Yi-Shao Lai

List of Publications by Year
in descending order

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217	3,638	32	48
papers	citations	h-index	g-index
		136950	206112

219	219	219	1554
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental studies of board-level reliability of chip-scale packages subjected to JEDEC drop test condition. Microelectronics Reliability, 2006, 46, 645-650.	1.7	170
2	Thermomigration in SnPb composite flip chip solder joints. Applied Physics Letters, 2006, 88, 141911.	3.3	144
3	Nanoindentation identifications of mechanical properties of Cu6Sn5, Cu3Sn, and Ni3Sn4 intermetallic compounds derived by diffusion couples. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 485, 305-310.	5.6	144
4	Support excitation scheme for transient analysis of JEDEC board-level drop test. Microelectronics Reliability, 2006, 46, 626-636.	1.7	82
5	Electromigration of Snâ€“37Pb and Snâ€“3Agâ€“1.5Cu/Snâ€“3Agâ€“0.5Cu composite flipâ€“chip solder bumps with Ti/Ni(V)/Cu under bump metallurgy. Microelectronics Reliability, 2007, 47, 1273-1279.	1.7	70
6	Electromigration Reliability and Morphologies of Cu Pillar Flip-Chip Solder Joints with Cu Substrate Pad Metallization. Journal of Electronic Materials, 2008, 37, 1624-1630.	2.2	65
7	Alloying modification of Snâ€“Agâ€“Cu solders by manganese and titanium. Microelectronics Reliability, 2009, 49, 235-241.	1.7	65
8	Evaluation of board-level reliability of electronic packages under consecutive drops. Microelectronics Reliability, 2006, 46, 1172-1182.	1.7	61
9	Effect of entropy production on microstructure change in eutectic SnPb flip chip solder joints by thermomigration. Applied Physics Letters, 2006, 89, 221906.	3.3	59
10	Local melting induced by electromigration in flip-chip solder joints. Journal of Electronic Materials, 2006, 35, 1005-1009.	2.2	58
11	Characteristics of ZnO thin films prepared by radio frequency magnetron sputtering. Microelectronics Reliability, 2008, 48, 389-394.	1.7	54
12	Evaluation of solder joint strengths under ball impact test. Microelectronics Reliability, 2007, 47, 2179-2187.	1.7	53
13	Characteristics of current crowding in flip-chip solder bumps. Microelectronics Reliability, 2006, 46, 915-922.	1.7	50
14	Atomic-level simulations of nanoindentation-induced phase transformation in mono-crystalline silicon. Applied Surface Science, 2007, 254, 1415-1422.	6.1	50
15	Effect of current crowding on whisker growth at the anode in flip chip solder joints. Applied Physics Letters, 2007, 91, 231919.	3.3	48
16	Cross-sectional transmission electron microscopy observations on the Berkovich indentation-induced deformation microstructures in GaN thin films. Journal Physics D: Applied Physics, 2007, 40, 3985-3990.	2.8	48
17	Electromigration induced high fraction of compound formation in SnAgCu flip chip solder joints with copper column. Applied Physics Letters, 2008, 92, .	3.3	47
18	Effect of the combination of electromigration and thermomigration on phase migration and partial melting in flip chip composite SnPb solder joints. Journal of Applied Physics, 2006, 100, 033512.	2.5	46

