Jeong-Won Yoon

List of Publications by Year
in descending order

102 papers	2,304 citations	172457 29 h-index	265206 42 g-index
102 all docs	102 docs citations	102 times ranked	804 citing authors

#	Article	IF	Citations
1	High-temperature stability of Ni-Sn intermetallic joints for power device packaging. Journal of Alloys and Compounds, 2022, 890, 161778.	5.5	3
2	Metallurgically and mechanically reliable microsilver-sintered joints for automotive power module applications. Journal of Materials Science: Materials in Electronics, 2022, 33, 1724-1737.	2.2	2
3	Effect of temperature on shear properties of Sn-3.0Ag-0.5Cu and Sn-58Bi solder joints. Journal of Alloys and Compounds, 2022, 903, 163987.	5.5	8
4	Intermetallic compound transformation and mechanical strength of Niâ€“Sn transient liquid phase sinter-bonded joints in an extreme high-temperature environment. Journal of Materials Science: Materials in Electronics, 2022, 33, 6616.	2.2	1
5	Comparative study of interfacial reaction and bonding property of laser- and reflow-soldered Snâ€“Agâ€“Cu/Cu joints. Journal of Materials Science: Materials in Electronics, 2022, 33, 7983-7994.	2.2	5
6	Effects of shear test temperatures and conditions on mechanical properties of Snâ€“Ag flip-chip solder bumps. Journal of Materials Science: Materials in Electronics, 2022, 33, 10002-10012.	2.2	1
7	Effects of solder volume and size on microstructures and mechanical properties of Sn-3.0Ag-0.5Cu solder joints. Journal of Materials Science: Materials in Electronics, 2022, 33, 16700-16709.	2.2	5
8	Effect of Ni(P) thickness in Au/Pd/Ni(P) surface finish on the electrical reliability of Snâ€“3.0Agâ€“0.5Cu solder joints during current-stressing. Journal of Alloys and Compounds, 2021, 850, 156729.	5.5	21
9	A Study of Transient Liquid Phase Bonding Using an Ag-Sn3.0Ag0.5Cu Hybrid Solder Paste. Journal of Welding and Joining, 2021, 39, 376-383.	1.3	3
10	Comparative study of normal and thin Au/Pd/Ni(P) surface finishes with Snâ€“3.0Agâ€“0.5Cu solder joints under isothermal aging. Journal of Materials Science: Materials in Electronics, 2021, 32, 24790-24800.	2.2	5
11	Effects of crystalline and amorphous Pd layers on initial interfacial reactions at Sn-3.0Ag-0.5Cu/thin-Au/Pd/Ni(P) solder joints. Applied Surface Science, 2020, 503, 144339.	6.1	18
12	Effects of a phosphorous-containing Pd layer in a thin-ENEPIG surface finish on the interfacial reactions and mechanical strength of a Snâ€“58Bi solder joint. Journal of Alloys and Compounds, 2020, 820, 153396.	5.5	12
13	Fast formation of Niâ€“Sn intermetallic joints using Niâ€“Sn paste for high-temperature bonding applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 15048-15060.	2.2	12
14	Effects of Ni(P) layer thickness and Pd layer type in thin-Au/Pd/Ni(P) surface finishes on interfacial reactions and mechanical strength of Snâ€“58Bi solder joints during aging. Journal of Materials Science: Materials in Electronics, 2020, 31, 19852-19874.	2.2	0
15	Interfacial reactions and mechanical properties of Snâ€“3.0Agâ€“0.5Cu solder with pure Pd or Pd(P) layers containing thin-Au/Pd/Ni(P) surface-finished PCBs during aging. Journal of Materials Science: Materials in Electronics, 2020, 31, 4027-4039.	2.2	1
16	Fast formation of Cu-Sn intermetallic joints using pre-annealed Sn/Cu/Sn composite preform for high-temperature bonding applications. Thin Solid Films, 2020, 698, 137873.	1.8	7
17	Bonding of power device to ceramic substrate using Sn-coated Cu micro paste for high-temperature applications. Applied Surface Science, 2020, 515, 146060.	6.1	23
18	Optimal Ni(P) thickness and reliability evaluation of thin-Au/Pd(P)/Ni(P) surface-finish with Sn-3.0Ag-0.5Cu solder joints. Journal of Alloys and Compounds, 2019, 805, 1013-1024.	5.5	15

