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Effects of intermetallic compounds on properties of SnAgCu lead-free soldered joints

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#	Paper	IF	Citations
541	In-situ observation and simulation of the solidification process in soldering a small outline package with the Sn-Ag-Cu lead-free alloy. 2003 , 32, 1483-1489		6
540	Influence of copper addition on adhesive strength of Sn ₃ Ag ₁ Bi solder joints. <i>Science and Technology of Welding and Joining</i> , 2004 , 9, 555-559	3.7	3
539	A novel technique for lead-free soldering process using variable frequency microwave (VFM).		
538	Lead-free solder interconnect by variable frequency microwave (VFM).		
537	Interfacial reactions of Sn ₃ Cu and Sn ₃ BiAg solder with Au/Ni during extended time reflow in ball grid array packages. 2004 , 19, 2897-2904		18
536	Solidification of ternary eutectic and near eutectic alloys in the Ag-Cu-Sn system. 2004 , 20, 1403-1413		7
535	Interfacial reaction study on a solder joint with Sn-4Ag-0.5Cu solder ball and Sn-7Zn-Al (30 ppm) solder paste in a lead-free wafer level chip scale package. 2004 , 33, 1550-1556		4
534	Phase equilibria of the Sn-Ag-Cu-Ni quaternary system at the Sn-rich corner. 2004 , 33, 1071-1079		23
533	Experimental and finite element analysis of the shear speed effects on the Sn ₃ Ag and Sn ₃ Ag ₂ Cu BGA solder joints. 2004 , 371, 267-276		65
532	On the formation of Cu-Ni-Sn ternary intermetallics in SMT solder joints.		
531	Evolution of Ag ₃ /Sn during reflow soldering.		0
530	.		
529	Astronautic PBGA (plastic ball grid array) solder joints' reliability: under successive-high acceleration shock condition.		
528	Microstructure and Strength of Sn-Bi Coated Sn-3.5 mass%Ag Solder Alloy. 2004 , 45, 783-789		4
527	Effect of Astronautic PBGA Solder Joints by Serious and Complex Condition. 2005 , 9, 44-45		
526	Study on Sn-Ag Oxidation and Feasibility of Room Temperature Bonding of Sn-Ag-Cu Solder. 2005 , 46, 2431-2436		24
525	Microstructure and Mechanical Properties of Sn-0.7Cu Flip Chip Solder Bumps Using Stencil Printing Method. 2005 , 46, 2366-2371		6

524	Solid-liquid reactions: The effect of Cu content on Sn-Ag-Cu interconnects. 2005 , 57, 30-35	15
523	Lead-free interconnect technique by using variable frequency microwave. 2005 , 34, 1081-1088	14
522	Formation of bulk Ag ₃ Sn intermetallic compounds in Sn-Ag lead-free solders in solidification. 2005 , 34, 1591-1597	48
521	Effect of rare earth element addition on the microstructure of Sn-Ag-Cu solder joint. 2005 , 34, 217-224	75
520	Comparison of AuSn _x IMCs's Morphology, Distribution in Lead-free Solder Joints Fabricated by Laser and Hot Air Reflow Process.	1
519	IMC Evolution and Reliability of Lead-free Solder Bump Formed by Induction Self Heat Reflow.	
518	Impact of Cu Content on the Sn-Ag-Cu Interconnects.	2
517	Intermetallic Growth and Failure Study for Sn-Ag-Cu/ENIG PBGA Solder Joints Subject to Thermal Cycling.	1
516	The mechanical properties of a joint of Sn-3.5Ag-1Zn solder and Cu substrate with aging treatment. 2005 , 96, 148-154	3
515	Volume effect on the soldering reaction between SnAgCu solders and Ni.	6
514	Effects of intermetallic compounds on properties of Sn-Cu lead-free soldered joints.	1
513	.	1
512	Electromigration in Pb-free bumps with different UBM thickness.	0
511	Development of fluxes for selected Sn-Cu based lead-free solders.	0
510	.	
509	Interfacial reaction and mechanical properties of eutectic Sn _{0.7} Cu/Ni BGA solder joints during isothermal long-term aging. <i>Journal of Alloys and Compounds</i> , 2005 , 391, 82-89	5-7 91
508	IMC morphology, interfacial reaction and joint reliability of Pb-free SnAgCu solder on electrolytic Ni BGA substrate. <i>Journal of Alloys and Compounds</i> , 2005 , 392, 247-252	5-7 96
507	Interfacial Reaction and Joint Reliability of Sn-Ag-Cu/OSP-Cu Pad SMT Solder Joint. 2006 ,	2

506 . 2006,

505 . 2006,

1

504 Effects of cooling rates on microstructure and microhardness of lead-free Sn-3.5% Ag solders. **2006**, 16, 59-64 42

503 Coupling effects at Cu(Ni)/SnAgCu/Cu(Ni) sandwich solder joint during isothermal aging. *Journal of Alloys and Compounds*, **2006**, 417, 143-149 5-7 17

502 Learning from the migration to lead-free solder. *Soldering and Surface Mount Technology*, **2006**, 18, 14-18.4 3

501 ??????????????????????. **2006**, 45, 353-358

500 Sn0.7wt.%Cu/Ni interfacial reactions at 250°C. **2006**, 54, 247-253 110

499 Evaluation of displacement rate effect in shear test of SnAg0.5Cu solder bump for flip chip application. *Microelectronics Reliability*, **2006**, 46, 535-542 1.2 30

498 Fatigue damage mechanisms of copper single crystal/SnAgCu interfaces. **2006**, 435-436, 588-594 25

497 RETRACTED: Strengthening effects of ZrO₂ nanoparticles on the microstructure and microhardness of SnAg0.5Cu lead-free solder. **2006**, 441, 135-141 23

496 Intermetallic compound formation in SnCuCu, SnAgCu and eutectic SnCu solder joints on electroless Ni(P) immersion Au surface finish after reflow soldering. **2006**, 135, 134-140 34

495 Thermal behavior and microstructure of the intermetallic compounds formed at the SnAg0.5Cu/Cu interface after soldering and isothermal aging. **2006**, 290, 103-110 14

494 Microstructure evolution of the SnAg0.5Cu interconnect. *Microelectronics Reliability*, **2006**, 46, 1058-1070.2 16

493 Adhesive strength and tensile fracture of Ni particle enhanced SnAg composite solder joints. **2006**, 419, 172-180 53

492 Intermetallic compounds evolution between lead-free solder and Cu-based lead frame alloys during isothermal aging. **2006**, 41, 2359-2364 14

491 Effect of Ag content on the microstructure development of Sn-Ag-Cu interconnects. *Journal of Materials Science: Materials in Electronics*, **2006**, 17, 171-178 2.1 38

490 Phase Diagrams of Pb-Free Solders and their Related Materials Systems. *Journal of Materials Science: Materials in Electronics*, **2006**, 18, 19-37 2.1 71

489 Interfacial reaction issues for lead-free electronic solders. *Journal of Materials Science: Materials in Electronics*, **2006**, 18, 155-174 2.1 167

488	Astronautic PBGA (plastic ball grid array) solder joints reliability: under successive-high acceleration shock condition. 2006 , 27, 902-910	1
487	Phase field simulations of morphological evolution and growth kinetics of solder reaction products. 2006 , 35, 56-64	21
486	Characterizing metallurgical reaction of Sn3.0Ag0.5Cu composite solder by mechanical alloying with electroless Ni-P/Cu under-bump metallization after various reflow cycles. 2006 , 35, 81-88	11
485	Strengthening effects of ZrO ₂ nanoparticles on the microstructure and microhardness of Sn-3.5Ag lead-free solder. 2006 , 35, 1672-1679	78
484	Numerical prediction of fraction of eutectic phase in SnAgCu soldering using the phase-field method. 2006 , 35, 1969-1974	1
483	Controlling intermetallic compound growth in SnAgCu/Ni-P solder joints by nanosized Cu ₆ Sn ₅ addition. 2006 , 35, 486-493	25
482	Characterization technique in phase distribution during sample preparation for applications to solder joints and wire-bonding chips. 2006 , 35, 333-342	1
481	Interaction of intermetallic compound formation in Cu/SnAgCu/NiAu sandwich solder joints. 2006 , 35, 897-904	11
480	Effects of limited cu supply on soldering reactions between SnAgCu and Ni. 2006 , 35, 1017-1024	110
479	Reliability testing of WLCSP lead-free solder joints. 2006 , 35, 1032-1040	18
478	Comparative study of microstructures and properties of three valuable SnAgCuRE lead-free solder alloys. 2006 , 35, 1095-1103	17
477	Asymmetrical solder microstructure in Ni/Sn/Cu solder joint. 2006 , 55, 347-350	36
476	Thermal Oxidation Study on Lead-free Solders of Sn-Ag-Cu and Sn-Ag-Cu-Ge. 2006 , 8, 111-114	21
475	Modeling the interdependence of processing and alloy composition on the evolution of microstructure in Sn-based lead-free solders in fine pitch flip chip. 2006 , 29, 98-104	2
474	Interfacial reactions of Sn-Cu/Ni couples at 250 °C. 2006 , 21, 2270-2277	40
473	Intermetallic compound formation in Sn-Co-Cu, Sn-Ag-Cu and eutectic Sn-Cu solder joints on electroless Ni(P) immersion au surface finish after reflow soldering. 2006 ,	
472	The Influences of Solder Composition and Pad Finish on the Reliability of Fine Pitch BGA Solder Joints. 2007 ,	
471	High-cycle fatigue testing of Pb-free solder joints. <i>Soldering and Surface Mount Technology</i> , 2007 , 19, 29-38	1.4 7

