

Yi-Shao Lai

List of Publications by Year in descending order

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217
papers

3,638
citations

136950

32
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48
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219
docs citations

219
times ranked

1554
citing authors

#	ARTICLE	IF	CITATIONS
1	A new representation for anisotropic viscoelastic functions. <i>Mathematics and Mechanics of Solids</i> , 2016, 21, 685-708.	2.4	5
2	On non-monotonicity of linear viscoelastic functions. <i>Mathematics and Mechanics of Solids</i> , 2015, 20, 600-613.	2.4	3
3	Using DMA to Simultaneously Acquire Young's Relaxation Modulus and Time-dependent Poisson's Ratio of a Viscoelastic Material. <i>Procedia Engineering</i> , 2014, 79, 153-159.	1.2	12
4	Nanotribological properties of ALD-processed bilayer TiO ₂ /ZnO films. <i>Microelectronics Reliability</i> , 2014, 54, 2754-2759.	1.7	10
5	Investigation of electromigration reliability of redistribution lines in wafer-level chip-scale packages. <i>Microelectronics Reliability</i> , 2014, 54, 2471-2478.	1.7	2
6	Ball Impact Reliability of Zn-Sn High-Temperature Solder Joints Bonded with Different Substrates. <i>Journal of Electronic Materials</i> , 2013, 42, 2813-2821.	2.2	13
7	The growth and segregation of intermetallic compounds in the bulk of flip chip Sn _{2.4} Ag solder joint under electrical current stressing. , 2013, , .		1
8	Electrorecrystallization of Metal Alloy. <i>Journal of Alloys and Compounds</i> , 2013, 549, 190-194.	5.5	17
9	The influence of Pd on the interfacial reactions between the Pd-plated Cu ball bond and Al pad. <i>Surface and Coatings Technology</i> , 2013, 231, 599-603.	4.8	18
10	Rapid, low temperature microwave synthesis of durable, superhydrophobic carbon nanotube-polybenzoxazine nanocomposites. <i>RSC Advances</i> , 2013, 3, 9764.	3.6	34
11	Interconversions between linear viscoelastic functions by using relaxation-creep duality representation. <i>Mathematics and Mechanics of Solids</i> , 2013, 18, 701-721.	2.4	11
12	Influence of Cu column under-bump-metallizations on current crowding and Joule heating effects of electromigration in flip-chip solder joints. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	22
13	Dissolution of Sn in a SnPb solder bump under current stressing. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	19
14	Impact test performance of Zn-based die-attach joints for power devices. , 2012, , .		0
15	The performance and fracture mechanism of solder joints under mechanical reliability test. <i>Microelectronics Reliability</i> , 2012, 52, 1428-1434.	1.7	8
16	Electrorecrystallization of intermetallic compound in the Sn _{0.7} Cu solder joint. <i>Intermetallics</i> , 2012, 26, 40-43.	3.9	24
17	Effect of electromigration induced joule heating and strain on microstructural recrystallization in eutectic SnPb flip chip solder joints. <i>Materials Chemistry and Physics</i> , 2012, 136, 210-218.	4.0	18
18	Structural design guideline to minimize extreme low-k delamination potential in 40nm flip-chip packages. <i>Microelectronics Reliability</i> , 2012, 52, 2851-2855.	1.7	11