#	Article	IF	Citations
19	Nanomechanical responses of intermetallic phase at the solder joint interface â€“ Crystal orientation and metallurgical effects. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 53-59.	5.6	46
20	Investigation of growth behavior of Alâ€"Cu intermetallic compounds in Cu wire bonding. Microelectronics Reliability, 2011, 51, 125-129.	1.7	45
21	A review of three-dimensional viscoelastic models with an application to viscoelasticity characterization using nanoindentation. Microelectronics Reliability, 2012, 52, 541-558.	1.7	45
22	Electrothermal coupling analysis of current crowding and Joule heating in flip-chip packages. Microelectronics Reliability, 2006, 46, 1357-1368.	1.7	43
23	Transient fracturing of solder joints subjected to displacement-controlled impact loads. Microelectronics Reliability, 2006, 46, 885-895.	1.7	42
24	Effects of solder alloy constitutive relationships on impact force responses of package-level solder joints under ball impact test. Journal of Electronic Materials, 2006, 35, 1892-1901.	2.2	42
25	Empirical correlation between package-level ball impact test and board-level drop reliability. Microelectronics Reliability, 2007, 47, 1127-1134.	1.7	41
26	Molecular Dynamics Simulation of Nanoindentation-induced Mechanical Deformation and Phase Transformation in Monocrystalline Silicon. Nanoscale Research Letters, 2008, 3, .	5.7	41
27	Surface Morphological and Nanomechanical Properties of PLD-Derived ZnO Thin Films. Nanoscale Research Letters, 2008, 3, .	5.7	41
28	Effects of different drop test conditions on board-level reliability of chip-scale packages. Microelectronics Reliability, 2008, 48, 274-281.	1.7	40
29	Quantitative X-ray microtomography study of 3-D void growth induced by electromigration in eutectic SnPb flip-chip solder joints. Scripta Materialia, 2011, 65, 646-649.	5.2	37
30	Effect of Underfill Thermomechanical Properties on Thermal Cycling Fatigue Reliability of Flip-Chip Ball Grid Array. Journal of Electronic Packaging, Transactions of the ASME, 2004, 126, 560-564.	1.8	35
31	Rapid, low temperature microwave synthesis of durable, superhydrophobic carbon nanotubeâ€"polybenzoxazine nanocomposites. RSC Advances, 2013, 3, 9764.	3.6	34
32	Strain Rate Dependence on Nanoindentation Responses of Interfacial Intermetallic Compounds in Electronic Solder Joints with Cu and Ag Substrates. Materials Transactions, 2009, 50, 1231-1234.	1.2	33
33	Transient Simulation of Wire Pull Test on Cu/Low-K Wafers. IEEE Transactions on Advanced Packaging, 2006, 29, 631-638.	1.6	32
34	First-principles calculations of elastic properties of Cu3Sn superstructure. Applied Physics Letters, 2008, 92, 081901.	3.3	32
35	Cross-sectional transmission electron microscopy observations of structural damage in Al0.16Ga0.84N thin film under contact loading. Journal of Applied Physics, 2008, 103, 033503.	2.5	32
36	Characteristic of copper wire and transient analysis on wirebonding process. Microelectronics Reliability, 2011, 51, 179-186.	1.7	31

#	Article	IF	Citations
37	Cyclic bending reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2007, 47, 111-117.	1.7	30
38	Thermomigration Versus Electromigration in Microelectronics Solder Joints. IEEE Transactions on Advanced Packaging, 2009, 32, 627-635.	1.6	30
39	Verification of submodeling technique in thermomechanical reliability assessment of flip-chip package assembly. Microelectronics Reliability, 2005, 45, 575-582.	1.7	29
40	Ball Impact Responses of Ni- or Ge-Doped Sn-Ag-Cu Solder Joints. Journal of Electronic Materials, 2008, 37, 201-209.	2.2	29
41	Mechanical properties of the hexagonal HoMnO3 thin films by nanoindentation. Journal of Alloys and Compounds, 2010, 508, 523-527.	5.5	29
42	Optimal design towards enhancement of board-level thermomechanical reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2007, 47, 104-110.	1.7	28
43	Transient analysis of the impact stage of wirebonding on Cu/low-K wafers. Microelectronics Reliability, 2005, 45, 371-378.	1.7	27
44	Calibration of electromigration reliability of flip-chip packages by electrothermal coupling analysis. Journal of Electronic Materials, 2006, 35, 972-977.	2.2	27
45	Transient Submodeling Analysis for Board-Level Drop Tests of Electronic Packages. IEEE Transactions on Electronics Packaging Manufacturing, 2007, 30, 54-62.	1.4	27
46	Tin Whisker Growth Induced by High Electron Current Density. Journal of Electronic Materials, 2008, 37, 17-22.	2.2	27
47	Towards elastic anisotropy and strain-induced void formation in Cuâ€"Sn crystalline phases. Microelectronics Reliability, 2009, 49, 264-268.	1.7	27
48	Nanomechanical properties of AlN(103) thin films by nanoindentation. Journal of Alloys and Compounds, 2010, 494, 219-222.	5.5	27
49	Optimization of Thermomechanical Reliability of Board-level Package-on-Package Stacking Assembly. IEEE Transactions on Components and Packaging Technologies, 2006, 29, 864-868.	1.3	26
50	High-G drop impact response and failure analysis of a chip packaged printed circuit board. International Journal of Impact Engineering, 2007, 34, 1655-1667.	5.0	26
51	In situmeasurement of electromigration-induced transient stress in Pb-free Snâ€"Cu solder joints by synchrotron radiation based x-ray polychromatic microdiffraction. Journal of Applied Physics, 2009, 106, 023502.	2.5	26
52	Comprehensive Dynamic Analysis of Wirebonding on Cu/Low-K Wafers. IEEE Transactions on Advanced Packaging, 2006, 29, 264-270.	1.6	25
53	High strain rate compression behavior for Snâ€"37Pb eutectic alloy, lead-free Snâ€"1Agâ€"0.5Cu and Snâ€"3Agâ€"0.5Cu alloys. Microelectronics Reliability, 2009, 49, 310-317.	1.7	24
54	Electrorecrystallization of intermetallic compound in the Sn0.7Cu solder joint. Intermetallics, 2012, 26, 40-43.	3.9	24

