation behavior of 96.5Sn3.5Ag lead-free solder alloy during in situ tensile tests. <i>Journal of Alloys and Compounds</i> , 2007 , 428, 274-285	5.7	43
210	Interfacial reactions of eutectic Sn _{3.5} Ag and pure tin solders with Cu substrates during liquid-state soldering. <i>Intermetallics</i> , 2012 , 25, 86-94	3.5	42
209	Investigation of ultrasonic copper wire wedge bonding on Au/Ni plated Cu substrates at ambient temperature. <i>Journal of Materials Processing Technology</i> , 2008 , 208, 179-186	5.3	42
208	Effects of bump size on deformation and fracture behavior of Sn _{3.0} Ag _{0.5} Cu/Cu solder joints during shear testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 529, 468-478	5.3	40
207	Microstructures, corrosion and mechanical properties of as-cast Mg ₂ Zn ₁₇ (Gd) alloys. <i>Transactions of Nonferrous Metals Society of China</i> , 2015 , 25, 2172-2180	3.3	38
206	Low Temperature Sintering Cu ₆ Sn ₅ Nanoparticles for Superplastic and Super-uniform High Temperature Circuit Interconnections. <i>Small</i> , 2015 , 11, 4097-103	11	38
205	Ultrarapid formation of homogeneous Cu ₆ Sn ₅ and Cu ₃ Sn intermetallic compound joints at room temperature using ultrasonic waves. <i>Ultrasonics Sonochemistry</i> , 2014 , 21, 924-9	8.9	37
204	Extremely fast formation of Cu ₃ Sn intermetallic compounds in Cu/Sn/Cu system via a micro-resistance spot welding process. <i>Journal of Alloys and Compounds</i> , 2016 , 687, 667-673	5.7	36

203	Electronic structure mechanism for the wettability of Sn-based solder alloys. <i>Journal of Electronic Materials</i> , 2002 , 31, 185-190	1.9	35
202	Mechanisms for low-temperature direct bonding of Si/Si and quartz/quartz VUV/O activation.. <i>RSC Advances</i> , 2018 , 8, 11528-11535	3.7	33
201	Electrochemical synthesis of Ni ₃ C/CeO ₂ composite electrodes for hydrogen evolution reaction. <i>Journal of Power Sources</i> , 2013 , 230, 10-14	8.9	33
200	Finite element modeling of electron beam welding of a large complex Al alloy structure by parallel computations. <i>Journal of Materials Processing Technology</i> , 2008 , 199, 41-48	5.3	32
199	Microstructural study of copper free air balls in thermosonic wire bonding. <i>Microelectronic Engineering</i> , 2008 , 85, 1815-1819	2.5	31
198	Aging effects on fracture behavior of 63Sn37Pb eutectic solder during tensile tests under the SEM 2004 , 384, 314-314		31
197	Sintering mechanism of the Cu@Ag core-shell nanoparticle paste at low temperature in ambient air. <i>RSC Advances</i> , 2016 , 6, 91783-91790	3.7	31
196	Intermetallic compounds formation at interface between PBGA solder ball and Au/Ni/Cu/BT PCB substrate after laser reflow processes. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002 , 95, 254-262	3.1	30
195	Silk fibroin film-coated MgZnCa alloy with enhanced in vitro and in vivo performance prepared using surface activation. <i>Acta Biomaterialia</i> , 2019 , 91, 99-111	10.8	29
194	Effect of Cu grain size on the voiding propensity at the interface of SnAgCu/Cu solder joints. <i>Materials Letters</i> , 2015 , 144, 97-99	3.3	29
193	Reliability and failure analysis of fine copper wire bonds encapsulated with commercial epoxy molding compound. <i>Microelectronics Reliability</i> , 2011 , 51, 157-165	1.2	26
192	Effect of electronic flame off parameters on copper bonding wire: Free-air ball deformability, heat affected zone length, heat affected zone breaking force. <i>Microelectronic Engineering</i> , 2009 , 86, 2094-2103 ⁵		25
191	Glass-on-LiNbO ₃ heterostructure formed via a two-step plasma activated low-temperature direct bonding method. <i>Applied Surface Science</i> , 2018 , 459, 621-629	6.7	24
190	Mechanical properties and fracture mechanisms of Sn-3.0Ag-0.5Cu solder alloys and joints at cryogenic temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017 , 684, 697-705	5.3	23
189	Nano features of Al/Au ultrasonic bond interface observed by high resolution transmission electron microscopy. <i>Materials Characterization</i> , 2008 , 59, 1419-1424	3.9	23