470	Grain Deformation and Strain in Board Level SnAgCu Solder Interconnects Under Deep Thermal Cycling. 2007 , 30, 178-185		9
469	The Effect of Aging on Microstructures Evolution and Shear Behaviors in Lead-free Solder Joint. 2007 ,		
468	Are Intermetallics in Solder Joints Really Brittle?. 2007 ,		38
467	Pb-Free Solder: New Materials Considerations for Microelectronics Processing. 2007 , 32, 360-365		42
466	Electrochemical corrosion study of Sn \times Ag \times 0.5Cu alloys in 3.5% NaCl solution. 2007 , 22, 2573-2581		12
465	Dramatic morphological change of scallop-type Cu ₆ Sn ₅ formed on (001) single crystal copper in reaction between molten SnPb solder and Cu. 2007 , 91, 051907		77
464	Investigation of interfacial reactions between Sn \times n solder with electrolytic Ni and electroless Ni(P) metallization. <i>Journal of Alloys and Compounds</i> , 2007 , 440, 117-121	5-7	23
463	First-principles investigation of the structural and electronic properties of Cu ₆ \times Ni \times Sn ₅ (x=0, 1, 2) intermetallic compounds. 2007 , 15, 1471-1478		89
462	Behavior of Lead Free Solder Joint after Thermal Treatment. 2007 ,		
461	Sagging Phenomenon of Micro-Solder Joints Fabricated by Laser Reflow Process. 2007 ,		
460	. 2007 ,		9
459	Environmentally Conscious Electronic Manufacturing. 179-209		
458	Elasto-viscoplastic nonlocal damage modelling of thermal fatigue in anisotropic lead-free solder. 2007 , 39, 685-701		24
457	Crystallization, morphology and distribution of Ag ₃ Sn in Sn \times Ag \times Cu alloys and their influence on the vibration fracture properties. 2007 , 466, 9-17		47
456	Preferred orientation relationship between Cu ₆ Sn ₅ scallop-type grains and Cu substrate in reactions between molten Sn-based solders and Cu. 2007 , 102, 063511		58
455	Microstructure and mechanical properties of Lead-free Sn \times Cu solder composites prepared by rapid directional solidification. <i>Journal of Materials Science: Materials in Electronics</i> , 2007 , 18, 1235-1238	2.1	7
454	Failure Mechanisms and Crack Propagation Paths in Thermally Aged Pb-Free Solder Interconnects. 2007 , 36, 783-797		19
453	Interfacial Reactions in Sn-0.7wt.%Cu/Ni-V Couples at 250 ^\circ C. 2007 , 36, 1121-1128		12

452	The Effect of Low-Temperature Solute Elements on Nonequilibrium Eutectic Solidification of Sn-Ag Eutectic Solders. 2007 , 36, 1608-1614		2
451	Effect of substrate metallization on interfacial reactions and reliability of Sn ₃ NiBi solder joints. 2007 , 84, 328-335		35
450	The effects of third alloying elements on the bulk Ag ₃ Sn formation in slowly cooled Sn ₃ .5Ag lead-free solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2008 , 19, 275-280	2.1	12
449	Demonstration and Characterization of Sn-3.0Ag-0.5Cu/ Sn-57Bi-1Ag Combination Solder for 3-D Multistack Packaging. 2008 , 37, 110-117		4
448	Liquidus Projection and Solidification of the Sn-In-Cu Ternary Alloys. 2008 , 37, 498-506		25
447	In Situ Scanning Electron Microscopy Observation of Tensile Deformation in Sn-Ag-Cu Alloys Containing Rare-Earth Elements. 2008 , 37, 1751-1755		8
446	Beurteilung von Loten und Lötverbindungen unter dem Einfluss steigender Kupfergehalte in verunreinigten bleifreien Lotbleibern. 2008 , 39, 66-74		1
445	Recrystallization behaviour of SnAgCu solder joints. 2008 , 474, 201-207		80
444	Reaction properties and interfacial intermetallics for Sn ₃ Ag _{0.5} Cu solders as a function of Ag content. 2008 , 14, 649-654		33
443	Corrosion behaviour assessment of lead-free Sn ₃ Ag _M (M=In, Bi, Cu) solder alloys. 2008 , 109, 386-391		54
442	Evolution of Ag ₃ Sn compound formation in Ni/Sn ₃ Ag/Cu solder joint. 2008 , 62, 3887-3889		11
441	Effect of surface finish on interfacial reactions of Cu/Sn ₃ Ag _{0.5} Cu/Cu(ENIG) sandwich solder joints. <i>Journal of Alloys and Compounds</i> , 2008 , 448, 177-184	5.7	30
440	Investigation of sagging phenomenon observed in laser reflow soldering right-angled solder joints during isothermal aging or thermal cycle process. <i>Journal of Alloys and Compounds</i> , 2008 , 458, 323-329	5.7	2
439	Growth kinetics of intermetallic compounds and tensile properties of Sn ₃ Ag _{0.5} Cu/Ag single crystal joint. <i>Journal of Alloys and Compounds</i> , 2008 , 461, 410-417	5.7	31
438	Effect of triethanolamine and heliotropin on cathodic polarization of weakly acidic baths and properties of Sn ₃ Ag _{0.5} Cu alloy electrodeposits. 2008 , 53, 2637-2643		17
437	Effect of Ag content on the microstructure of Sn-Ag-Cu based solder alloys. <i>Soldering and Surface Mount Technology</i> , 2008 , 20, 3-8	1.4	53
436	Investigating the movement of chip components during reflow soldering. 2008 ,		0
435	Limited Sn grain number of miniaturized Sn-Ag-Cu solder joints. 2008 ,		0

434	Shear fracture behavior of Sn3.0Ag0.5Cu solder joints on Cu pads with different solder volumes. 2008,		0
433	Effect of silver content and nickel dopant on mechanical properties of Sn-Ag-based solders. 2008,		19
432	Influence of Cu addition on intermetallic compound formation and microstructure of Sn ₃ Ag ₁ Sb ₂ Cu solder joints. <i>Science and Technology of Welding and Joining</i> , 2008 , 13, 781-790	3.7	2
431	Green PCB production processes. 2008 , 34, 13-24		
430	The influence of low level doping of Ni on the microstructure and reliability of SAC solder joint. 2008,		1
429	Effect of Nickel Pad Metallization Thickness on Fatigue Failure of BGA Lead-Free Solder Joints. 2008 , 31, 734-740		0
428	Solid/solid interfacial reactions between Sn _{0.7} wt% Cu and Ni ₁ wt% V. 2008 , 23, 1895-1901		8
427	Thermal degradation of sputtered Al/Ni(V)/Cu-UBM in Pb-free flip chip solder joints connected to substrate with different surface finishes. 2008,		0
426	First-principles Investigation of the Structural and Electronic Properties of Cu Based Intermetallics. 2008,		
425	Effect of Surface Contamination on Solid-State Bondability of Sn-Ag-Cu Bumps in Ambient Air. 2008 , 49, 1508-1512		6
424	Interfacial Bonding Mechanism Using Silver Metallo-Organic Nanoparticles to Bulk Metals and Observation of Sintering Behavior. 2008 , 49, 1537-1545		112
423	Effect of cooling rate on Ag ₃ Sn formation in Sn-Ag based lead-free solder. 2009,		7
422	Investigating the effect of chip component misalignment on its solder joint mechanical strength. 2009,		1
421	Electromigration on void formation of Sn ₃ Ag _{1.5} Cu FCBGAs solder joints. <i>Microelectronics Reliability</i> , 2009 , 49, 734-745	1.2	14
420	Effect of rare earth addition on shear strength of SnAgCu lead-free solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 186-192	2.1	27
419	Fluxless bonding of silicon wafers to molybdenum substrates using electroplated tin-rich solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 334-342	2.1	3
418	Formation of interfacial structure of Sn _{3.7} Ag _{0.9} Zn eutectic solder with different Al additions. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 861-866	2.1	5
417	Effects of trace amount addition of rare earth on properties and microstructure of SnAgCu alloys. <i>Journal of Materials Science: Materials in Electronics</i> , 2009 , 20, 1193-1199	2.1	37

416	Stability of Flip-Chip Interconnects Assembled with Al/Ni(V)/Cu-UBM and Eutectic Pb-Sn Solder During Exposure to High-Temperature Storage. 2009 , 38, 303-324		10
415	Peltier Effect on Sn/Co Interfacial Reactions. 2009 , 38, 655-662		16
414	Intermetallic Compound Formation and Evolution in Solid-State Sn/Immersion-Ag/Cu Trilayer Interfacial Reactions on a Flexible Polymer Board. 2009 , 38, 908-914		14
413	Inhomogeneous Consumption of the Electroless Ni-P Layer at the Solder Joint Formed with Sn-3.5Ag-0.7Cu. 2009 , 38, 2554-2562		2
412	Multiphase Field Simulations of Intermetallic Compound Growth During Lead-Free Soldering. 2009 , 38, 2525-2533		23
411	A Study of the Shear Response of a Lead-Free Composite Solder by Experimental and Homogenization Techniques. 2009 , 38, 2122-2131		13
410	Wetting Behavior and Mechanical Properties of Sn-Zn and Sn-Pb Solder Alloys. 2009 , 38, 2405-2414		44
409	Nucleation Control and Thermal Aging Resistance of Near-Eutectic Sn-Ag-Cu-X Solder Joints by Alloy Design. 2009 , 38, 2770-2779		40
408	Effects of cerium on Sn-Ag-Cu alloys based on finite element simulation and experiments. 2009 , 27, 138-144		34
407	Interfacial reaction and shear strength of SnAgCu-Ni/Ni solder joints during aging at 150 °C. 2009 , 86, 1969-1974		43
406	Effect of thermal-shearing cycling on Ag ₃ Sn microstructural coarsening in SnAgCu solder. <i>Journal of Alloys and Compounds</i> , 2009 , 469, 102-107	5-7	21
405	Effect of rare earth on mechanical creep-fatigue property of SnAgCu solder joint. <i>Journal of Alloys and Compounds</i> , 2009 , 472, 198-202	5-7	50
404	Interfacial intermetallic growth and shear strength of lead-free composite solder joints. <i>Journal of Alloys and Compounds</i> , 2009 , 473, 100-106	5-7	114
403	Influence of indium addition on characteristics of Sn _{0.3} Ag _{0.7} Cu solder alloy. <i>Journal of Alloys and Compounds</i> , 2009 , 485, 225-230	5-7	81
402	Electromigration Test on Void Formation and Failure Mechanism of FCBGA Lead-Free Solder Joints. 2009 , 32, 79-88		8
401	Evolution of Ag ₃ Sn compounds in solidification of eutectic Sn-3.5Ag solder. 2009 ,		3
400	Effects of Thermal Storage and Cu Addition on Adhesive Strength and Microstructure of Sn-3.0 mass% Ag-1.5 mass% Sb-xCu Solder Joints. 2009 , 50, 899-908		
399	Microstructure and creep properties of Sn-Ag-Cu lead-free solders bearing minor amounts of the rare earth cerium. <i>Soldering and Surface Mount Technology</i> , 2010 , 22, 30-36	1.4	17