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55	Effect of electromigration in the anodic Al interconnect on melting of flip chip solder joints. Applied Physics Letters, 2007, 90, 211914.	3.3	23
56	Examination of board-level drop reliability of package-on-package stacking assemblies of different structural configurations. Microelectronic Engineering, 2007, 84, 87-94.	2.4	23
57	Mechanical properties of InGaN thin films deposited by metal-organic chemical vapor deposition. Materials Chemistry and Physics, 2008, 109, 360-364.	4.0	22
58	Structural and elastic properties of Cu₆Sn₅ and Cu₃Snfrom first-principles calculations. Journal of Materials Research, 2009, 24, 2361-2372.	2.6	22
59	Evaluation of the nanoindentation behaviors of SiGe epitaxial layer on Si substrate. Microelectronics Reliability, 2010, 50, 63-69.	1.7	22
60	Influence of Cu column under-bump-metallizations on current crowding and Joule heating effects of electromigration in flip-chip solder joints. Journal of Applied Physics, 2012, 111, .	2.5	22
61	Effect of Test Conditions on Electromigration Reliability of Sn-Ag-Cu Flip-Chip Solder Interconnects. Journal of Electronic Packaging, Transactions of the ASME, 2007, 129, 56-62.	1.8	21
62	Submodeling Analysis for Path-Dependent Thermomechanical Problems. Journal of Electronic Packaging, Transactions of the ASME, 2005, 127, 135-140.	1.8	20
63	Design Guideline for Ball Impact Test Apparatus. Journal of Electronic Packaging, Transactions of the ASME, 2007, 129, 98-104.	1.8	20
64	Effects of Curing and Chemical Aging on Warpageâ€"Characterization and Simulation. IEEE Transactions on Device and Materials Reliability, 2011, 11, 339-348.	2.0	20
65	Transient analysis of drop responses of board-level electronic packages using response spectra incorporated with modal superposition. Microelectronics Reliability, 2007, 47, 2188-2196.	1.7	19
66	Finite element model verification for packaged printed circuit board by experimental modal analysis. Microelectronics Reliability, 2008, 48, 1837-1846.	1.7	19
67	Fine pitch copper wire bonding — Why now?. , 2009, , .		19
68	Dissolution of Sn in a SnPb solder bump under current stressing. Journal of Applied Physics, 2012, 111, .	2.5	19
69	Influence of trace alloying elements on the ball impact test reliability of SnAgCu solder joints. Microelectronics Reliability, 2012, 52, 180-189.	1.7	19
70	The Pd distribution and Cu flow pattern of the Pd-plated Cu wire bond and their effect on the nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 543, 152-157.	5.6	19
71	Micromechanical Analysis of Imperfectly Bonded Layered Media. Journal of Engineering Mechanics - ASCE, 1997, 123, 986-995.	2.9	18
72	Effect of electromigration induced joule heating and strain on microstructural recrystallization in eutectic SnPb flip chip solder joints. Materials Chemistry and Physics, 2012, 136, 210-218.	4.0	18