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19	Study of Electromigration-Induced Failures on Cu Pillar Bumps Joined to OSP and ENEPIG Substrates. <i>Journal of Electronic Materials</i> , 2012, 41, 3368-3374.	2.2	5
20	Influence of trace alloying elements on the ball impact test reliability of SnAgCu solder joints. <i>Microelectronics Reliability</i> , 2012, 52, 180-189.	1.7	19
21	A review of three-dimensional viscoelastic models with an application to viscoelasticity characterization using nanoindentation. <i>Microelectronics Reliability</i> , 2012, 52, 541-558.	1.7	45
22	Nanomechanical responses of intermetallic phase at the solder joint interface " Crystal orientation and metallurgical effects. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 534, 53-59.	5.6	46
23	The Pd distribution and Cu flow pattern of the Pd-plated Cu wire bond and their effect on the nanoindentation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 543, 152-157.	5.6	19
24	Electromigration reliability of redistribution lines in wafer-level chip-scale packages. , 2011, , .		9
25	Vibration and bondability analysis of fine-pitch Cu wire bonding. , 2011, , .		2
26	Influence of Cu columns on current crowding effect in electromigration in flip-chip solder joints. , 2011, , .		0
27	Warpage evolution of overmolded ball grid array package during post-mold curing thermal process. <i>Microelectronics Reliability</i> , 2011, 51, 2263-2273.	1.7	17
28	Evaluating nanotribological behavior of annealing Si _{0.8} Ge _{0.2} /Si films. <i>Microelectronics Reliability</i> , 2011, 51, 2223-2227.	1.7	4
29	Supersaturation induced by current stressing. <i>Scripta Materialia</i> , 2011, 65, 615-617.	5.2	17
30	Quantitative X-ray microtomography study of 3-D void growth induced by electromigration in eutectic SnPb flip-chip solder joints. <i>Scripta Materialia</i> , 2011, 65, 646-649.	5.2	37
31	Investigation of growth behavior of Al"Cu intermetallic compounds in Cu wire bonding. <i>Microelectronics Reliability</i> , 2011, 51, 125-129.	1.7	45
32	Nanomechanical characteristics of annealed Si/SiGe superlattices. <i>Applied Surface Science</i> , 2011, 257, 8887-8893.	6.1	12
33	Characteristic of copper wire and transient analysis on wirebonding process. <i>Microelectronics Reliability</i> , 2011, 51, 179-186.	1.7	31
34	Effects of Curing and Chemical Aging on Warpage"Characterization and Simulation. <i>IEEE Transactions on Device and Materials Reliability</i> , 2011, 11, 339-348.	2.0	20
35	Geometric design for ultra-long needle probe card for digital light processing wafer testing. <i>Microelectronics Reliability</i> , 2010, 50, 556-563.	1.7	5
36	New Bending Algorithm for Field-Driven Molecular Dynamics. <i>Nanoscale Research Letters</i> , 2010, 5, 315-322.	5.7	2

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37	Effect of annealing treatment and nanomechanical properties for multilayer Si _{0.8} Ge _{0.2} Si films. Microelectronics Reliability, 2010, 50, 851-856.	1.7	9
38	Evaluation of the nanoindentation behaviors of SiGe epitaxial layer on Si substrate. Microelectronics Reliability, 2010, 50, 63-69.	1.7	22
39	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
40	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
41	Growth of semi-polar (101̄3) AlN films on the silicon. , 2010, , .		1
42	Coreless substrate for high performance flip chip packaging. , 2010, , .		8
43	High precision thermal stress study on flip chips by synchrotron polychromatic x-ray microdiffraction. Journal of Applied Physics, 2010, 107, 063502.	2.5	14
44	Time-dependent deformation behavior of interfacial intermetallic compound layers in electronic solder joints. Journal of Materials Research, 2010, 25, 629-632.	2.6	15
45	Nanomechanical properties of AlN(103) thin films by nanoindentation. Journal of Alloys and Compounds, 2010, 494, 219-222.	5.5	27
46	Mechanical properties of the hexagonal HoMnO ₃ thin films by nanoindentation. Journal of Alloys and Compounds, 2010, 508, 523-527.	5.5	29
47	A refined finite element model verification for IC packaged PCB with thermal effects. , 2010, , .		1
48	Advanced QFN packaging for low cost and solution. , 2010, , .		12
49	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
50	The stress-strain relationship of Sn63Pb37 and SAC305 solder materials at elevated temperature condition. , 2010, , .		2
51	Time dependent deformation behavior of interfacial intermetallic compounds in electronic solder joints. , 2009, , .		0
52	Effect of minor alloying additions on the BIT reliability of SnAgCu solder joints. , 2009, , .		2
53	High-power-used thermal gel degradation Evaluation on board-level HFCBGA subjected to reliability tests. , 2009, , .		6
54	In situmeasurement of electromigration-induced transient stress in Pb-free Sn–Cu solder joints by synchrotron radiation based x-ray polychromatic microdiffraction. Journal of Applied Physics, 2009, 106, 023502.	2.5	26