398	Reliability evaluation of SnAgCu/SnAgCuCe solder joints based on finite element simulation and experiments. <i>Soldering and Surface Mount Technology</i> , 2010 , 22, 57-64	1.4	4
397	Effects of Zn additions on the structure of the soldered Sn-3.5Ag and Cu interfaces. <i>Soldering and Surface Mount Technology</i> , 2010 , 22, 13-20	1.4	7
396	Early stages of intermetallic compound formation and growth during lead-free soldering. 2010 , 58, 4900-4910	74	
395	Formation of Ag ₃ Sn plates in SnAgCu solder bumps. 2010 , 527, 2588-2591		22
394	Interfacial Reactions Between Sn-Zn Alloys and Ni Substrates. 2010 , 39, 209-214		20
393	Formation and Growth of Intermetallic Compound Cu ₆ Sn ₅ at Early Stages in Lead-Free Soldering. 2010 , 39, 2574-2582		28
392	Growth Behavior of Intermetallic Compounds at SnAgCu/Ni and Cu Interfaces. 2010 , 19, 129-134		8
391	Effect of praseodymium on the microstructure and properties of Sn _{3.8} Ag _{0.7} Cu solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 910-916	2.1	30
390	Investigation on Sn grain number and crystal orientation in the SnAgCu/Cu solder joints of different sizes. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 1174-1180	2.1	21
389	A review on the interfacial intermetallic compounds between SnAgCu based solders and substrates. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 421-440	2.1	107
388	Investigation of the fracture morphologies of Sn _{3.8} Ag _{0.7} Cu joints under high-velocity conditions. <i>Journal of Materials Science: Materials in Electronics</i> , 2010 , 21, 1076-1082	2.1	2
387	Damping characteristics of Sn ₃ Ag _{0.5} Cu and Sn ₃ Pb solders studied by dynamic mechanical analysis. 2010 , 63, 957-960		14
386	Effect of alloying elements on properties and microstructures of SnAgCu solders. 2010 , 87, 2025-2034		110
385	Morphology and mechanical properties of intermetallic compounds in SnAgCu solder joints. 2010 , 87, 2416-2422		30
384	Effect of particle size distributions on the rheology of Sn/Ag/Cu lead-free solder pastes. 2010 , 31, 594-598		24
383	Improved method for determining the shear strength of chip component solder joints. <i>Microelectronics Reliability</i> , 2010 , 50, 235-241	1.2	7
382	Reliability study of SnAgCuCe soldered joints in quad flat packages. <i>Microelectronics Reliability</i> , 2010 , 50, 2071-2077	1.2	12
381	Effect of RE on Microstructure and Interfacial Reactions of SnAgCu Solder. 2010 , 154-155, 87-90		2

380	Abnormal spalling phenomena in the Sn-0.7Cu/Au/Ni/SUS304 interfacial reactions. 2010 , 25, 2278-2286		9
379	Continuum damage evolution in Pb-free solder joint under shear fatigue loadings. 2010 ,		2
378	Interfacial reactions between Sn-Cu solders and Ni-Co alloys at 250 °C. 2010 , 25, 1321-1328		7
377	Study on IMC morphology and impact to solder joint performance for different halogen free (HF) flux in semiconductor application. 2010 ,		
376	Effect of phosphorus element on the comprehensive properties of Sn-Cu lead-free solder. <i>Journal of Alloys and Compounds</i> , 2010 , 491, 382-385	5-7	29
375	The adsorption of Ag ₃ Sn nano-particles on Cu ₃ Sn intermetallic compounds of Sn-Ag _{0.5} Cu/Cu during soldering. <i>Journal of Alloys and Compounds</i> , 2010 , 492, 433-438	5-7	58
374	Pb-free solder-alloy based on Sn-Zn-Bi with the addition of germanium. <i>Journal of Alloys and Compounds</i> , 2010 , 497, 428-431	5-7	40
373	Effects of cerium content on wettability, microstructure and mechanical properties of Sn-Ag _{0.5} Te solder alloys. <i>Journal of Alloys and Compounds</i> , 2010 , 499, 154-159	5-7	37
372	Revisiting mechanisms to inhibit Ag ₃ Sn plates in Sn-Ag _{0.5} Cu solders with 1wt.% Zn addition. <i>Journal of Alloys and Compounds</i> , 2010 , 500, 39-45	5-7	32
371	Influence of thermal aging on microhardness and microstructure of Sn _{0.3} Ag _{0.7} Cu-In lead-free solders. <i>Journal of Alloys and Compounds</i> , 2010 , 504, L5-L9	5-7	26
370	The study of mechanical properties of Sn-Ag _{0.5} Cu lead-free solders with different Ag contents and Ni doping under different strain rates and temperatures. <i>Journal of Alloys and Compounds</i> , 2010 , 507, 215-224	5-7	108
369	Wettability and interfacial reactions between the molten Sn _{0.0} wt%Ag _{0.5} wt%Cu solder (SAC305) and Ni ₆₀ alloys. <i>Journal of Alloys and Compounds</i> , 2010 , 507, 419-424	5-7	16
368	Effect of solder volume on diffusion kinetics and mechanical properties of microbump solder joints. 2010 ,		1
367	Near-eutectic Sn-Ag-Cu solder bumps formation for flip-chip interconnection by electrodeposition. 2010 ,		
366	Effect of Cu content on the interfacial reliability of SnAgCu solder joints. 2010 ,		
365	. 2011 , 11, 141-147		7
364	Diffusion kinetics and mechanical behavior of lead-free microbump solder joints in 3D packaging applications. 2011 ,		
363	Investigation on microstructures and properties of low Ag content lead-free solder alloy. 2011 ,		1

362	Correlation between Ag content and Cu pad consumption in lead-free solder joints under electron current stressing. 2011 ,			1
361	. 2011 ,			
360	The Morphology and Evolution of Cu ₆ Sn ₅ at the Interface of Sn-2.5Ag-0.7Cu-0.1RE/Cu Solder Joint during the Isothermal Aging. 2011 , 704-705, 685-689			2
359	Solder Joint Reliability of SnAgCu Solder Refinished Components Under Temperature Cycling Test. 2011 , 1, 798-808			5
358	Computational investigation of intermetallic compounds (Cu ₆ Sn ₅ and Cu ₃ Sn) growth during solid-state aging process. 2011 , 50, 1692-1700			23
357	Evolution of nano-Ag ₃ Sn particle formation on Cu ₆ Sn intermetallic compounds of Sn _{3.5} Ag _{0.5} Cu composite solder/Cu during soldering. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 2326-2333	5-7		72
356	Evolution of Ag ₃ Sn intermetallic compounds during solidification of eutectic Sn _{3.5} Ag solder. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 2510-2517	5-7		35
355	Effect of soldering condition on formation of intermetallic phases developed between Sn _{0.3} Ag _{0.7} Cu low-silver lead-free solder and Cu substrate. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 6276-6279	5-7		39
354	Evolution of Ag ₃ Sn at Sn _{3.0} Ag _{0.3} Cu _{0.05} Cr/Cu joint interfaces during thermal aging. <i>Journal of Alloys and Compounds</i> , 2011 , 509, 6666-6672	5-7		30
353	Indium Addition on Intermetallic Compound Evolution in Tin-Silver Solder Bump. 2011 , 52, 1522-1524			4
352	Influence of Intermetallic Characteristics on the Solder Joint Strength of Halogen-Free Printed Circuit Board Assembly. 2011 , 133,			3
351	Influence of crystallographic orientation of Sn ₃ Ag _{0.5} Cu on electromigration in flip-chip joint. <i>Microelectronics Reliability</i> , 2011 , 51, 2290-2297	1.2		19
350	Microstructural evolutions of Cu(Ni)/AuSn/Ni joints during reflow. 2011 , 21, 347-354			13
349	Effect of adding Ce on interfacial reactions between Sn ₃ Ag solder and Cu. <i>Journal of Materials Science: Materials in Electronics</i> , 2011 , 22, 745-750	2.1		14
348	Recent advances on Sn ₃ Cu solders with alloying elements: review. <i>Journal of Materials Science: Materials in Electronics</i> , 2011 , 22, 565-578	2.1		48
347	Effect of nano-TiO ₂ addition on the microstructure and bonding strengths of Sn _{3.5} Ag _{0.5} Cu composite solder BGA packages with immersion Sn surface finish. <i>Journal of Materials Science: Materials in Electronics</i> , 2011 , 22, 1443-1449	2.1		35
346	Investigations of wetting properties of Ni ₃ V and Ni ₃ Co alloys by Sn, Sn ₃ Pb, Sn ₃ Cu, and Sn ₃ Ag _{0.5} Cu solders. 2011 , 42, 350-355			9
345	Wetting and interfacial reaction characteristics of Sn-1.2Ag-0.5Cu-xIn quaternary solder alloys. 2011 , 17, 521-526			13

344	Localized Recrystallization Induced by Subgrain Rotation in Sn-3.0Ag-0.5Cu Ball Grid Array Solder Interconnects During Thermal Cycling. 2011 , 40, 2470-2479		16
343	Shear strength of Cu/In ₈ Sn/Cu diffusion soldered interconnections. <i>Science and Technology of Welding and Joining</i> , 2011 , 16, 541-545	3-7	5
342	Fractural Research on Ti ₂ AlC/TiAl Compound Materials. 2011 , 306-307, 827-830		
341	Effect of RE on Creep Rupture Life of SnAgCu Solder Joints. 2011 , 687, 39-43		
340	Influence of reflow atmosphere on SAC305 solder joints. 2011 ,		0
339	Microstructure Evolution and Mechanical Properties of the Ni/Ni Soldered Joints. 2011 , 172-174, 863-868		
338	Interfacial Microstructures and Kinetics of Sn _{2.5} Ag _{0.7} Cu/Cu. 2011 , 687, 112-116		1
337	Effects of bulk Cu ₆ Sn ₅ intermetallic compounds on the properties of Sn-Ag-Cu-Ce soldered joints. <i>Soldering and Surface Mount Technology</i> , 2011 , 23, 4-9	1-4	7
336	Shear test parameters for brittle fracture of flip chip solder joint. 2011 , 27, 696-701		1
335	A Comparative Study of Soldering Temperatures and Materials on the Reliability of Photovoltaic Modules. 2012 , 562-564, 188-191		
334	Intermetallic Compound Formation on Solder Alloy/Cu-Substrate Interface Using Lead-Free Sn-0.7Cu/Recycled-Aluminum Composite Solder. 2012 , 620, 105-111		16
333	Electrical resistivity of Sn ₈₅ Ag ₁₀ Bi solder melts. 2012 , 85, 453-460		2
332	Effect of adding porous Cu on the microstructure and mechanical properties of Pb-free solder joint. 2012 ,		1
331	Study of critical factors influencing the solidification undercooling behavior of Sn-3.0Ag-0.5Cu (SAC) lead-free solder and SAC/Cu joints. 2012 ,		2
330	A review on effect of minor alloying elements on thermal cycling and drop impact reliability of low-Ag Sn-Ag-Cu solder joints. 2012 , 29, 47-57		36
329	ELECTROLUMINESCENCE OBSERVATION OF MICROCRACK GROWTH BEHAVIOR OF CRYSTALLINE SILICON SOLAR MODULES FABRICATED BY HOT-AIR SOLDERING TECHNOLOGY. 2012 , 06, 43-48		2
328	Interfacial IMC layer growth and tensile properties of low-silver Cu/SACBE/Cu solder joints. <i>Soldering and Surface Mount Technology</i> , 2012 , 24, 249-256	1-4	5
327	Effect of Crystal Orientation on Sn Whisker-Free Sn-Ag-Cu Plating. 2012 , 53, 2078-2084		1