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73	The influence of Pd on the interfacial reactions between the Pd-plated Cu ball bond and Al pad. Surface and Coatings Technology, 2013, 231, 599-603.	4.8	18
74	Response spectra analysis for undamped structural systems subjected to half-sine impact acceleration pulses. Microelectronics Reliability, 2007, 47, 1239-1245.	1.7	17
75	Warpage evolution of overmolded ball grid array package during post-mold curing thermal process. Microelectronics Reliability, 2011, 51, 2263-2273.	1.7	17
76	Supersaturation induced by current stressing. Scripta Materialia, 2011, 65, 615-617.	5.2	17
77	Electrorecrystallization of Metal Alloy. Journal of Alloys and Compounds, 2013, 549, 190-194.	5.5	17
78	Structural design optimization for board-level drop reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2008, 48, 757-762.	1.7	16
79	Electromigration reliability and morphologies of Cu pillar flip-chip solder joints. , 2008, , .		16
80	Transient analysis of board-level drop response of lead-free chip-scale packages with experimental verifications. , 0, , .		15
81	Morphological, structural, and mechanical characterizations of InGaN thin films deposited by MOCVD. Journal of Alloys and Compounds, 2008, 463, 533-538.	5.5	15
82	Time-dependent deformation behavior of interfacial intermetallic compound layers in electronic solder joints. Journal of Materials Research, 2010, 25, 629-632.	2.6	15
83	Correlation Between Package-level Ball Impact Test and Board-level Drop Test. , 0, , .		14
84	Underfill selection for reducing Cu/low-K delamination risk of flip-chip assembly. , 2006, , .		14
85	Thermalâ€“Mechanical Coupling Analysis for Coupled Power- and Thermal-Cycling Reliability of Board-Level Electronic Packages. IEEE Transactions on Device and Materials Reliability, 2008, 8, 122-128.	2.0	14
86	High precision thermal stress study on flip chips by synchrotron polychromatic x-ray microdiffraction. Journal of Applied Physics, 2010, 107, 063502.	2.5	14
87	A study of quasi-circular cracks. International Journal of Fracture, 2002, 113, 1-25.	2.2	13
88	Transient Thermal Analysis for Board-Level Chip-Scale Packages Subjected to Coupled Power and Thermal Cycling Test Conditions. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 281-284.	1.8	13
89	Insights Into Correlation Between Board-Level Drop Reliability and Package-Level Ball Impact Test Characteristics. IEEE Transactions on Electronics Packaging Manufacturing, 2007, 30, 84-91.	1.4	13
90	Ball Impact Reliability of Zn-Sn High-Temperature Solder Joints Bonded with Different Substrates. Journal of Electronic Materials, 2013, 42, 2813-2821.	2.2	13

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91	Investigations of Board-Level Drop Reliability of Wafer-Level Chip-Scale Packages. Journal of Electronic Packaging, Transactions of the ASME, 2007, 129, 105-108.	1.8	12
92	Advanced QFN packaging for low cost and solution. , 2010, , .		12
93	Blocking hillock and whisker growth by intermetallic compound formation in Sn-0.7Cu flip chip solder joints under electromigration. Journal of Applied Physics, 2010, 107, 093715.	2.5	12
94	Nanomechanical characteristics of annealed Si/SiGe superlattices. Applied Surface Science, 2011, 257, 8887-8893.	6.1	12
95	Using DMA to Simultaneously Acquire Young's Relaxation Modulus and Time-dependent Poisson's Ratio of a Viscoelastic Material. Procedia Engineering, 2014, 79, 153-159.	1.2	12
96	Prediction of Board-level Reliability of Chip-scale Packages Under Consecutive Drops. , 0, , .		11
97	Optimization of board-level thermomechanical reliability of high performance flip-chip package assembly. Microelectronic Engineering, 2008, 85, 659-664.	2.4	11
98	Characterizations of ball impact responses of wafer-level chip-scale packages. Journal of Alloys and Compounds, 2008, 450, 238-244.	5.5	11
99	Intermetallic formation induced substrate dissolution in electroless Ni(P)-solder interconnections. Journal of Materials Research, 2008, 23, 2545-2554.	2.6	11
100	InÂSitu Measurements of Thermal and Electrical Effects of Strain in Flip-Chip Silicon Dies Using Synchrotron Radiation X-rays. Journal of Electronic Materials, 2009, 38, 2308-2313.	2.2	11
101	Structural design guideline to minimize extreme low-k delamination potential in 40nm flip-chip packages. Microelectronics Reliability, 2012, 52, 2851-2855.	1.7	11
102	Interconversions between linear viscoelastic functions by using relaxation-creep duality representation. Mathematics and Mechanics of Solids, 2013, 18, 701-721.	2.4	11
103	Coupled Power and Thermal Cycling Reliability of Board-Level Package-on-Package Stacking Assembly. IEEE Transactions on Electronics Packaging Manufacturing, 2009, 32, 14-21.	1.4	10
104	Nanotribological properties of ALD-processed bilayer TiO2/ZnO films. Microelectronics Reliability, 2014, 54, 2754-2759.	1.7	10
105	Transient simulation of solder joint fracturing under impact test. , 0, , .		9
106	In-situ observation of material migration in flip-chip solder joints under current stressing. Journal of Electronic Materials, 2006, 35, 1781-1786.	2.2	9
107	Insights into Correlation between Board-Level Drop Reliability and Package-Level Ball Impact Test. , 0, , .		9
108	Characteristic of Heat Affected Zone for Ultra Thin Gold Wire/Copper Wire and Advanced Finite Element Wirebonding Model. , 2008, , .		9