#	Article	IF	Citations
19	Nickelâ€“tin transient liquid phase sintering with high bonding strength for high-temperature power applications. Journal of Materials Science: Materials in Electronics, 2019, 30, 20205-20212.	2.2	8
20	Effects of Ni layer thickness of thin-ENEPIG surface finishes on the interfacial reactions and shear strength of Sn-3.0Agâ€“0.5Cu solder joints during aging. Journal of Materials Science: Materials in Electronics, 2019, 30, 12911-12923.	2.2	3
21	Effect of Sintering Conditions on Microstructure and Mechanical Strength of Cu Micro-Particle Sintered Joints for High-Power Semiconductor Module Applications. Journal of Welding and Joining, 2019, 37, 26-34.	1.3	9
22	The Effect of Environmental Test on the Shear Strength of the Ultrasonic bonded Cu Terminal for Power Module. Journal of Welding and Joining, 2019, 37, 1-6.	1.3	1
23	Sequential interfacial reactions of <scp>SAC305</scp> solder joints with thin <scp>ENEPIG</scp> surface finishes. Surface and Interface Analysis, 2018, 50, 1046-1050.	1.8	7
24	Comparative study of ENEPIG and thin ENEPIG as surface finishes for SAC305 solder joints. Journal of Materials Science: Materials in Electronics, 2018, 29, 4724-4731.	2.2	17
25	Cu-Sn Intermetallic Compound Joints for High-Temperature Power Electronics Applications. Journal of Electronic Materials, 2018, 47, 430-435.	2.2	41
26	A Study of the Growth Rate of Cu-Sn Intermetallic Compounds for Transient Liquid Phase Bonding during Isothermal Aging. , 2018, , .		1
27	Effect of Sintering Conditions on the Mechanical Strength of Cu-Sintered Joints for High-Power Applications. Materials, 2018, 11, 2105.	2.9	30
28	Effect of surface finish metallization on mechanical strength of Ag sintered joint. Microelectronic Engineering, 2018, 198, 15-21.	2.4	19
29	Effect of Thin ENEPIG Plating Thickness on Interfacial Reaction and Brittle Fracture Rate of Sn-3.0Ag-0.5Cu Solder Joints. Journal of Welding and Joining, 2018, 36, 52-60.	1.3	3
30	Cuâ€“Sn and Niâ€“Sn transient liquid phase bonding for die-attach technology applications in high-temperature power electronics packaging. Journal of Materials Science: Materials in Electronics, 2017, 28, 7827-7833.	2.2	57
31	Interfacial reactions and mechanical strength of Sn-3.0Ag-0.5Cu/Ni/Cu and Au-20Sn/Ni/Cu solder joints for power electronics applications. Microelectronics Reliability, 2017, 71, 119-125.	1.7	37
32	Die-attach for power devices using the Ag sintering process: Interfacial microstructure and mechanical strength. Metals and Materials International, 2017, 23, 958-963.	3.4	34
33	Thermal Aging Characteristics of Sn-xSb Solder for Automotive Power Module. Journal of Welding and Joining, 2017, 35, 38-47.	1.3	10
34	Interfacial reactions and mechanical strength of Sn-3.0Ag-0.5Cu/0.1ãŽ›-Ni thin ENEPIG solder joint. Journal of Welding and Joining, 2017, 35, 51-58.	1.3	6
35	Solderability of thin ENEPIG plating Layer for Fine Pitch Package application. Journal of the Microelectronics and Packaging Society, 2017, 24, 83-90.	0.1	8
36	Electromigration effect on Sn-58Â% Bi solder joints with various substrate metallizations under current stress. Journal of Materials Science: Materials in Electronics, 2016, 27, 1105-1112.	2.2	14

#	Article	IF	Citations
37	Effect of Plasma Surface Finish on Wettability and Mechanical Properties of SAC305 Solder Joints. Journal of Electronic Materials, 2016, 45, 6184-6191.	2.2	9
38	Lead-free Solder for Automotive Electronics and Reliability Evaluation of Solder Joint. Journal of Welding and Joining, 2016, 34, 26-34.	1.3	11