326	High-temperature fatigue life of flip chip lead-free solder joints at varying component stand-off height. <i>Microelectronics Reliability</i> , 2012 , 52, 2982-2994	1.2	9
325	Evolution of Intermetallic Compounds between Sn-0.3Ag-0.7Cu Low-silver Lead-free Solder and Cu Substrate during Thermal Aging. <i>Journal of Materials Science and Technology</i> , 2012 , 28, 53-59	9.1	46
324	Modifying the mechanical properties of lead-free solder by adding iron and indium and using a lap joint test. <i>Journal of Materials Science: Materials in Electronics</i> , 2012 , 23, 1739-1749	2.1	8
323	Alternating reaction phases in SnCu/NiCu solid-state reactions. <i>Journal of Alloys and Compounds</i> , 2012 , 545, 28-31	5.7	6
322	Influence of IMCs volume ratio in micro-scale solder joints on their mechanical integrity. 2012 ,		2
321	Soldering and interfacial characteristics of Sn-3.5Ag solder containing zinc nanoparticles. 2012 ,		
320	Influence of soldering temperature and dwelling time on morphological evolution of Cu ₆ Sn ₅ intermetallic compound at the Sn-3.0Ag-0.5Cu/Cu interface. 2012 ,		
319	Fatigue Life Predicting of Lead-Free Soldered Joints of QFP Device. 2012 ,		
318	Fatigue failure processes in Pb-free solder joints using continuum damage and cohesive zone models. 2012 ,		1
317	Growth and shear strength of intermetallic compounds in Sn-Ag-Cu solder joints. 2012 ,		
316	Study on short time interfacial reactions between Sn-3.0Ag-0.5Cu solder balls and ENEPIG pads. 2012 ,		0
315	Experimental and computational study of the morphological evolution of intermetallic compound (Cu ₆ Sn ₅) layers at the Cu/Sn interface under isothermal soldering conditions. 2012 , 60, 5125-5134		25
314	Effect of iron and indium on IMC formation and mechanical properties of lead-free solder. 2012 , 553, 22-31		38
313	Interface reaction between SnAgCu/SnAgCuCe solders and Cu substrate subjected to thermal cycling and isothermal aging. <i>Journal of Alloys and Compounds</i> , 2012 , 510, 38-45	5.7	78
312	Effects of Zn addition and aging treatment on tensile properties of SnAgCu alloys. <i>Journal of Alloys and Compounds</i> , 2012 , 527, 226-232	5.7	35
311	In-situ study on growth behavior of Ag ₃ Sn in Sn ₃ .5Ag/Cu soldering reaction by synchrotron radiation real-time imaging technology. <i>Journal of Alloys and Compounds</i> , 2012 , 537, 286-290	5.7	44
310	Phase-field simulations of intermetallic compound growth in Cu/Sn/Cu sandwich structure under transient liquid phase bonding conditions. 2012 , 60, 6278-6287		75
309	Damage of lead-free solder joints in flip chip assemblies subjected to high-temperature thermal cycling. 2012 , 65, 470-484		15

308	Interfacial reactions of high-temperature ZnSn solders with Ni substrate. 2012 , 136, 325-333		13
307	Effects of small amount of active Ti element additions on microstructure and property of Sn3.5Ag0.5Cu solder. 2012 , 558, 478-484		53
306	Interfacial Reaction of Molten Sn on a Strained Cu Electroplated Layer. 2012 , 41, 2470-2477		3
305	Undercooling Behavior and Intermetallic Compound Coalescence in Microscale Sn-3.0Ag-0.5Cu Solder Balls and Sn-3.0Ag-0.5Cu/Cu Joints. 2012 , 41, 3169-3178		12
304	Wettability and Interfacial Characteristic of Sn-Ag-Cu Solder on Ni Substrates at Elevated Temperatures. 2012 , 554-556, 703-708		
303	Effects of cooling rate and solder volume on the formation of large Ag ₃ Sn plates in Sn-Ag based solder joints. 2012 ,		0
302	Influence of cooling speed on the solidification of a hyper-eutectic Cu ₃ Sn alloy. 2012 , 209, 825-831		5
301	Electrochemical corrosion behaviour of SnAgCu (SAC) eutectic alloy in a chloride containing environment. 2012 , 63, 492-496		8
300	Concurrent nucleation, formation and growth of two intermetallic compounds (Cu ₆ Sn ₅ and Cu ₃ Sn) during the early stages of lead-free soldering. 2012 , 60, 923-934		66
299	Precipitation of large Ag ₃ Sn intermetallic compounds in SnAg _{2.5} microbumps after multiple reflows in 3D-IC packaging. 2012 , 134, 340-344		18
298	Solid-state interfacial reactions at the solder joints employing Au/Pd/Ni and Au/Ni as the surface finish metallizations. <i>Microelectronics Reliability</i> , 2012 , 52, 385-390	1.2	19
297	Investigation of intermetallic compounds (IMCs) in electrochemically stripped solder joints with SEM. <i>Microelectronics Reliability</i> , 2012 , 52, 1138-1142	1.2	26
296	Optimization of Pb-Free Solder Joint Reliability from a Metallurgical Perspective. 2012 , 41, 253-261		15
295	Ni Interdiffusion Coefficient and Activation Energy in Cu ₆ Sn ₅ . 2012 , 41, 172-175		18
294	Influence of silver additions on electrical, mechanical and structures properties of rapidly solidified Sn0.7%Cu alloy from melt. <i>Journal of Materials Science: Materials in Electronics</i> , 2012 , 23, 94-99	2.1	4
293	Effect of TiO ₂ nanoparticles on the microstructure and bonding strengths of Sn0.7Cu composite solder BGA packages with immersion Sn surface finish. <i>Journal of Materials Science: Materials in Electronics</i> , 2012 , 23, 681-687	2.1	29
292	Effect of cerium addition on wetting, undercooling, and mechanical properties of Sn-3.9Ag-0.7Cu Pb-free solder alloys. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 3456-3466	2.1	7
291	Review on microstructure evolution in SnAgCu solders and its effect on mechanical integrity of solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 3149-3169	2.1	43

290	Intermetallic compound layer growth between SnAgCu solder and Cu substrate in electronic packaging. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 3249-3254	2.1	22
289	Reactive wetting of Sn _{3.5} Ag _{0.5} Cu solder on copper and silver coated copper substrates. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 1714-1719	2.1	2
288	Effects of reflow on the interfacial characteristics between Zn nanoparticles containing Sn-3.8Ag-0.7Cu solder and copper substrate. <i>Soldering and Surface Mount Technology</i> , 2013 , 25, 91-98	1.4	22
287	Spreading Behavior and Evolution of IMCs During Reactive Wetting of SAC Solders on Smooth and Rough Copper Substrates. 2013 , 42, 2696-2707		4
286	Corrosion Behavior of Pb-Free Sn-1Ag-0.5Cu-XNi Solder Alloys in 3.5% NaCl Solution. 2013 , 42, 628-638		15
285	Nanomechanical characterization of SnAgCu/Cu joints Part 1: Young's modulus, hardness and deformation mechanisms as a function of temperature. 2013 , 61, 2460-2470		56
284	Phase-field simulations of intermetallic compound evolution in Cu/Sn solder joints under electromigration. 2013 , 61, 7142-7154		31
283	Effects of nano-Al ₂ O ₃ particles on microstructure and mechanical properties of Sn _{3.5} Ag _{0.5} Cu composite solder ball grid array joints on Sn/Cu pads. 2013 , 50, 774-781		45
282	. 2013 ,		2
281	Investigation on reliability of low-Ag lead-free solder alloy. 2013 ,		
280	Nucleation behaviors of the intermetallic compounds at the initial interfacial reaction between the liquid Sn _{3.0} Ag _{0.5} Cu solder and Ni substrate during reflow. 2013 , 32, 6-11		8
279	Role of reactant concentration in size control of SnAgCu nanoparticles. 2013 , 23, 1668-1673		3
278	Ex situ observations of fast intermetallic growth on the surface of interfacial region between eutectic SnBi solder and Cu substrate during solid-state aging process. <i>Microelectronics Reliability</i> , 2013 , 53, 899-905	1.2	3
277	Mechanical shock behavior of Sn _{3.9} Ag _{0.7} Cu and Sn _{3.9} Ag _{0.7} Cu _{0.5} Ce solder joints. <i>Microelectronics Reliability</i> , 2013 , 53, 733-740	1.2	16
276	Study of Intermetallic Growth and Kinetics in Fine-Pitch Lead-Free Solder Bumps for Next-Generation Flip-Chip Assemblies. 2013 , 42, 230-239		16
275	Computational Investigation of the Evolution of Intermetallic Compounds Affected by Microvoids During the Solid-State Aging Process in the Cu-Sn System. 2013 , 42, 999-1009		2
274	Effect of graphene nanosheets reinforcement on the performance of Sn ₃ Ag ₃ Cu lead-free solder. 2013 , 562, 25-32		113
273	Combined effects of Ag content and cooling rate on microstructure and mechanical behavior of SnAgCu solders. 2013 , 45, 377-383		33

272	Comparison of spreading behaviour and interfacial microstructure in Sn0.7Cu, Sn0.3Ag0.7Cu and Sn0.5Ag0.5Cu lead free solder alloys on Fe2Ni substrate. 2013 , 29, 464-473			7
271	Interfacial intermetallic compound growth and shear strength of low-silver SnAgCuBiNi/Cu lead-free solder joints. 2013 , 20, 883-889			4
270	Wetting Behavior and Interfacial Characteristic of the Sn-3.5Ag Alloy on Ni Substrates. 2013 , 834-836, 335-339			
269	Dissolution and precipitation of Ag3Sn plates in ultra fine solder joints using synchrotron radiation real-time imaging technology. 2013 ,			
268	Effect of Sn grain orientation on polarity effect in Sn-Ag-Cu solder joints during electromigration. 2013 ,			
267	Interfacial Reaction of Sn-Ag-Cu Lead-Free Solder Alloy on Cu: A Review. 2013 , 2013, 1-11			21
266	Dependence of electromigration damage on Sn grain orientation in SnAgCu solder joints. 2013 , 114, 153509			28
265	The effect of Pb contamination on the solidification behaviors and mechanical properties of backward compatible solder joints. 2013 ,			
264	Effect of the cross-interaction on the solidification behaviors of Ni/Sn-Ag-Cu/Cu solder joint. 2013 ,			
263	Fracture mode of the IMC layer in solder joints. 2013 ,			0
262	Interfacial reaction of a Sn-3.0Ag-0.5Cu thin film during solder reflow. <i>Soldering and Surface Mount Technology</i> , 2013 , 25, 15-23	1.4		12
261	In situ heating transmission electron microscopy observation of nanoeutectic lamellar structure in Sn-Ag-Cu alloy on Au under-bump metallization. 2013 , 19 Suppl 5, 49-53			1
260	Effect of Lanthanum Doping on the Microstructure Evolution and Intermetallic Compound (IMC) Growth during Thermal Aging of SAC305 Solder Alloy. 2013 , 03,			2
259	Reliability of 1206 capacitor/SAC305 solder joint reflowed in protective atmosphere. 2014 ,			
258	IMC Growth at the Interface of Sn0.0Ag0.5Zn Solder Joints with Cu, Ni, and NiW Substrates. 2014 , 43, 4119-4125			3
257	Investigation on the intermetallic compound layer growth of Sn0.5Ag0.7CuGa/Cu solder joints during isothermal aging. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 5195-5200	2.1		15
256	Impact properties of Sn-3Ag-0.5Cu solder ball joint with epoxy-based flux. 2014 ,			
255	. 2014 ,			