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55	Structural and elastic properties of Cu ₆ Sn ₅ and Cu ₃ Sn from first-principles calculations. Journal of Materials Research, 2009, 24, 2361-2372.	2.6	22
56	A comparison study of electromigration performance of Pb-free flip chip solder bumps. , 2009, , .		4
57	Experimental investigation and finite element analysis of bump wafer probing. , 2009, , .		1
58	Alloying modification of Sn-3Ag-Cu solders by manganese and titanium. Microelectronics Reliability, 2009, 49, 235-241.	1.7	65
59	High strain rate compression behavior for Sn-37Pb eutectic alloy, lead-free Sn-1Ag-0.5Cu and Sn-3Ag-0.5Cu alloys. Microelectronics Reliability, 2009, 49, 310-317.	1.7	24
60	Nanotribological Characteristics of Cu ₆ Sn ₅ , Cu ₃ Sn, and Ni ₃ Sn ₄ Intermetallic Compounds. Journal of Electronic Materials, 2009, 38, 810-814.	2.2	3
61	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
62	In-Situ 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
63	Towards elastic anisotropy and strain-induced void formation in Cu-Sn crystalline phases. Microelectronics Reliability, 2009, 49, 264-268.	1.7	27
64	Response prediction and verification for PCB with package due to thermal and random vibration coupling effects. , 2009, , .		4
65	Underfill study for large dice flip chip packages. , 2009, , .		4
66	Design Optimization of Needle Geometry for Wafer-Level Probing Test. IEEE Transactions on Components and Packaging Technologies, 2009, 32, 435-439.	1.3	4
67	Fine pitch copper wire bonding — Why now?. , 2009, , .		19
68	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
69	Thermomigration Versus Electromigration in Microelectronics Solder Joints. IEEE Transactions on Advanced Packaging, 2009, 32, 627-635.	1.6	30
70	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
71	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
72	Electromigration Reliability of 96.5Sn-3Ag-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

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73	Influence of Power Cycling Durations on Thermal and Fatigue Reliability Characteristics of Board-Level Chip-Scale Packages. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2009, 131, .	1.8	2
74	Effects of different drop test conditions on board-level reliability of chip-scale packages. <i>Microelectronics Reliability</i> , 2008, 48, 274-281.	1.7	40
75	Tin Whisker Growth Induced by High Electron Current Density. <i>Journal of Electronic Materials</i> , 2008, 37, 17-22.	2.2	27
76	Ball Impact Responses of Ni- or Ge-Doped Sn-Ag-Cu Solder Joints. <i>Journal of Electronic Materials</i> , 2008, 37, 201-209.	2.2	29
77	Electromigration Reliability and Morphologies of Cu Pillar Flip-Chip Solder Joints with Cu Substrate Pad Metallization. <i>Journal of Electronic Materials</i> , 2008, 37, 1624-1630.	2.2	65
78	Molecular Dynamics Simulation of Nanoindentation-induced Mechanical Deformation and Phase Transformation in Monocrystalline Silicon. <i>Nanoscale Research Letters</i> , 2008, 3, .	5.7	41
79	Surface Morphological and Nanomechanical Properties of PLD-Derived ZnO Thin Films. <i>Nanoscale Research Letters</i> , 2008, 3, .	5.7	41
80	Optimization of board-level thermomechanical reliability of high performance flip-chip package assembly. <i>Microelectronic Engineering</i> , 2008, 85, 659-664.	2.4	11
81	Reliability evaluations for board-level chip-scale packages under coupled power and thermal cycling test conditions. <i>Microelectronics Reliability</i> , 2008, 48, 132-139.	1.7	8
82	Nanoindentation identifications of mechanical properties of Cu ₆ Sn ₅ , Cu ₃ Sn, and Ni ₃ Sn ₄ intermetallic compounds derived by diffusion couples. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 485, 305-310.	5.6	144
83	Investigations of solder joint damage potentials for board-level chip-scale packages subjected to consecutive drops. <i>Microelectronics Reliability</i> , 2008, 48, 282-292.	1.7	7
84	Characteristics of ZnO thin films prepared by radio frequency magnetron sputtering. <i>Microelectronics Reliability</i> , 2008, 48, 389-394.	1.7	54
85	Finite element model verification for packaged printed circuit board by experimental modal analysis. <i>Microelectronics Reliability</i> , 2008, 48, 1837-1846.	1.7	19
86	Mechanical properties of InGaN thin films deposited by metal-organic chemical vapor deposition. <i>Materials Chemistry and Physics</i> , 2008, 109, 360-364.	4.0	22
87	Thermal-Mechanical Coupling Analysis for Coupled Power- and Thermal-Cycling Reliability of Board-Level Electronic Packages. <i>IEEE Transactions on Device and Materials Reliability</i> , 2008, 8, 122-128.	2.0	14
88	Optimization of Thermomechanical Reliability of Board-Level Flip-Chip Packages Implemented With Organic or Silicon Substrates. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2008, 31, 174-179.	1.4	4
89	Characterizations of ball impact responses of wafer-level chip-scale packages. <i>Journal of Alloys and Compounds</i> , 2008, 450, 238-244.	5.5	11
90	Morphological, structural, and mechanical characterizations of InGaN thin films deposited by MOCVD. <i>Journal of Alloys and Compounds</i> , 2008, 463, 533-538.	5.5	15