39	Interfacial reaction and intermetallic compound formation of Snâ€“1Ag/ENIG and Snâ€“1Ag/ENEPIG solder joints. Journal of Alloys and Compounds, 2015, 627, 276-280.	5.5	42
40	Interfacial reaction and mechanical properties between low melting temperature Snâ€“58Bi solder and various surface finishes during reflow reactions. Journal of Materials Science: Materials in Electronics, 2015, 26, 1649-1660.	2.2	13
41	Effect of rare earth metal Ce addition to Sn-Ag solder on interfacial reactions with Cu substrate. Metals and Materials International, 2014, 20, 515-519.	3.4	5
42	Power Module Packaging Technology with Extended Reliability for Electric Vehicle Applications. Journal of the Microelectronics and Packaging Society, 2014, 21, 1-13.	0.1	16
43	Joint reliability evaluation of thermo-compression bonded FPCB/RPCB joints under high temperature storage test. Microelectronics Reliability, 2013, 53, 2036-2042.	1.7	7
44	A novel and simple fabrication technology for high power module with enhanced thermal performance. , 2012, , .		3
45	Mechanical strength and fracture mode transition of Sn-58Bi epoxy solder joints under high-speed shear test. Journal of Materials Science: Materials in Electronics, 2012, 23, 1515-1520.	2.2	7
46	Thermo-compression bonding of electrodes between FPCB and RPCB by using Pb-free solders. Journal of Materials Science: Materials in Electronics, 2012, 23, 41-47.	2.2	5
47	Sequential interfacial intermetallic compound formation of Cu6Sn5 and Ni3Sn4 between Snâ€“Agâ€“Cu solder and ENEPIG substrate during a reflow process. Journal of Alloys and Compounds, 2011, 509, L153-L156.	5.5	70
48	In situ TEM characterization of interfacial reaction in Snâ€“3.5Ag/electroless Ni(P) solder joint. Scripta Materialia, 2011, 64, 597-600.	5.2	14
49	Interfacial reaction between Auâ€“Sn solder and Au/Ni-metallized Kovar. Journal of Materials Science: Materials in Electronics, 2011, 22, 84-90.	2.2	23
50	Effect of adding Ce on interfacial reactions between Snâ€“Ag solder and Cu. Journal of Materials Science: Materials in Electronics, 2011, 22, 745-750.	2.2	14
51	Effects of different kinds of seed layers and heat treatment on adhesion characteristics of Cu/(Cr or) Tj ETQq1 1 0.784314 rgBT /Over 2011, 22, 790-796.	2.2	6
52	Microstructure, Electrical Properties, and Electrochemical Migration of a Directly Printed Ag Pattern. Journal of Electronic Materials, 2011, 40, 35-41.	2.2	29
53	Effects of Different Kinds of Underfills and Temperatureâ€“Humidity Treatments on Drop Reliability of Board-Level Packages. Journal of Electronic Materials, 2011, 40, 224-231.	2.2	12
54	Comparative Study of ENIG and ENEPIG as Surface Finishes for a Sn-Ag-Cu Solder Joint. Journal of Electronic Materials, 2011, 40, 1950-1955.	2.2	82

#	Article	IF	Citations
55	Effect of Cr Thickness on Adhesion Strength of Cu/Cr/Polyimide Flexible Copper Clad Laminate Fabricated by Roll-to-Roll Process. Materials Transactions, 2010, 51, 85-89.	1.2	15
56	Effect of Ni-Cr seed layer thickness on the adhesion characteristics of flexible copper clad laminates fabricated using a roll-to-roll process. Metals and Materials International, 2010, 16, 779-784.	3.4	14
57	Characterization of ternary Ni2SnP layer in Snâ€“3.5Agâ€“0.7Cu/electroless Ni (P) solder joint. Scripta Materialia, 2010, 63, 1108-1111.	5.2	24
58	Effect of multiple reflows on interfacial reaction and shear strength of Snâ€“Ag electroplated solder bumps for flip chip package. Microelectronic Engineering, 2010, 87, 517-521.	2.4	32
59	Mechanical Reliability of Sn-Ag BGA Solder Joints With Various Electroless Ni-P and Ni-B Plating Layers. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 222-228.	1.3	10