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109	Effect of annealing treatment and nanomechanical properties for multilayer Si0.8Ge0.2â€“Si films. Microelectronics Reliability, 2010, 50, 851-856.	1.7	9
110	Electromigration reliability of redistribution lines in wafer-level chip-scale packages. , 2011, , .		9
111	Integrating electrothermal coupling analysis in the calibration of experimental electromigration reliability of flip-chip packages. , 0, , .		8
112	Thermal-mechanical coupling analysis for coupled power and thermal cycling reliability of chip-scale packages. , 0, , .		8
113	Electromigration of 96.5Sn-3Ag-0.5Cu Flip-chip Solder Bumps Bonded on Substrate Pads of Au/Ni/Cu or Cu Metallization. , 0, , .		8
114	Electromigration Reliability and Morphologies of 62Snâ€“36Pbâ€“2Ni and 62Snâ€“36Pbâ€“2Cu Flip-Chip Solder Joints. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 526-531.	1.3	8
115	Reliability evaluations for board-level chip-scale packages under coupled power and thermal cycling test conditions. Microelectronics Reliability, 2008, 48, 132-139.	1.7	8
116	Modeling of electromigration on void propagation at the interface between under bump metallization and intermetallic compound in flip-chip ball grid array solder joints. Journal of Applied Physics, 2010, 107, .	2.5	8
117	Coreless substrate for high performance flip chip packaging. , 2010, , .		8
118	The performance and fracture mechanism of solder joints under mechanical reliability test. Microelectronics Reliability, 2012, 52, 1428-1434.	1.7	8
119	Board Level Power Cycling and Thermal Cycling Fatigue Reliability of Chip-scale Packages. Journal of Microelectronics and Electronic Packaging, 2005, 2, 171-179.	0.7	8
120	Modified Mohr-Coulomb-type micromechanical failure criteria for layered rocks. International Journal for Numerical and Analytical Methods in Geomechanics, 1999, 23, 451-460.	3.3	7
121	Correlation between power cycling and thermal cycling fatigue reliabilities of chip-scale packages. , 0, , .		7
122	The Effect of IMC Microstructure of Solder Joint on the Mechanical Drop Performance in SnxAgCu and SnAgCuX CSP Package. , 0, , .		7
123	Investigations of solder joint damage potentials for board-level chip-scale packages subjected to consecutive drops. Microelectronics Reliability, 2008, 48, 282-292.	1.7	7
124	Electrothermal coupling analysis of current crowding and Joule heating in flip-chip package assembly. , 0, , .		6
125	Transient analysis of impact fracturing of solder joints. , 0, , .		6
126	Failure Mechanism of Sn-Ag-Cu Flip-chip Solder Joints with Different Cu Weight Contents Under Comparatively Low Current Stressing. , 2007, , .		6