254	Study of melting point: Solderability and interface microstructure of SnAgCu-XSm/Cu. 2014,		0
253	Thermal cycling reliability of SnAgCu solder joints in WLCSP. 2014,		5
252	Effect of microwave hybrid heating on the formation of intermetallic compound of Sn-Ag-Cu solder joints. 2014,		2
251	The growth of Ag ₃ Sn intermetallic compound under a temperature gradient. 2014,		
250	Effect of variation in the reflow profile on the microstructure of near eutectic SnAgCu alloys. 2014,		1
249	Effect of trace platinum additions on the interfacial morphology of Sn ₈₅ Ag ₁₀ Cu alloy aged for long hours. <i>Microelectronics Reliability</i> , 2014 , 54, 2536-2541	1.2	5
248	Effect of TiO ₂ Reinforcement on Microstructure and Microhardness of Low-Silver SAC107 Lead-Free Solder Composite Solder. 2014 , 803, 273-277		5
247	The Reliability of Microalloyed Sn-Ag-Cu Solder Interconnections Under Cyclic Thermal and Mechanical Shock Loading. 2014 , 43, 4090-4102		10
246	Enhanced growth of the Cu ₆ Sn ₅ phase in the Sn/Ag/Cu and Sn/Cu multilayers subjected to applied strain. <i>Journal of Alloys and Compounds</i> , 2014 , 591, 297-303	5:7	16
245	Development of solidification microstructure and tensile mechanical properties of Sn-0.7Cu and Sn-0.7Cu-2.0Ag solders. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 478-486	2.1	14
244	Interfacial Reactions Between Columnar or Layered Ni(P) Layers and Sn-Ag-Cu Solder. 2014 , 43, 277-283		3
243	Thermo-electric finite element analysis and characteristic of thermoelectric generator with intermetallic compound. 2014 , 120, 194-199		3
242	Prediction of processing maps for transient liquid phase diffusion bonding of Cu/Sn/Cu joints in microelectronics packaging. <i>Microelectronics Reliability</i> , 2014 , 54, 1401-1411	1.2	21
241	Effect of reflow temperature and substrate roughness on wettability, IMC growth and shear strength of SAC387/Cu bonds. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 864-872	2.1	5
240	Effects of Al and Fe additions on microstructure and mechanical properties of SnAgCu eutectic lead-free solders. 2014 , 593, 79-84		26
239	Effect of Ni-coated graphene on the performance of SAC305 solder. 2014,		1
238	Research on reliability of Sn-1.0Ag-0.5Cu low-Ag lead-free solder alloy. 2014,		
237	Effects of Electroplating Additives on the Interfacial Reactions between Sn and Cu Electroplated Layers. 2014 , 161, D522-D527		15

236	Effect of aluminium additions on wettability and intermetallic compound (IMC) growth of lead free Sn (2 wt. % Ag, 5 wt. % Bi) soldered joints. 2014 , 10, 997-1004		26
235	Structure and properties of lead-free solders bearing micro and nano particles. 2014 , 82, 1-32		188
234	Effects of indium addition on properties and wettability of Sn _{0.7} Cu _{0.2} Ni lead-free solders. 2014 , 64, 15-20		51
233	Self-assembly of Sn-3Ag-0.5Cu Solder in Thermoplastic Resin Containing Carboxyl Group and its Interconnection. 2014 , 43, 3411-3422		
232	Effect of 1 wt% ZnO nanoparticles addition on the microstructure, IMC development, and mechanical properties of high Bi content Sn _{77.6} Bi _{0.4} Ag solder on Ni metalized Cu pads. <i>Journal of Materials Science: Materials in Electronics</i> , 2014 , 25, 2169-2176	2.1	6
231	Isothermal Ageing of SnAgCu Solder Alloys: Three-Dimensional Morphometry Analysis of Microstructural Evolution and Its Effects on Mechanical Response. 2014 , 43, 1026-1042		14
230	Electromigration in Cu-Cored Sn-3.5Ag-0.7Cu Solder Interconnects Under Current Stressing. 2014 , 43, 1144-1149		1
229	Confinement Effects on Evolution of Intermetallic Compounds During Metallurgical Joint Formation. 2014 , 43, 2510-2520		5
228	Microstructure and shear strength of Sn ₃₇ Pb/Cu solder joints subjected to isothermal aging. <i>Microelectronics Reliability</i> , 2014 , 54, 1575-1582	1.2	47
227	Growth kinetics of Ag ₃ Sn in silicon solar cells with a sintered Ag metallization layer. 2014 , 123, 139-143		29
226	Microstructural evolution at Cu/SnAgCu/Cu and Cu/SnAgCu/NiAu ball grid array interfaces during thermal ageing. <i>Journal of Alloys and Compounds</i> , 2014 , 613, 387-394	5.7	15
225	Effect of Sn grain orientation on Cu diffusion in SnAgCu solder interconnect undergoing electromigration. 2015 ,		
224	Effect of Dispersoids in β -Sn Matrix on Creep Properties of Chip Scale Packages Joined by Sn-xAg-0.5 mass%Cu (x = 1, 2, 3 and 4 mass%) Solder Alloys. 2015 , 56, 507-512		1
223	Temperature cycling aging studies of Zn-based solders for high-temperature applications. 2015 ,		
222	Influence of nanoparticle addition on the formation and growth of intermetallic compounds (IMCs) in Cu/Sn-Ag-Cu/Cu solder joint during different thermal conditions. 2015 , 16, 033505		24
221	. 2015 ,		
220	Interfacial reactions and formation of intermetallic compound of Sn-ball/Sn-3.0Ag-0.5Cu-paste/Cu joints in flip-chip on BGA packaging. 2015 ,		
219	Evaluation of the characteristics of 305SAC lead-free solder joints between a chip electrode and a Cu-pad in automotive electronics. 2015 , 16, 2483-2490		7

218	Microstructural discovery of Al addition on Sn0.5Cu-based Pb-free solder design. <i>Journal of Alloys and Compounds</i> , 2015 , 650, 106-115	5.7	20
217	Influence of La2O3 nanoparticle additions on microstructure, wetting, and tensile characteristics of SnAgCu alloy. <i>Materials and Design</i> , 2015 , 87, 370-379	8.1	55
216	Parametric Study on Pressureless Sintering of Nanosilver Paste to Bond Large-Area (100 mm ²) Power Chips at Low Temperatures for Electronic Packaging. 2015 , 44, 3973-3984		24
215	Effects of nano-SiO ₂ particles addition on the microstructure, wettability, joint shear force and the interfacial IMC growth of Sn3.0Ag0.5Cu solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 9387-9395	2.1	26
214	Effect of intermetallic compound layer thickness on the shear strength of 1206 chip resistor solder joint. <i>Soldering and Surface Mount Technology</i> , 2015 , 27, 52-58	1.4	6
213	Improvement of dispersion of pure indium particles by forming indium-complex covering. 2015 , 144, 36-38		
212	Effect of TiO ₂ nanoparticle addition and cooling rate on microstructure and mechanical properties of novel Sn1.5Sb0.7Cu solders. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 3493-3501	2.1	3
211	Interfacial Reaction and Mechanical Characterization of SnAgCu/Au/Pd(P)/Cu Solder Joints: Thick Pd(P) Deposition. 2015 , 44, 568-580		10
210	Failure study of solder joints subjected to random vibration loading at different temperatures. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 2374-2379	2.1	11
209	Investigating the effect of isothermal aging on the morphology and shear strength of Sn-5Sb solder reinforced with carbon nanotubes. <i>Journal of Alloys and Compounds</i> , 2015 , 649, 368-374	5.7	35
208	Indium, chromium and nickel-modified eutectic Sn0.7 wt% Cu lead-free solder rapidly solidified from molten state. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 6625-6632	2.1	17
207	Role of diffusion anisotropy in Sn in microstructural evolution of Sn-3.0Ag-0.5Cu flip chip bumps undergoing electromigration. 2015 , 100, 98-106		51
206	Size effect on ductile-to-brittle transition in Cu-solder-Cu micro-joints. 2015 ,		8
205	Intermetallic Layer Growth Kinetics in Sn-Ag-Cu System using Diffusion Multiple and Reflow Techniques. 2015 , 17, 512-522		4
204	Micro-Scale Solder Joints between Cu-Cu Wires Formed by Nanoparticle Enabled Lead-Free Solder Pastes. 2016 ,		1
203	Investigation in microstructure and mechanical properties of Ni-coated multi-wall carbon nanotubes doped Sn3.0Ag0.5Cu solder alloys. 2016 ,		
202	Nanoscale Three-Dimensional Microstructural Characterization of an Sn-Rich Solder Alloy Using High-Resolution Transmission X-Ray Microscopy (TXM). 2016 , 22, 808-13		7
201	Interfacial reactions and microstructural evolution of BGA structure Cu/Sn3.0Ag0.5Cu/Sn58Bi/Cu mixed assembly joints during isothermal aging. 2016 ,		1