188	Bonding mechanism of ultrasonic wedge bonding of copper wire on Au/Ni/Cu substrate. <i>Transactions of Nonferrous Metals Society of China</i> , 2008 , 18, 132-137	3.3	23
187	Room-temperature direct bonding of silicon and quartz glass wafers. <i>Applied Physics Letters</i> , 2017 , 110, 221602	3.4	22
186	Microstructure evolution and thermostability of bondline based on Cu@Sn core-shell structured microparticles under high-temperature conditions. <i>Materials and Design</i> , 2017 , 131, 196-203	8.1	22

185	Determination of the Elastic Properties of Cu ₃ Sn Through First-Principles Calculations. <i>Journal of Electronic Materials</i> , 2008 , 37, 477-482	1.9	22
184	Interdiffusion of Al-Ni system enhanced by ultrasonic vibration at ambient temperature. <i>Ultrasonics</i> , 2006 , 45, 61-5	3.5	22
183	Nanometer-Scale Heterogeneous Interfacial Sapphire Wafer Bonding for Enabling Plasmonic-Enhanced Nanofluidic Mid-Infrared Spectroscopy. <i>ACS Nano</i> , 2020 , 14, 12159-12172	16.7	22
182	Chemical and thermal robust tri-layer rGO/Ag NWs/GO composite film for wearable heaters. <i>Composites Science and Technology</i> , 2019 , 174, 76-83	8.6	21
181	The influence of strengthening and recrystallization to the cracking behavior of Ni, Sb, Bi alloyed SnAgCu solder during thermal cycling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 652, 264-270	5.3	21
180	Morphologies and grain orientations of Cu ₃ Sn intermetallic compounds in Sn _{3.0} Ag _{0.5} Cu/Cu solder joints. <i>Materials Letters</i> , 2012 , 86, 157-160	3.3	21
179	Investigation on Sn grain number and crystal orientation in the Sn _{3.0} Ag _{0.5} Cu/Cu solder joints of different sizes. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 1174-1180	2.1	21
178	Direct bonding of silicon and quartz glass using VUV/O ₃ activation and a multistep low-temperature annealing process. <i>Applied Surface Science</i> , 2018 , 453, 416-422	6.7	21
177	Cohesively enhanced electrical conductivity and thermal stability of silver nanowire networks by nickel ion bridge joining. <i>Scientific Reports</i> , 2018 , 8, 5260	4.9	20
176	Investigation of fluorine containing plasma activation for room-temperature bonding of Si-based materials. <i>Microelectronics Reliability</i> , 2012 , 52, 347-351	1.2	20
175	Bonding wire characterization using automatic deformability measurement. <i>Microelectronic Engineering</i> , 2008 , 85, 1795-1803	2.5	20
174	Electromigration-induced intermetallic growth and voids formation in symmetrical Cu/Sn/Cu and Cu/Intermetallic compounds (IMCs)/Cu joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 2674-2681	2.1	19
173	A Comparative Study: Void Formation in Silicon Wafer Direct Bonding by Oxygen Plasma Activation with and without Fluorine. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, P7-P13	2	18
172	Effect of electric current on grain orientation and mechanical properties of Cu-Sn intermetallic compounds joints. <i>Journal of Alloys and Compounds</i> , 2018 , 753, 203-211	5.7	18
171	Direct Homo/Heterogeneous Bonding of Silicon and Glass Using Vacuum Ultraviolet Irradiation in Air. <i>Journal of the Electrochemical Society</i> , 2018 , 165, H3093-H3098	3.9	18
170	Growth kinetics of Cu ₃ Sn intermetallic compound in Cu-liquid Sn interfacial reaction enhanced by electric current. <i>Scientific Reports</i> , 2018 , 8, 1775	4.9	18
169	Phase transformation and fracture behavior of Cu/In/Cu joints formed by solid-liquid interdiffusion bonding. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 4170-4178	2.1	18
168	Ultrafast formation of unidirectional and reliable Cu ₃ Sn-based intermetallic joints assisted by electric current. <i>Intermetallics</i> , 2017 , 80, 26-32	3.5	18

167	Effect of Au-Sn IMCs formation and morphologies on shear properties of laser reflowed micro-solder joints. <i>Soldering and Surface Mount Technology</i> , 2015 , 27, 45-51	1.4	18
166	Evolution of the bond interface during ultrasonic AlSi wire wedge bonding process. <i>Journal of Materials Processing Technology</i> , 2007 , 182, 202-206	5.3	18