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127	Orientation transformation of Pb grains in 5Snâ€"95Pb/ 63Snâ€"37Pb composite flip-chip solder joints during electromigration test. Journal of Materials Research, 2008, 23, 1877-1881.	2.6	6
128	High-power-used thermal gel degradation Evaluation on board-level HFCBGA subjected to reliability tests. , 2009, , .		6
129	First-Principles Calculations of Elastic Properties of Cu$_{3}$Sn and Cu$_{6}$Sn$_{5}$ Intermetallics. IEEE Transactions on Advanced Packaging, 2009, 32, 754-757.	1.6	6
130	A study of cyclic bending reliability of bare-die-type chip-scale packages. , 0, , .		5
131	Prediction of gap in QFP with unattached heat spreader. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 136-141.	1.3	5
132	Nonuniform and Negative Marker Displacements Induced by Current Crowding During Electromigration in Flip-Chip Sn-0.7Cu Solder Joints. Journal of Electronic Materials, 2009, 38, 2443-2448.	2.2	5
133	Geometric design for ultra-long needle probe card for digital light processing wafer testing. Microelectronics Reliability, 2010, 50, 556-563.	1.7	5
134	Study of Electromigration-Induced Failures on Cu Pillar Bumps Joined to OSP and ENEPIG Substrates. Journal of Electronic Materials, 2012, 41, 3368-3374.	2.2	5
135	A new representation for anisotropic viscoelastic functions. Mathematics and Mechanics of Solids, 2016, 21, 685-708.	2.4	5
136	Response Spectra Analysis for Transient Structural Responses of Board-level Electronic Packages Subjected to Half-sine Impact Acceleration Pulses. , 0, , .		4
137	Optimal Design in Enhancing Board-level Thermomechanical and Drop Reliability of Package-on-Package Stacking Assembly. , 0, , .		4
138	Electromigration Reliability of Sn-37Pb and Sn-3Ag-1.5Cu/Sn-3Ag-0.5Cu Composite Flip-chip Solder Bumps with Ti/Ni(V)/Cu Under Bump Metallurgy. , 0, , .		4
139	Optimization of Thermomechanical Reliability of Board-Level Flip-Chip Packages Implemented With Organic or Silicon Substrates. IEEE Transactions on Electronics Packaging Manufacturing, 2008, 31, 174-179.	1.4	4
140	A Study of Component-Level Measure of Board-Level Drop Impact Reliability by Ball Impact Test. , 2008, , .		4
141	Development and performance characterizations of a QFN/HMT package. , 2008, , .		4
142	A comparison study of electromigration performance of Pb-free flip chip solder bumps. , 2009, , .		4
143	Response prediction and verification for PCB with package due to thermal and random vibration coupling effects. , 2009, , .		4
144	Underfill study for large dice flip chip packages. , 2009, , .		4