60	Comparison of Interfacial Stability of Pb-Free Solders (Snâ€”3.5Ag, Snâ€”3.5Agâ€”0.7Cu, and Snâ€”0.7Cu) on ENIG-Plated Cu During Aging. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 64-70.	1.3	23
61	Control of interfacial reaction layers formed in Snâ€“3.5Agâ€“0.7Cu/electroless Niâ€“P solder joints. Scripta Materialia, 2009, 60, 257-260.	5.2	27
62	Adhesion characteristics of Cu/Niâ€“Cr/polyimide flexible copper clad laminates according to Ni:Cr ratio and Cu electroplating layer thickness. Journal of Materials Science: Materials in Electronics, 2009, 20, 885-890.	2.2	22
63	Electromigration Behavior in Sn-37Pb and Sn-3.0Ag-0.5Cu Flip-Chip Solder Joints under High Current Density. Journal of Electronic Materials, 2009, 38, 70-77.	2.2	18
64	Evaluation of Electrochemical Migration on Flexible Printed Circuit Boards with Different Surface Finishes. Journal of Electronic Materials, 2009, 38, 902-907.	2.2	45
65	Mechanical Property Evaluation of Sn-3.0A-0.5Cu BGA Solder Joints Using High-Speed Ball Shear Test. Journal of Electronic Materials, 2009, 38, 2489-2495.	2.2	20
66	Solder joint reliability in flip chip package with surface treatment of ENIG under thermal shock test. Metals and Materials International, 2009, 15, 655-660.	3.4	11
67	Liquid-state and solid-state interfacial reactions of fluxless-bonded Auâ€“20Sn/ENIG solder joint. Journal of Alloys and Compounds, 2009, 469, 108-115.	5.5	32
68	Effects of Underfill Materials and Thermal Cycling on Mechanical Reliability of Chip Scale Package. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 633-638.	1.3	10
69	Characterization of Interfacial Reaction Layers Formed Between Sn-3.5Ag Solder and Electroless Ni-Immersion Au-Plated Cu Substrates. Journal of Electronic Materials, 2008, 37, 84-89.	2.2	22
70	Effects of isothermal aging and temperatureâ€“humidity treatment of substrate on joint reliability of Snâ€“3.0Agâ€“0.5Cu/OSP-finished Cu CSP solder joint. Microelectronics Reliability, 2008, 48, 1864-1874.	1.7	33
71	Effect of surface finish on interfacial reactions of Cu/Snâ€“Agâ€“Cu/Cu(ENIG) sandwich solder joints. Journal of Alloys and Compounds, 2008, 448, 177-184.	5.5	39
72	Effect of immersion Ag surface finish on interfacial reaction and mechanical reliability of Snâ€“3.5Agâ€“0.7Cu solder joint. Journal of Alloys and Compounds, 2008, 458, 200-207.	5.5	40

#	Article	IF	Citations
73	Initial interfacial reaction layers formed in Snâ€“3.5Ag solder/electroless Niâ€“P plated Cu substrate system. Journal of Materials Research, 2008, 23, 2195-2201.	2.6	14
74	Interfacial reactions and mechanical properties of Inâ€“48Sn solder joint with electroplated Au/Ni ball grid array (BGA) substrate after multiple reflows. Journal of Materials Research, 2008, 23, 1631-1641.	2.6	9
75	Ultrasonic Bonding Technology for Flip Chip Packaging. Journal of Welding and Joining, 2008, 26, 31-36.	0.3	7
76	Reliability analysis of Auâ€“Sn flip-chip solder bump fabricated by co-electroplating. Journal of Materials Research, 2007, 22, 1219-1229.	2.6	30
77	Microstructural evolution and interfacial reactions of fluxless-bonded Au-20Sn/Cu solder joint during reflow and aging. Journal of Materials Research, 2007, 22, 2817-2824.	2.6	16
78	Characterization of Failure Behaviors in Anisotropic Conductive Interconnection. Materials Transactions, 2007, 48, 1070-1078.	1.2	12
79	Solid-state interfacial reactions between Snâ€“3.5Agâ€“0.7Cu solder and electroless Ni-immersion Au substrate during high temperature storage test. Journal of Alloys and Compounds, 2007, 439, 91-96.	5.5	33
80	Investigation of interfacial reaction and joint reliability between eutectic Snâ€“3.5Ag solder and ENIG-plated Cu substrate during high temperature storage test. Journal of Materials Science: Materials in Electronics, 2007, 18, 559-567.	2.2	16