165	Fabrication of SiC/Si, SiC/SiO ₂ , and SiC/glass heterostructures via VUV/O ₃ activated direct bonding at low temperature. <i>Ceramics International</i> , 2019 , 45, 4094-4098	5.1	18
164	Enhanced shear strength of CuSn intermetallic interconnects with interlocking dendrites under fluxless electric current-assisted bonding process. <i>Journal of Materials Science</i> , 2017 , 52, 1943-1954	4.3	17
163	Electrodeposition fabrication of Cu@Ni core shell nanowire network for highly stable transparent conductive films. <i>Chemical Engineering Journal</i> , 2020 , 390, 124495	14.7	17
162	Effects of ultrasonic irradiation and cooling rate on the solidification microstructure of Sn ₃ Ag _{0.5} Cu alloy. <i>Journal of Materials Processing Technology</i> , 2014 , 214, 13-20	5.3	17
161	Ultrafine-Grain and Isotropic Cu/SAC305/Cu Solder Interconnects Fabricated by High-Intensity Ultrasound-Assisted Solidification. <i>Journal of Electronic Materials</i> , 2014 , 43, 2467-2478	1.9	17
160	Aging effects on fracture behavior of 63Sn37Pb eutectic solder during tensile tests under the SEM. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 384, 314-323	5.3	17
159	A novel cobalt-free CO ₂ -stable perovskite-type oxygen permeable membrane. <i>Journal of Membrane Science</i> , 2019 , 573, 504-510	9.6	17
158	Effect of intermetallic compounds on fracture behaviors of Sn ₃ Ag _{0.5} Cu lead-free solder joints during in situ tensile test. <i>Journal of Materials Science: Materials in Electronics</i> , 2012 , 23, 136-147	2.1	16
157	Effect of solidification on solder bump formation in solder jet process: Simulation and experiment. <i>Transactions of Nonferrous Metals Society of China</i> , 2008 , 18, 1201-1208	3.3	16
156	An integrated system for prediction and analysis of solder interconnection shapes. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2000 , 23, 87-92		16
155	A facile method for direct bonding of single-crystalline SiC to Si, SiO ₂ , and glass using VUV irradiation. <i>Applied Surface Science</i> , 2019 , 471, 196-204	6.7	16
154	The role of chloride ions in rapid synthesis of ultra-long silver nanowires for flexible electrodes. <i>Materials Research Express</i> , 2016 , 3, 075007	1.7	15
153	Facile synthesis of CuAg hybrid nanowires with strong surface-enhanced Raman scattering sensitivity. <i>CrystEngComm</i> , 2016 , 18, 1200-1206	3.3	15
152	Mechanisms for Room-Temperature Fluorine Containing Plasma Activated Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2017 , 6, P373-P378	2	15
151	Low-temperature-solderable intermetallic nanoparticles for 3D printable flexible electronics. <i>Acta Materialia</i> , 2019 , 162, 163-175	8.4	15
150	Recent Progress in Rapid Sintering of Nanosilver for Electronics Applications. <i>Micromachines</i> , 2018 , 9,	3.3	15

- 149 Cu nanoparticles of low polydispersity synthesized by a double-template method and their stability. *Colloid and Polymer Science*, **2014**, 292, 715-722 2.4 14
- 148 Mechanical properties and microstructures of hybrid ultrasonic resistance brazing of WC-Co/BeCu. *Journal of Materials Processing Technology*, **2012**, 212, 1885-1891 5.3 14
- 147 In situ quantitative study of microstructural evolution at the interface of Sn_{3.0}Ag_{0.5}Cu/Cu solder joint during solid state aging. *Journal of Alloys and Compounds*, **2015**, 634, 94-98 5.7 14
- 146 Fabrication of multiferroic Ba_{0.7}Sr_{0.3}TiO₃Ni_{0.8}Zn_{0.2}Fe₂O₄ composite nanofibers by electrospinning. *Materials Letters*, **2013**, 91, 55-58 3.3 14
- 145 Room-Temperature Direct Bonding Using Fluorine Containing Plasma Activation. *Journal of the Electrochemical Society*, **2011**, 158, H525 3.9 14
- 144 Comparison of interface evolution of ultrasonic aluminum and gold wire wedge bonds during thermal aging. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2007**, 447, 111-118 5.3 14
- 143 Cross-Interaction of Interfacial Reactions in Ni (Au/Ni/Cu)-SnAg-Cu Solder Joints during Reflow Soldering and Thermal Aging. *Journal of Electronic Materials*, **2007**, 36, 26-32 1.9 14