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145	Design Optimization of Needle Geometry for Wafer-Level Probing Test. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 435-439.	1.3	4
146	Electromigration Reliability of 96.5Snâ€“3Agâ€“0.5Cu Flip-Chip Solder Joints With Au/Ni/Cu or Cu Substrate Pad Metallization. Journal of Electronic Packaging, Transactions of the ASME, 2009, 131, .	1.8	4
147	Evaluating nanotribological behavior of annealing Si0.8Ge0.2/Si films. Microelectronics Reliability, 2011, 51, 2223-2227.	1.7	4
148	Examination of thermal performance of board-level QFP with unattached drop-in heat spreader. , 0, , .		3
149	A numerical approach towards the correlation between ball impact test and drop reliability. , 2006, , .		3
150	Board-level Reliability of Package-on-Package Stacking Assemblies Subjected to Coupled Power and Thermal Cycling Tests. , 2007, , .		3
151	Thermal Characteristics and Thermomechanical Reliability of Board-Level Stacked-Die Packages Subjected to Coupled Power and Thermal Cycling Test. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 495-502.	1.3	3
152	Strain-rate and impact velocity effects on joint adhesion strength. , 2008, , .		3
153	Electromigration Reliability With Respect to Cu Weight Contents of Snâ€“Agâ€“Cu Flip-Chip Solder Joints Under Comparatively Low Current Stressing. Journal of Electronic Packaging, Transactions of the ASME, 2008, 130, .	1.8	3
154	Nanotribological Characteristics of Cu6Sn5, Cu3Sn, and Ni3Sn4 Intermetallic Compounds. Journal of Electronic Materials, 2009, 38, 810-814.	2.2	3
155	Redistribution in wafer level chip size packaging technology for high power device applications: Process and design considerations. Microelectronics Reliability, 2010, 50, 522-527.	1.7	3
156	On non-monotonicity of linear viscoelastic functions. Mathematics and Mechanics of Solids, 2015, 20, 600-613.	2.4	3
157	Finite Element Analysis Procedure for Board-level Swept Sine Vibration Tests. , 2006, , .		2
158	Dynamic finite element analysis on underlay microstructure of Cu/low-K wafer during bonding process. , 2007, , .		2
159	Working Temperature Characterizations for Die Attach Films in Stacked-die Process. Electronics Manufacturing Technology Symposium (IEMT), IEEE/CPMT International, 2007, , .	0.0	2
160	Mechanical Properties of Cu<inf>6</inf>Sn<inf>5</inf>, Cu<inf>3</inf>Sn, and Ni<inf>3</inf>Sn<inf>4</inf> Intermetallic Compounds Measured by Nanoindentation. , 2007, , .		2
161	Alloying design of Sn-Ag-Cu solders for the improvement in drop test performance. , 2008, , .		2
162	Parametric study on board-level electronic test device subjected to JEDEC vibration loads. , 2008, , .		2

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163	Effect of minor alloying additions on the BIT reliability of SnAgCu solder joints. , 2009, , .		2
164	Influence of Power Cycling Durations on Thermal and Fatigue Reliability Characteristics of Board-Level Chip-Scale Packages. Journal of Electronic Packaging, Transactions of the ASME, 2009, 131, .	1.8	2
165	New Bending Algorithm for Field-Driven Molecular Dynamics. Nanoscale Research Letters, 2010, 5, 315-322.	5.7	2
166	The stress-strain relationship of Sn63Pb37 and SAC305 solder materials at elevated temperature condition. , 2010, , .		2
167	Vibration and bondability analysis of fine-pitch Cu wire bonding. , 2011, , .		2
168	Investigation of electromigration reliability of redistribution lines in wafer-level chip-scale packages. Microelectronics Reliability, 2014, 54, 2471-2478.	1.7	2
169	Dynamic analysis of wirebonding process on Cu/low-K wafers. , 0, , .		1
170	High-G Drop Impact Response and Failure Analysis of a Chip Packaged Printed Circuit Board. , 0, , .		1
171	Application of submodeling technique to transient drop impact analysis of board-level stacked die packages. , 2006, , .		1
172	Development of ball impact test system. , 0, , .		1
173	An experimental investigation of current stressing on wafer-level chip-scale packages. , 2006, , .		1
174	Ball impact responses and failure analysis of wafer-level chip-scale packages. , 2006, , .		1
175	Finite Element Analysis of Dynamic Drop Impact of Board-level Stacked-Die Packages Using Submodeling Technique. , 2006, , .		1
176	Impact Force Characteristics of Package-level Solder Joints Under Ball Impact Test. , 0, , .		1
177	Characteristic of heat affected zone in thin gold wire and dynamic transient analysis of wire bonding for microstructure of Cu/Low-K wafer. , 2007, , .		1
178	Identification of mechanical properties of Cu<inf>6</inf>Sn<inf>5</inf>, Cu<inf>3</inf>Sn, and Ni<inf>3</inf>Sn<inf>4</inf> intermetallic compounds using nanoindentation. , 2007, , .		1
179	A study of self-assembled monolayer coating for non-stick encapsulation mold. , 2007, , .		1
180	The Effect of SnxAgCu and SnAgCuX on the Mechanical Drop Performance in Lead Free CSP Package. , 2007, , .		1

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181	Electromigration Reliability with Respect to Cu Content in Solder Joint System. , 2008, , .		1
182	Effect of Multiple Reflow Cycles on Ball Impact Responses of Sn-4Ag-0.5Cu Solder Joints with Immersion Tin Substrate Pad Finish. , 2008, , .		1
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