200	Effect of Flux onto Intermetallic Compound Formation and Growth. 2016 , 74, 00034		2
199	Wettability study of lead free solder paste and its effect towards multiple reflow. 2016 , 74, 00038		0
198	Effects of cobalt on the nucleation and grain refinement of Sn-3Ag-0.5Cu solders. <i>Journal of Alloys and Compounds</i> , 2016 , 682, 326-337	5.7	42
197	A reliability assessment guide for the transition planning to lead-free electronics for companies whose products are RoHS exempted or excluded. <i>Microelectronics Reliability</i> , 2016 , 62, 113-123	1.2	18
196	Effects of Reflow Cooling Rate on the Growth of Ag ₃ Sn Platelets and Deformation of Solder Balls. 2016 ,		5
195	Employment of roll-offset printing for fabrication of solder bump arrays: Harnessing the rheological properties of lead-free solder pastes using particle size distribution. 2016 , 164, 128-134		9
194	Effect of aluminum addition on the electrochemical corrosion behavior of Sn ₃ Ag _{0.5} Cu solder alloy in 3.5 wt% NaCl solution. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 12193-12200 ^{2,1}		16
193	Recent progress of Sn ₃ Ag _{0.5} Cu lead-free solders bearing alloy elements and nanoparticles in electronic packaging. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 12729-12763	2.1	21
192	Effects of Cu Electroplating Formulas on the Interfacial Microstructures of Sn/Cu Joints. 2016 , 163, D734-D741 ₂₅		
191	Fracture toughness of intermetallic Cu ₆ Sn ₅ in lead-free solder microelectronics. 2016 , 123, 38-41		19
190	Design and performance of Ag nanoparticle-modified graphene/SnAgCu lead-free solders. 2016 , 667, 87-96		36
189	Study on microstructure and properties of Sn _{0.3} Ag _{0.7} Cu solder bearing Nd. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 8771-8777	2.1	11
188	Importance of Bonding Atmosphere for Mechanical Reliability of Reactively Bonded Solder Joints. 2016 , 138,		11
187	Effect of Graphene Nanoplatelets on Wetting, Microstructure, and Tensile Characteristics of Sn-3.0Ag-0.5Cu (SAC) Alloy. 2016 , 47, 494-503		41
186	Microstructure and mechanical properties of Pb-free Sn ₃ .0Ag _{0.5} Cu solder pastes added with NiO nanoparticles after reflow soldering process. <i>Materials and Design</i> , 2016 , 90, 499-507	8.1	54
185	Asymmetrical Precipitation of Ag ₃ Sn Intermetallic Compounds Induced by Thermomigration of Ag in Pb-Free Microbumps During Solid-State Aging. 2016 , 45, 30-37		18
184	Sn ₃ .0Ag _{0.5} Cu nanocomposite solders reinforced by graphene nanosheets. <i>Journal of Materials Science: Materials in Electronics</i> , 2016 , 27, 6809-6815	2.1	21
183	Cooling thermal parameters and microstructure features of directionally solidified ternary SnBi(Cu,Ag) solder alloys. 2016 , 114, 30-42		25

182	Effects of Cooling Rate on the Microstructure and Morphology of Sn-3.0Ag-0.5Cu Solder. 2016 , 45, 182-190		16
181	Investigations on Microstructure and Mechanical Properties of the Cu/Pb-free Solder Joint Interfaces. <i>Springer Theses</i> , 2016 ,	0.1	0
180	Effects of deposition method on the microstructure and intermetallic compound formation in AgSn bilayers. 2016 , 295, 88-92		6
179	Cu ₆ Sn ₅ crystal growth mechanisms during solidification of electronic interconnections. 2017 , 126, 540-551		51
178	Influence of SnO ₂ Nanoparticles Addition on Microstructure, Thermal Analysis, and Interfacial IMC Growth of Sn _{1.0} Ag _{0.7} Cu Solder. 2017 , 46, 4197-4205		14
177	Nucleation, grain orientations, and microstructure of Sn-3Ag-0.5Cu soldered on cobalt substrates. <i>Journal of Alloys and Compounds</i> , 2017 , 706, 596-608	5.7	25
176	Thermal cycling, shear and insulating characteristics of epoxy embedded Sn-3.0Ag-0.5Cu (SAC305) solder paste for automotive applications. <i>Journal of Alloys and Compounds</i> , 2017 , 704, 795-803	5.7	24
175	Early stages of localized recrystallization in Pb-free BGA solder joints subjected to thermomechanical stress. <i>Journal of Alloys and Compounds</i> , 2017 , 704, 574-584	5.7	30
174	Effect of Bonding Time and Bonding Temperature on Lead-Free Solder Joints Dispersed Pillar Shaped IMCs. 2017 , 184, 214-222		2
173	Effects of Sn grain c-axis on electromigration behavior in BGA Sn _{3.0} Ag _{0.5} Cu solder interconnects. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 10785-10793	2.1	3
172	Effect of Pr addition on properties and Sn whisker growth of Sn _{0.3} Ag _{0.7} Cu low-Ag solder for electronic packaging. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 10230-10244	2.1	25
171	Microcantilever Fracture Testing of Intermetallic Cu ₃ Sn in Lead-Free Solder Interconnects. 2017 , 46, 1607-1611		2
170	The Melting Characteristics and Interfacial Reactions of Sn-ball/Sn-3.0Ag-0.5Cu-paste/Cu Joints During Reflow Soldering. 2017 , 46, 1504-1515		4
169	Recrystallization induced by subgrain rotation in Pb-free BGA solder joints under thermomechanical stress. <i>Journal of Alloys and Compounds</i> , 2017 , 698, 706-713	5.7	25
168	Influence of Ce addition on Sn-3.0Ag-0.5Cu solder joints: Thermal behavior, microstructure and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2017 , 698, 317-328	5.7	36
167	Impact of thermal aging on the intermetallic compound particle size and mechanical properties of lead free solder for green electronics. <i>Microelectronics Reliability</i> , 2017 , 78, 311-318	1.2	8
166	Size effect on microstructure and tensile properties of Sn _{3.0} Ag _{0.5} Cu solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 17682-17692	2.1	12
165	Microstructure and mechanical behavior of Sn ₀ Bi ₀ Cu alloy. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 15708-15717	2.1	8

164	Fuzzy logic approach for investigation of microstructure and mechanical properties of Sn96.5-Ag3.0-Cu0.5 lead free solder alloy. <i>Soldering and Surface Mount Technology</i> , 2017 , 29, 191-198	1.4	10
163	Synthesis of SnAgCu nanoparticles with low melting point by the chemical reduction method. <i>Microelectronics Reliability</i> , 2017 , 78, 17-24	1.2	8
162	Effects of aging temperature on tensile and fatigue behavior of Sn-3.0Ag-0.5Cu solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 14884-14892	2.1	14
161	Influence of latent heat released from solder joints II: PCB deformation during reflow and pad cratering defects. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 1070-1077	2.1	2
160	Complex eutectic growth and Bi precipitation in ternary Sn-Bi-Cu and Sn-Bi-Ag alloys. <i>Journal of Alloys and Compounds</i> , 2017 , 691, 600-605	5.7	29
159	Microstructural stability, defect structures and deformation mechanisms in a Ag ₃ Sn/Cu ₃ Sn alloy. 2017 , 52, 2944-2956		5
158	Dominant effect of Sn grain orientation on electromigration-induced failure mechanism of Sn-3.0Ag-0.5Cu flip chip solder interconnects. 2017 ,		1
157	Microstructures and shear properties of mixed assembly BGA structure SnAgCu/SnBi(Ag)/Cu joints in board-level packaging. 2017 ,		1
156	Cu ₃ Sn Whiskers Precipitated in Sn3.0Ag0.5Cu/Cu Interconnection in Concentrator Silicon Solar Cells Solder Layer. <i>Materials</i> , 2017 , 10,	3.5	6
155	Effect of Ga on the Inoxidizability and Wettability of Sn-0.5Ag-0.7Cu-0.05Pr Solder. 2017 , 2017, 1-7		4
154	Electron Microscopy of the Tin-oxide Nanolayer Formed on the Surface of Sn-Ag-Cu Alloys. 2017 , 196, 012006		2
153	Nucleation and twinning in tin droplet solidification on single crystal intermetallic compounds. 2018 , 150, 281-294		20
152	Mechanical and electrical properties of reverse-offset printed Sn-Ag-Cu solder bumps. 2018 , 259, 126-133		4
151	Materials, processing and reliability of low temperature bonding in 3D chip stacking. <i>Journal of Alloys and Compounds</i> , 2018 , 750, 980-995	5.7	49
150	Towards femtosecond laser ablation ionization mass spectrometric approaches for chemical depth-profiling analysis of lead-free Sn solder bumps with minimized side-wall contributions. 2018 , 33, 283-293		12
149	In situ imaging of the soldering reactions in nanoscale Cu/Sn/Cu and Sn/Cu/Sn diffusion couples. 2018 , 123, 024302		1
148	Size effects on the interfacial reaction and microstructural evolution of Sn-ball/Sn3.0Ag0.5Cu-paste/Cu joints in board-level hybrid BGA interconnection at critical reflowing temperature. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 7651-7660	2.1	6
147	Heat-resistant die-attach with cold-rolled Ag sheet. 2018 , 11, 016501		11

146	Wetting of Sn-Zn-Ga and Sn-Zn-Na Alloys on Al and Ni Substrate. 2018 , 47, 49-60		9
145	Comparative study on the isothermal aging of bare Cu and ENImAg surface finish for Sn-Ag-Cu solder joints. <i>Journal of Alloys and Compounds</i> , 2018 , 740, 958-966	5-7	22
144	Electrochemical Behavior of Sn-9Zn-xTi Lead-Free Solders in Neutral 0.5M NaCl Solution. 2018 , 27, 2182-2191		4
143	Wetting and low temperature bonding of zirconia metallized with Sn0.3Ag0.7Cu-Ti alloys. 2018 , 44, 11456-11468		8
142	The Influence of Primary Cu ₆ Sn ₅ Size on the Shear Impact Properties of Sn-Cu/Cu BGA Joints. 2018 , 47, 84-95		5
141	Gold Passivated Cu-Cu Bonding At 140°C For 3D IC Packaging And Heterogeneous Integration Applications.. 2018 ,		
140	Physical properties of niobium-based intermetallics (Nb ₃ B; B = Os, Pt, Au): a DFT-based ab-initio study. 2018 , 91, 1		15
139	Intermetallic and tensile study of the newly developed Sn-2.0Ag-0.7Cu solder with addition of 0.5 wt.% zinc. 2018 ,		
138	Characteristics of SAC305 Lead-Free Powder Prepared by Centrifugal Atomization. 2018 , 777, 322-326		0
137	Effect of particle size distribution on the mechanical and electrical properties of reverse-offset printed SnAgCu solder bumps. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 19620-19631 ^{2,1}		1
136	Microstructural evolution and mechanical properties of Sn-Bi-Cu ternary eutectic alloy produced by directional solidification. 2018 , 21,		6
135	Effects of Dy substitution for Sn on the solderability and mechanical property of the standard near eutectic SnAgCu alloy. <i>Journal of Materials Science: Materials in Electronics</i> , 2018 , 29, 12662-12668	2.1	4
134	The Interfacial Intermetallic and Shear Strength of Ni Nanoparticle-Decorated Reduced Graphene Oxide Reinforced Sn _{2.5} Ag _{0.5} Cu Lead-Free Composite Soldering Joints. 2018 , 20, 1800147		7
133	Effect of Graphitic Carbon Nitride Nanosheets Addition on the Microstructure and Mechanical Properties of Sn-3.5Ag-0.5Cu Solder Alloy. 2018 , 47, 5614-5624		4
132	Insights into the plasticity of Ag ₃ Sn from density functional theory. 2018 , 110, 57-73		3
131	Studies of Interfacial Microstructures and Series Resistance on Electroplated and Hot-Dipped Sn-xCu Photovoltaic Modules. 2018 , 47, 6028-6035		5
130	Corrosion behavior of Sn-3.0Ag-0.5Cu alloy under chlorine-containing thin electrolyte layers. 2018 , 143, 347-361		26
129	Experimental and theoretical analysis of the classification of Sn0.3Ag0.7Cu lead-free solders powder. 2018 , 156, 277-282		4