- 142 The effects of pulsed Nd:YAG laser irradiation on surface energy of copper. *Applied Surface Science*, **2006**, 252, 4257-4263 6.7 14
- 141 High-efficiency extraction synthesis for high-purity copper nanowires and their applications in flexible transparent electrodes. *Nano Materials Science*, **2020**, 2, 164-171 10.2 13
- 140 Synthesis of Co-doped barium strontium titanate nanofibers by sol-gel/electrospinning process. *Materials Letters*, **2012**, 75, 207-210 3.3 12
- 139 In situ TEM observation of microcrack nucleation and propagation in pure tin solder. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2006**, 127, 62-69 3.1 12
- 138 Study of electroless Sn-coated Cu microparticles and their application as a high temperature thermal interface material. *Surface and Coatings Technology*, **2017**, 319, 230-240 4.4 11
- 137 Synthesis of multiferroic Bi_{0.9}La_{0.1}Fe_{0.95}Mn_{0.05}O₃Ba_{0.7}Sr_{0.3}TiO₃Ni_{0.8}Zn_{0.2}Fe₂O₄ nanotubes with one closed end using a template-assisted sol-gel process. *CrystEngComm*, **2013**, 15, 2147 3.3 11
- 136 Thermomechanical behaviour of PBGA package during laser and hot air reflow soldering. *Modelling and Simulation in Materials Science and Engineering*, **2004**, 12, 235-243 2 11
- 135 One-Step Fabrication of 3D Nanohierarchical Nickel Nanomace Array To Sinter with Silver NPs and the Interfacial Analysis. *ACS Applied Materials & Interfaces*, **2017**, 9, 4798-4807 9.5 10
- 134 Recycled low-temperature direct bonding of Si/glass and glass/glass chips for detachable micro/nanofluidic devices. *Journal of Materials Science and Technology*, **2020**, 46, 156-167 9.1 10
- 133 Fabrication and characterization of silk fibroin coating on APTES pretreated Mg-Zn-Ca alloy. *Materials Science and Engineering C*, **2020**, 110, 110742 8.3 10
- 132 TEM observation of interfacial compounds of SnAgCu/ENIG solder bump after laser soldering and subsequent hot air reflows. *Materials Letters*, **2016**, 163, 254-257 3.3 10

131	The investigation of quality of life in 87 Chinese patients with disorders of sex development. <i>BioMed Research International</i> , 2015 , 2015, 342420	3	10
130	Effect of Diamond Additions on Wettability and Distribution of SnAgCu Composite Solder. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 661-665	9.1	10
129	Determination of the Elastic Properties of Au5Sn and AuSn from Ab Initio Calculations. <i>Journal of Electronic Materials</i> , 2008 , 37, 968-974	1.9	10
128	Progress in wafer bonding technology towards MEMS, high-power electronics, optoelectronics, and optofluidics. <i>International Journal of Optomechatronics</i> , 2020 , 14, 94-118	3.5	10
127	Evolution of deformation near the triple point of grain junctions in Sn-based solders during in situ tensile test. <i>Materials Letters</i> , 2005 , 59, 697-700	3.3	9
126	The Fabrication of Micro-Array Channels with the Ultrafine-Grained LZ91 Mg-Li Alloy by Micro-Embossing. <i>Micromachines</i> , 2018 , 9,	3.3	9
125	One-Step Fabrication of Copper Nanopillar Array-Filled AAO Films by Pulse Electrodeposition for Anisotropic Thermal Conductive Interconnectors. <i>ACS Omega</i> , 2019 , 4, 6092-6096	3.9	8
124	Optimization and modeling for one-step synthesis process of AgCu nano-particles using DOE methodology. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 4265-4274	2.1	8
123	Fabrication of Cu ₆ Sn ₅ single-crystal layer for under-bump metallization in flip-chip packaging. <i>Intermetallics</i> , 2013 , 42, 52-55	3.5	8
122	Micro heat pipe device utilizing extended nanofluidics. <i>RSC Advances</i> , 2017 , 7, 50591-50597	3.7	8
121	Joining of Silver Nanowires by Femtosecond Laser Irradiation Method. <i>Materials Transactions</i> , 2015 , 56, 981-983	1.3	8
120	Scanning electron microscope in-situ investigation of fracture behavior in 96.5Sn3.5Ag lead-free solder. <i>Journal of Electronic Materials</i> , 2005 , 34, 1324-1335	1.9	8