81	Auâ€“Sn flip-chip solder bump for microelectronic and optoelectronic applications. Microsystem Technologies, 2007, 13, 1463-1469.	2.0	31
82	Fabrication of Ni Metal Mask by Electroforming Process Using Wetting Agents. Journal of Electronic Materials, 2007, 36, 1510-1515.	2.2	7
83	Flip-chip Bonding Technology and Reliability of Electronic Packaging. Journal of Welding and Joining, 2007, 25, 6-15.	0.3	6
84	Interfacial reactions and shear strength on Cu and electrolytic Au/Ni metallization with Sn-Zn solder. Journal of Materials Research, 2006, 21, 1590-1599.	2.6	58
85	Interfacial reactions and joint strength of Snâ€“37Pb and Snâ€“3.5Ag solders with immersion Ag-plated Cu substrate during aging at 150 Â°C. Journal of Materials Research, 2006, 21, 3196-3204.	2.6	30
86	Interfacial reactions between Inâ€“48Sn solder and electroless nickel/immersion gold substrate during reflow process. Surface and Interface Analysis, 2006, 38, 426-428.	1.8	9
87	Characteristic analysis of electroless Ni plating layer for electronic packaging. Surface and Interface Analysis, 2006, 38, 440-443.	1.8	4
88	High temperature reliability and interfacial reaction of eutectic Snâ€“0.7Cu/Ni solder joints during isothermal aging. Microelectronics Reliability, 2006, 46, 905-914.	1.7	21
89	Effect of isothermal aging on the interfacial reactions between Snâ€“0.4Cu solder and Cu substrate with or without ENIG plating layer. Surface and Coatings Technology, 2006, 200, 4440-4447.	4.8	20
90	Interfacial Reaction and Mechanical Characterization of Eutectic Sn–Zn/ENIG Solder Joints during Reflow and Aging. Materials Transactions, 2005, 46, 2386-2393.	1.2	9

#	Article	IF	Citations
91	Interfacial reactions between Snâ€“0.4Cu solder and Cu substrate with or without ENIG plating layer during reflow reaction. Journal of Alloys and Compounds, 2005, 396, 122-127.	5.5	79
92	Effect of isothermal aging on intermetallic compound layer growth at the interface between Sn-3.5Ag-0.75Cu solder and Cu substrate. Journal of Materials Science, 2004, 39, 4211-4217.	3.7	58
93	Interfacial reactions and shear strengths between Sn-Ag-based Pb-free solder balls and Au/EN/Cu metallization. Journal of Electronic Materials, 2004, 33, 1182-1189.	2.2	78
94	Reliability investigation and interfacial reaction of ball-grid-array packages using the lead-free Sn-Cu solder. Journal of Electronic Materials, 2004, 33, 1190-1199.	2.2	74
95	Phase analysis and kinetics of solid-state ageing of Pb-free Snï£¿3.5Ag solder on electroless Niï£¿P substrate. Surface and Interface Analysis, 2004, 36, 963-965.	1.8	10
96	Growth kinetics of Ni3Sn4 and Ni3P layer between Snâ€“3.5Ag solder and electroless Niâ€“P substrate. Journal of Alloys and Compounds, 2004, 376, 105-110.	5.5	61
97	Intermetallic compound layer growth at the interface between Snâ€“Cuâ€“Ni solder and Cu substrate. Journal of Alloys and Compounds, 2004, 381, 151-157.	5.5	99
98	IMC Growth and Shear Strength of Sn-Ag-Bi-In/Au/Ni/Cu BGA Joints During Aging. Materials Transactions, 2004, 45, 727-733.	1.2	71
99	Title is missing!. Journal of Materials Science: Materials in Electronics, 2003, 14, 487-493.	2.2	41
100	Growth of an intermetallic compound layer with Sn-3.5Ag-5Bi on Cu and Ni-P/Cu during aging treatment. Journal of Electronic Materials, 2003, 32, 1195-1202.	2.2	83
101	Interfacial Reactions Between Sn-58 mass%Bi Eutectic Solder and (Cu, Electroless Ni-P/Cu) Substrate. Materials Transactions, 2002, 43, 1821-1826.	1.2	66
102	Recent Studies of Transient Liquid Phase Bonding Technology for Electric Vehicles. Journal of Welding and Joining, 0, , .	1.3	0