128	Role of cerium in microstructure and corrosion properties of Sn-1.0Ag solder alloys. 2018 , 228, 309-313		21
127	Effect of additional elements on the low-cycle-fatigue characteristics of Sn-1.0Ag-0.7Cu solder obtained using a miniature-sized specimen. 2018 , 116, 180-191		6
126	Impact of different isothermal aging conditions on the IMC layer growth and shear strength of MWCNT-reinforced Sn ₃ Ag solder composites on Cu substrate. <i>Journal of Alloys and Compounds</i> , 2019 , 808, 151714	5.7	15
125	. 2019 ,		1
124	Suppressed Growth of (Fe, Cr Co Ni Cu)Sn Intermetallic Compound at Interface between Sn-3.0Ag-0.5Cu Solder and FeCoNiCrCu Substrate during Solid-state Aging. 2019 , 9, 10210		9
123	Temperature dependent mechanical properties of inter-metallic compounds in nano-solder joints. 2019 ,		1
122	Effects of Operating Parameters on the Cut Size of Turbo Air Classifier for Particle Size Classification of SAC305 Lead-Free Solder Powder. 2019 , 7, 427		2
121	Investigating the Effect of Ag Content on Mechanical Properties of Sn-Ag-Cu Micro-BGA Joints. 2019 , 48, 6866-6871		7
120	Roles of direct current in ultrafast wetting of 3YSZ by Sn ₃ Ag _{0.5} Cu and joining to Ni. 2019 , 7, 100399		2
119	Effects of Minor Cu, Ni and Ag Additions on the Reactions Between Sn-Based Solders and Co Substrate. 2019 , 71, 3023-3030		2
118	Investigation of anodic dissolution behaviour of intermetallic compound in Sn-3Ag-0.5Cu solder alloy by cyclic voltammetry. <i>Soldering and Surface Mount Technology</i> , 2019 , 31, 211-220	1.4	1
117	. 2019 ,		0
116	. 2019 ,		1
115	Effects of Ag contents in Sn ₃ Ag lead-free solders on microstructure, corrosion behavior and interfacial reaction with Cu substrate. 2019 , 29, 1696-1704		16
114	Unique interfacial reaction and so-induced change in mechanical performance of Sn ₃ Ag _{0.5} Cu/Cu solder joints formed during undercooled and eutectic liquid soldering processes. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 4770-4781	2.1	1
113	Influence of Zn Concentration on Interfacial Intermetallics During Liquid and Solid State Reaction of Hypo and Hypereutectic Sn-Zn Solder Alloys. 2019 , 48, 2731-2736		2
112	Influence of Indium on Microstructure and Properties of Sn-Pb Binary Alloy Applied in Photovoltaic Ribbon. 2019 , 28, 3714-3723		2
111	Effect of Different Amount of Silicon Carbide on SAC Solder-Cu Joint Performance by Using Microwave Hybrid Heating Method. 2019 , 469, 012110		4

110	Minor P Doping to Effectively Suppress IMC Growth in Solder Joints with Electroplated Co(P) Metallization. 2019 , 48, 4552-4561		3
109	Reinforcement of vanadium on the microstructure and properties of Sn-58Bi lead-free solder joints. 2019 , 6, 066301		1
108	Microstructure of Sn-20In-2.8Ag solder and mechanical properties of joint with Cu. <i>Soldering and Surface Mount Technology</i> , 2019 , 31, 1-5	1.4	2
107	Suppression of the Growth of Intermetallic Compound Layers with the Addition of Graphene Nano-Sheets to an Epoxy Sn?Ag?Cu Solder on a Cu Substrate. <i>Materials</i> , 2019 , 12,	3-5	5
106	Effect of FeCoNiCrCu High-entropy-alloy Substrate on Sn Grain Size in Sn-3.0Ag-0.5Cu Solder. 2019 , 9, 3658		8
105	The effect of CNT and Cu on interfacial intermetallic growth of Sn-Ag-Cu solder. 2019 , 469, 012007		
104	On the mechanism of Sn tunnelling induced intermetallic formation between Sn-8Zn-3Bi solder alloys and Cu substrates. <i>Journal of Alloys and Compounds</i> , 2019 , 791, 559-566	5-7	14
103	Effect of Cu and Ni micro-nanocones interlayer on the growth of tin whisker. 2019 ,		
102	Introductory Chapter: Overview of Pb-Free Solders and Effect of Multilayered Thin Film of Sn on the Lead-Free Solder Joint Interface. 2019 ,		
101	AuSn solders applied in transient liquid phase bonding: Microstructure and mechanical behavior. 2019 , 8, 100503		6
100	Electromigration-Induced Sn Grain Rotation in Lead-Free Flip Chip Solder Bumps. 2019 ,		1
99	Novel polarity effect on intermetallic compound thickness changes during electromigration in Cu/Sn-3.0Ag-0.5Cu/Cu solder joints. 2019 , 126, 185109		9
98	A critical review on performance, microstructure and corrosion resistance of Pb-free solders. 2019 , 134, 897-907		36
97	Thermal transport engineering in single layered graphene sheets via MD simulations: On the effect of nickel coating. 2019 , 138, 416-424		9
96	Effects of Ag addition on phase transitions, microstructures and solder/copper interfaces of Sn99.1%Cu0.9Agx alloys. 2019 , 136, 2205-2210		4
95	Mechanisms of beta-Sn nucleation and microstructure evolution in Sn-Ag-Cu solders containing titanium. <i>Journal of Alloys and Compounds</i> , 2019 , 777, 1357-1366	5-7	11
94	Electromigration behaviors of Sn58%Bi solder containing Ag-coated MWCNTs with OSP surface finished PCB. <i>Journal of Alloys and Compounds</i> , 2019 , 775, 581-588	5-7	17
93	Wettability, interfacial reactions, and impact strength of Sn3.0Ag0.5Cu solder/ENIG substrate used for fluxless soldering under formic acid atmosphere. 2020 , 55, 3107-3117		11

92	Effects of crystalline and amorphous Pd layers on initial interfacial reactions at Sn-3.0Ag-0.5Cu/thin-Au/Pd/Ni(P) solder joints. <i>Applied Surface Science</i> , 2020 , 503, 144339	6.7	11
91	Tensile deformation and microstructures of Sn β .0Ag β .5Cu solder joints: Effect of annealing temperature. <i>Microelectronics Reliability</i> , 2020 , 104, 113555	1.2	5
90	Morphologies of Primary Cu β 6Sn β 5 and Ag β 3Sn Intermetallics in Sn β Ag β Cu Solder Balls. 2020 , 10, 18-29		1
89	Effects of cooling rate and joint size on Sn grain features in Cu/Sn β .5Ag/Cu solder joints. 2020 , 14, 100929		1
88	Healing solders: A numerical investigation of damage-healing experiments. 2020 ,		2
87	Selective etching and hardness properties of quenched SAC305 solder joints. <i>Soldering and Surface Mount Technology</i> , 2020 , 32, 225-233	1.4	1
86	Effect of relative humidity on corrosion behavior of SAC305 and Sn β 7Pb solders under polyvinyl chloride fire smoke atmosphere. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 19920-19930	2.1	1
85	Experimental and Theoretical Studies of Cu-Sn Intermetallic Phase Growth During High-Temperature Storage of Eutectic SnAg Interconnects. 2020 , 49, 7194-7210		2
84	A brief review of FEM simulation techniques for IC packaging under impact load. 2020 ,		0
83	Effect of Aging Temperature on the Microstructure and Shear Strength of SAC0307-0.1Ni Lead-Free Solders in Copper Joints. 2020 , 61, 89-98		0
82	Insight view of mechanical, electronic and thermodynamic properties of the novel intermetallic (hbox {REPt}_{4}) (hbox {In}_{4}) (RE (=) Eu, Gd, Tb, Dy, Ho) compounds via ab initio calculations. 2020 , 43, 1		2
81	Backside Metallization of Ag β nAg Multilayer Thin Films and Die Attach for Semiconductor Applications. 2020 , 49, 4265-4271		4
80	Solderability, Microstructure, and Thermal Characteristics of Sn-0.7Cu Alloy Processed by High-Energy Ball Milling. 2020 , 10, 370		2
79	Viscoplastic characterization of novel (Fe, Co, Te)/Bi containing Sn β .0Ag β .7Cu lead-free solder alloy. <i>Journal of Materials Science: Materials in Electronics</i> , 2020 , 31, 5521-5532	2.1	2
78	Microstructure induced galvanic corrosion evolution of SAC305 solder alloys in simulated marine atmosphere. <i>Journal of Materials Science and Technology</i> , 2020 , 51, 40-53	9.1	19
77	Effect of Morphological Change of Ni β 3Sn β 4 Intermetallic Compounds on the Growth Kinetics in Electroless Ni-P/Sn-3.5Ag Solder Joint. 2020 , 51, 2905-2914		3
76	Long-Term Reliability Evaluation of Power Modules With Low Amplitude Thermomechanical Stresses and Initial Defects. 2021 , 9, 602-615		6
75	Effect of Different Soldering Temperatures on the Solder Joints of Flip-Chip LED Chips. 2021 , 50, 796-807		2

74	Online Thermal Resistance and Reliability Characteristic Monitoring of Power Modules With Ag Sinter Joining and Pb, Pb-Free Solders During Power Cycling Test by SiC TEG Chip. 2021 , 36, 4977-4990			8
73	Aging resistance and mechanical properties of Sn3.0Ag0.5Cu solder bump joints with different bump shapes. 2021 , 40, 225-230			2
72	Effect of Soldering Temperature on the Reliability of Sn-Ag-Cu Lead-Free Solder Joints. 2021 , 50, 869-880			1
71	Interfacial Reactions in Lead-Free Solder/Cu-2.0Be (Alloy 25) Couples. 2021 , 50, 903-913			1
70	Recent Progress in Metallurgical Bonding Mechanisms at the Liquid/Solid Interface of Dissimilar Metals Investigated via in situ X-ray Imaging Technologies. 2021 , 34, 145-168			17
69	Prediction of activities of all components in Sn-Ag-Cu and Sn-Ag-Cu-Zn lead-free solders using modified molecular interaction volume model. 2021 , 3, 100143			
68	Mathematical Modelling of Vickers Hardness of Sn-9Zn-Cu Solder Alloys Using an Artificial Neural Network. 2021 , 27, 4084-4096			3
67	Influence of porous Cu interlayer on the intermetallic compound layer and shear strength of MWCNT-reinforced SAC 305 composite solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 4515-4528	2.1		4
66	Electromigration behavior of silver thin film fabricated by electron-beam physical vapor deposition. 2021 , 56, 9769-9779			1
65	Effect of Bi Content on the Microstructure and Mechanical Performance of Sn-1Ag-0.5Cu Solder Alloy. 2021 , 11, 314			0
64	Investigation of FeCoNiCu properties: Thermal stability, corrosion behavior, wettability with Sn-3.0Ag-0.5Cu and interlayer formation of multi-element intermetallic compound. <i>Applied Surface Science</i> , 2021 , 546, 148931	6.7		10
63	Effect of solder joint size and composition on liquid-assisted healing. <i>Microelectronics Reliability</i> , 2021 , 119, 114066	1.2		3
62	Study on corrosion behavior of Sn and intermetallic compounds phases in SAC305 alloy by in-situ EC-AFM and first-principles calculation. 2021 , 181, 109244			5
61	The effects of the addition of CNT@Ni on the hardness, density, wettability and mechanical properties of Sn-0.7Cu lead-free solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 10843-10854	2.1		1
60	Effect of In-Doping on Mechanical Properties of Cu ₆ Sn ₅ -Based Intermetallic Compounds: A First-Principles Study. 2021 , 50, 4164			3
59	Effects of Yttrium Addition on the Microstructure Evolution and Electrochemical Corrosion of Sn-9Zn Lead-Free Solders Alloy. <i>Materials</i> , 2021 , 14,	3.5		
58	Effect of Small Amount of Ni Addition on Microstructure and Fatigue Properties of Sn-Sb-Ag Lead-Free Solder. <i>Materials</i> , 2021 , 14,	3.5		3
57	Effect of grain size on the interface structure and shear behavior of lead-free solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 21620-21630	2.1		