119	Computer simulation of three-dimensional castellated solder joint geometry in surface mount technology. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1998 , 6, 557-565	2	8
118	Interaction kinetics between PBGA solder balls and Au/Ni/Cu metallisation during laser reflow bumping. <i>Soldering and Surface Mount Technology</i> , 2003 , 15, 17-21	1.4	8
117	Low-temperature wafer direct bonding of silicon and quartz glass by a two-step wet chemical surface cleaning. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 02BD02	1.4	8
116	Low-temperature direct bonding of Si and quartz glass using the APTES modification. <i>Ceramics International</i> , 2019 , 45, 16670-16675	5.1	7
115	Effects of temperature and dispersants on the phases and morphology of AgCu nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 10065-10069	2.1	7
114	Shear Deformation Behaviors of Sn _{3.5} Ag Lead-free Solder Samples. <i>Journal of Materials Science and Technology</i> , 2013 , 29, 471-479	9.1	7

113	Mechanism of low temperature Cu-In Solid-Liquid Interdiffusion bonding in 3D package 2012 ,		7
112	Degradation behaviors of micro ball grid array (BGA) solder joints under the coupled effects of electromigration and thermal stress. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 11583-11592		7
111	Communication Defect-Free Direct Bonding for High-Performance Glass-On-LiNbO ₃ Devices. <i>Journal of the Electrochemical Society</i> , 2018 , 165, B727-B729	3.9	7
110	Communication Ag NW Networks Enhanced by Ni Electroplating for Flexible Transparent Electrodes. <i>Journal of the Electrochemical Society</i> , 2018 , 165, D328-D330	3.9	6
109	Oxidation and Au-Sn reaction of laser reflowed micro-solder joints protected by N ₂ or exposed to air atmosphere. <i>Soldering and Surface Mount Technology</i> , 2012 , 24, 191-196	1.4	6
108	Low-Temperature Co-hydroxylated Cu/SiO ₂ Hybrid Bonding Strategy for a Memory-Centric Chip Architecture. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 38866-38876	9.5	6
107	Fabrication of Al ₂ O ₃ /Mullite/AlN Multiphase Ceramic Layer on W/Cu Substrates for Power Semiconductor Packaging. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2015 , 5, 182-187	1.7	5
106	Microstructures and Properties of As-Cast Mg ₉₂ Zn ₄ Y ₄ and Mg ₉₂ Zn ₄ Y ₃ Gd ₁ Alloys with LPSO Phase. <i>Rare Metal Materials and Engineering</i> , 2015 , 44, 1617-1622		5
105	Rapid pressureless and low-temperature bonding of large-area power chips by sintering two-step activated Ag paste. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 6497-6505	2.1	5
104	Effects of Ba _{0.7} Sr _{0.3} TiO ₃ -based buffer layers and La/Mn doping on the crystallization behavior and multiferroic properties of BiFeO ₃ thin films. <i>RSC Advances</i> , 2014 , 4, 55889-55896	3.7	5
103	The effect of voids on thermal conductivity of solder joints 2012 ,		5
102	Surface-Tension-Driven Self-Assembly of 3-D Microcomponents by Using Laser Reflow Soldering and Wire Limiting Mechanisms. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2013 , 3, 168-176	1.7	5
101	Effects of Solder Volume on Formation and Redeposition of Au-Containing Intermetallics in Ni/Au-SnAgCu-Ni(P) Solder Joints. <i>Journal of Electronic Materials</i> , 2007 , 36, 33-39	1.9	5
100	Nd:YAG laser surface treatment of copper to improve the wettability of Sn _{3.5} Ag solder on copper. <i>Surface and Coatings Technology</i> , 2005 , 200, 2181-2186	4.4	5
99	In-situ SEM observation on fracture behaviors of Sn-based solder alloys. <i>Journal of Materials Science</i> , 2005 , 40, 1993-2001	4.3	5
98	Maximum shear stress-controlled uniaxial tensile deformation and fracture mechanisms and constitutive relations of Sn/Pb eutectic alloy at cryogenic temperatures. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021 , 819, 141523	5.3	5
97	Crystallized Bi _{0.9} La _{0.1} Fe _{0.95} Mn _{0.05} O ₃ /Ba _{0.7} Sr _{0.3} Ti _{0.95} Co _{0.05} O ₃ bilayer thin films with enhanced multiferroic properties. <i>Applied Surface Science</i> , 2017 , 404, 162-167	6.7	4
96	Laser Sintering of Nano-Ag Particle Paste for High-Temperature Electronics Assembly. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2017 , 7, 1050-1057	1.7	4

95	Low temperature nanojoining of silver-copper nanopaste as die attach material for high temperature packaging. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 5446-5451	2.1	4
94	Effect of the Silver Content of SnAgCu Solder on the Interfacial Reaction and on the Reliability of Angle Joints Fabricated by Laser-Jet Soldering. <i>Journal of Electronic Materials</i> , 2015 , 44, 733-743	1.9	4
93	Solderless bonding with nanoporous copper as interlayer for high-temperature applications. <i>Microelectronics Reliability</i> , 2018 , 80, 198-204	1.2	4
92	Communication A Self-Contained Temperature Sensing Approach for Ultrafast Microwelding. <i>Journal of the Electrochemical Society</i> , 2018 , 165, B220-B222	3.9	4
91	Preparation and Sintering Properties of Ag ₂₇ Cu ₂ Sn Nanopaste as Die Attach Material. <i>Journal of Electronic Materials</i> , 2016 , 45, 5436-5442	1.9	4
90	Communication Fluorinated Plasma Treatments Using PTFE Substrates for Room-Temperature Silicon Wafer Direct Bonding. <i>ECS Journal of Solid State Science and Technology</i> , 2016 , 5, P393-P395	2	4
89	VUV/O ₃ activated direct heterogeneous bonding towards high-performance LiNbO ₃ -based optical devices. <i>Applied Surface Science</i> , 2019 , 495, 143576	6.7	4
88	Pressureless low-temperature sintering of plasma activated Ag nanoparticles for high-power device packaging. <i>Materials Letters</i> , 2019 , 256, 126620	3.3	4
87	Formation of AuSn _x IMCs in Sn _{3.5} Ag _{0.75} Cu micro-solder joints fabricated by laser and hot air reflow processes. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 217-223	2.1	4
86	Suppression of void nucleation in Sn _{3.0} Ag _{0.5} Cu/CU solder joint by rapid thermal processing. <i>Materials Letters</i> , 2015 , 158, 252-254	3.3	4
85	Ultrasonic Bondability and Antioxidation Property of Ti/Cu/TaN/Ag Multi-layers on Si Substrate. <i>Thin Solid Films</i> , 2012 , 524, 224-228	2.2	4
84	The effects of humidity and temperature aging test on flexible packaging LED module 2013 ,		4
83	Effect of Zn addition in Sn-rich alloys on interfacial reaction with Au foils. <i>Transactions of Nonferrous Metals Society of China</i> , 2008 , 18, 617-622	3.3	4
82	Evolution of Cu/Al Intermetallic Compounds in the Copper Bump bonds during Aging Process 2007 ,		4
81	Electronic structure calculation for properties of Sn-based solder alloys with the relativistic DV-X α method. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002 , 10, 121-129	2	4
80	Low-temperature bonding process for the fabrication of hybrid glass-membrane organ-on-a-chip devices. <i>Journal of Micro/Nanolithography, MEMS, and MOEMS</i> , 2016 , 15, 044502	0.7	4
79	A Modified Interposer Fabrication Process by Copper Nano-Pillars Filled in Anodic Aluminum Oxide Film for 3D Electronic Package. <i>Applied Sciences (Switzerland)</i> , 2018 , 8, 2188	2.6	4
78	Laser sintering mechanism and shear performance of Cu-Ag-Cu joints with mixed bimodal size Ag nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 7787-7793	2.1	3

77	Unique buoyancy-force-based kinetics determination of beta to alpha phase transformation in bulk tin plates. <i>Materials and Design</i> , 2020 , 190, 108550	8.1	3
76	Characterization of the Microstructure of an AlN-Mullite-Al ₂ O ₃ Ceramic Layer on WCu Composite Alloy for Microelectronic Application. <i>Journal of Electronic Materials</i> , 2015 , 44, 4154-4160	1.9	3
75	In situ measurement of bond resistance varying with process parameters during ultrasonic wedge bonding. <i>Journal of Materials Processing Technology</i> , 2009 , 209, 139-144	5.3	3
74	Modeling thermal fatigue in anisotropic Sn-Ag-Cu/Cu solder joints 2009 ,		3
73	Three-dimensional modelling of solder droplet impact onto a groove. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 245503	3	3
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