56	Interfacial IMC evolution and shear strength of MWCNTs-reinforced Sn ₃ Sb composite solder joints: Experimental characterization and artificial neural network modelling. <i>Journal of Materials Research and Technology</i> , 2021 , 13, 1020-1031	5.5	2
55	A critical analysis of a reliability study of ball grid array electronic components submitted to thermal aging and board-level drop test. 2021 , 128, 105578		1
54	Microstructural and shear strength properties of GNSs-reinforced Sn-1.0Ag-0.5Cu (SAC105) composite solder interconnects on plain Cu and ENI Ag surface finish. <i>Journal of Materials Research and Technology</i> , 2021 , 15, 2497-2506	5.5	0
53	Peritectic phase formation kinetics of directionally solidifying Sn-Cu alloys within a broad growth rate regime. 2021 , 220, 117295		3
52	Impact reliability analysis of a rigid-flex PCB system under acceleration loads. <i>Microelectronics Reliability</i> , 2021 , 127, 114374	1.2	1
51	Interfacial reaction issues for lead-free electronic solders. 2006 , 155-174		27
50	Phase diagrams of Pb-free solders and their related materials systems. 2006 , 19-37		2
49	Solder Joint Reliability. 2011 , 49-69		1
48	Interfacial Reactions and Electromigration in Flip-Chip Solder Joints. 2013 , 503-560		3
47	Study of interfacial reactions between Sn ₃ Ag ₁ Cu alloys and Au substrate. 2007 , 98, 496-500		4
46	VOLUME EFFECT OF SHEAR FRACTURE BEHAVIOR OF Sn _{3.0} Ag _{0.5} Cu/Cu LEAD-FREE SOLDER JOINTS. 2010 , 46, 366-371		4
45	A Study on the Thermal Oxidation and Wettability of Lead-free Solders of Sn-Ag-Cu and Sn-Ag-Cu-In. 2014 , 23, 345-350		1
44	Interfacial Properties with Kind of Surface Finish and Sn-Ag Based Lead-free Solder. 2009 , 27, 20-24		3
43	210°C reflow technology study in 3D Packaging. 2021 ,		
42	Effects of antimony on the microstructure, thermal properties, mechanical performance, and interfacial behavior of Sn _{0.7} Cu _{0.05} Ni _{0.5} Sb/Cu solder joints. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 27607	2.1	1
41	Bidirectional pulsed current effect on the precipitation behavior of Cu ₆ Sn ₅ : An in situ observation. <i>Materials Today Communications</i> , 2021 , 29, 102825	2.5	
40	Solder Joint Reliability of SnBi Finished TSOPs with Alloy 42 Lead-Frame under Temperature Cycling. <i>Journal of ASTM International</i> , 2010 , 7, 102939		
39	History of Soldering. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2014 , 134, 564-567		0

38	Application IV: Fatigue Fracture Process of Solder Joints. <i>Advanced Structured Materials</i> , 2014 , 153-171	0.6	
37	Fracture Behavior of IMCs at Cu/Pb-Free Solder Interface. <i>Springer Theses</i> , 2016 , 35-66	0.1	
36	Research Progress in Pb-Free Soldering. <i>Springer Theses</i> , 2016 , 1-33	0.1	
35	Characterization of Soldering Property on Heating Condition by Infrared Lamp Soldering Process for C-Si Photovoltaic Modules. <i>Current Photovoltaic Research</i> , 2016 , 4, 59-63		
34	Wiring the Tin-Silver-Copper Alloy by Fused Deposition Modeling. <i>Lecture Notes in Mechanical Engineering</i> , 2017 , 31-39	0.4	
33	Microstructure and Welding Performance of Sn-Ag-Cu Material. <i>Lecture Notes in Mechanical Engineering</i> , 2018 , 15-20	0.4	
32	Solder Reactions on Nickel, Palladium, and Gold. 2007 , 183-208		
31	Effect of indentation depth and strain rate on mechanical properties of Sn _{0.3} Ag _{0.7} Cu. <i>Microelectronics Reliability</i> , 2022 , 128, 114429	1.2	0
30	On the Design of Sn-Bi-Ag-In and Sn-Bi-Ag-Zn Low-Temperature Pb-Free Solders Using High-Throughput CALPHAD Modeling and Key Experiments. <i>SSRN Electronic Journal</i> ,	1	0
29	Effective (Pd,Ni)Sn ₄ diffusion barrier to suppress brittle fracture at Sn-58Bi-xAg solder joint with Ni(P)/Pd(P)/Au metallization pad. <i>Microelectronics Reliability</i> , 2022 , 129, 114472	1.2	
28	Graphene as a diffusion barrier at the interface of Liquid-State low-melting Sn-8Bi alloy and copper foil. <i>Applied Surface Science</i> , 2022 , 578, 152108	6.7	4
27	High-Strength Sn-Bi-Based Low-Temperature Pb-Free Solders with High Toughness Designed with the Guidance of High-Throughput Thermodynamic Modeling. <i>SSRN Electronic Journal</i> ,	1	
26	Effects of Zn contents on microstructure, thermodynamic characteristic and mechanical properties of Sn-Bi-based lead-free solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2022 , 33, 1741	2.1	0
25	EDS analysis on effect of low dosage gamma radiation and micromechanical properties of SnAg ₃ Cu _{0.5} solder. <i>Journal of Materials Science: Materials in Electronics</i> , 2022 , 33, 4225	2.1	0
24	Development of lead-free interconnection materials in electronic industry during the past decades: structure and properties. <i>Materials and Design</i> , 2022 , 110439	8.1	0
23	Development of anti-oxidation Ag salt paste for large-area (35 × 5 mm ²) Cu-Cu bonding with ultra-high bonding strength. <i>Journal of Materials Science and Technology</i> , 2022 , 113, 261-270	9.1	0
22	Mechanical, photoelectric and thermal reliability of SAC307 solder joints with Ni-decorated MWCNTs for flip-chip LED package component during aging. <i>Soldering and Surface Mount Technology</i> , 2022 , ahead-of-print,	1.4	
21	Effects of temperature and strain rate on tensile properties of (Ag,Cu)-Sn intermetallic compounds: A molecular dynamics simulation. <i>Journal of Materials Research and Technology</i> , 2022 ,	5.5	0

20	Effects of immersion silver (ImAg) and immersion tin (ImSn) surface finish on the microstructure and joint strength of Sn-3.0Ag-0.5Cu solder. <i>Journal of Materials Science: Materials in Electronics</i> ,	2.1	○
19	Mechanical properties of Sn-Bi-Ag low-temperature Pb-free solders. 2022 ,		
18	Interfacial Reactions in the Sn-3.0Ag-0.5Cu/C194 Couples. 2022 ,		○
17	High-strength SnBi-based low-temperature solders with high toughness designed via high-throughput thermodynamic modelling1. <i>Science and Technology of Welding and Joining</i> , 1-7	3.7	
16	Impact of rotating magnetic field on the microstructure, thermal properties, and creep behavior during the solidification of Sn $\bar{2}$.0Ag $\bar{0}$.5Cu solder alloy. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 146442072211114	1.3	
15	Effect of Sn Grain Orientation on Reliability Issues of Sn-Rich Solder Joints. <i>Materials</i> , 2022 , 15, 5086	3.5	○
14	Interface behavior and performance of Sn $\bar{4}$ Ag $\bar{0}$ Cu lead-free solder bearing Tb.		○
13	Microwave Hybrid Heating as an Alternative Method for Soldering \bar{A} Brief Review. 2023 , 565-577		
12	Tensile properties dependency on crystal size and direction of single crystal Ag $\bar{3}$ Sn intermetallic compound: a molecular dynamics study. 2022 , 20, 2094-2108		○
11	The Reliability of SAC305 Individual Solder Joints during Creep \bar{B} atigue Conditions at Room Temperature. 2022 , 12, 1306		○
10	Prediction of fatigue life of TC4 titanium alloy based on normalized equivalent initial flaw size model. 2022 , 122, 103563		○
9	Boron Nitride Nanotubes Modified on a Lead-Free Solder Alloy for Microelectromechanical Packaging. 2022 , 5, 13626-13636		1
8	Structure and properties of low-Ag SAC solders for electronic packaging.		○
7	Effects of heat treatment on mechanical, electrical properties and curtailment of electromigration in Sn-Ag $\bar{3}$.0-Cu $\bar{0}$.5 soldering based alloys. 2022 , 119, 602		○
6	Non-destructive micro analysis of electromigration failures in solder microbumps using 3D X-ray computed tomography. 2022 , 194, 112404		○
5	Dependence of mechanical and thermal deformation behaviors on crystal size and direction of Cu $\bar{3}$ Sn intermetallic: A molecular dynamics study. 2022 ,		1
4	Aging Interfacial Structure and Abnormal Tensile Strength of SnAg $\bar{3}$ Cu $\bar{0}$.5/Cu Solder Joints. 2022 , 15, 9004		○
3	Electrochemical corrosion and electrochemical migration characteristics of SAC-1Bi-xMn solder alloys in NaCl solution. 2023 , 110965		○

- 2 Nucleation and growth of Ag₃Sn in Sn-Ag and Sn-Ag-Cu solder alloys. **2023**, 249, 118831 ○
- 1 Preparation and characterization of nano-solder paste with high nanoparticle loading and their thermal and printing properties. **2023**, 297, 127399 ○