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91	First-principles calculations of elastic properties of Cu ₃ Sn superstructure. Applied Physics Letters, 2008, 92, 081901.	3.3	32
92	Structural design optimization for board-level drop reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2008, 48, 757-762.	1.7	16
93	A Study of Component-Level Measure of Board-Level Drop Impact Reliability by Ball Impact Test. , 2008, , .		4
94	Development and performance characterizations of a QFN/HMT package. , 2008, , .		4
95	Electromigration reliability and morphologies of Cu pillar flip-chip solder joints. , 2008, , .		16
96	Characteristic of Heat Affected Zone for Ultra Thin Gold Wire/Copper Wire and Advanced Finite Element Wirebonding Model. , 2008, , .		9
97	Experimental and Molecular Dynamics Investigations of Nanoindentation-induced Phase Transformations in Monocrystalline Silicon. , 2008, , .		0
98	Alloying design of Sn-Ag-Cu solders for the improvement in drop test performance. , 2008, , .		2
99	Electromigration Reliability with Respect to Cu Content in Solder Joint System. , 2008, , .		1
100	Effect of Multiple Reflow Cycles on Ball Impact Responses of Sn-4Ag-0.5Cu Solder Joints with Immersion Tin Substrate Pad Finish. , 2008, , .		1
101	Reliability and Failure Mechanism of Current-Stressed 99.3Sn-0.7Cu/96.5Sn-3Ag-0.5Cu Composite Flip-Chip Solder Joints with Cu or Au/Ni/Cu Substrate Pad Metallization. , 2008, , .		0
102	An Investigation on Heat Affected Zone for Au Wire/Cu Wire and Advanced Finite Element Wirebonding Model. , 2008, , .		0
103	Effect of transition metals on the interfacial reactions in electroless Ni(P)-solder interconnections. , 2008, , .		0
104	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
105	Nanotribological Characteristics of Cu ₆ Sn ₅ , Cu ₃ Sn, and Ni ₃ Sn ₄ Intermetallic Compounds Developed by Diffusion Couples. , 2008, , .		0
106	Theoretical Approach Towards Elastic Anisotropy and Strain-Induced Void Formation in Cu-Sn Crystalline Phases. , 2008, , .		1
107	Ultra Long Needle Geometry Probe Card Development for Wafer Level Test. , 2008, , .		0
108	Intermetallic formation induced substrate dissolution in electroless Ni(P)-solder interconnections. Journal of Materials Research, 2008, 23, 2545-2554.	2.6	11

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109	Evaluation of Thermal Characteristics of Board-level High Performance Flip-chip Package Equipped with Vapor Chamber as Heat Spreader. , 2008, , .		0
110	Strain-rate and impact velocity effects on joint adhesion strength. , 2008, , .		3
111	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
112	Parametric study on board-level electronic test device subjected to JEDEC vibration loads. , 2008, , .		2
113	Size and substrate effects on microstructure and shear properties of solder joints. , 2008, , .		0
114	Electromigration induced high fraction of compound formation in SnAgCu flip chip solder joints with copper column. Applied Physics Letters, 2008, 92, .	3.3	47
115	Metallurgical Perspective on Alloying Modification of Sn-Ag-Cu Solders. , 2008, , .		1
116	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
117	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
118	Dynamic finite element analysis on underlay microstructure of Cu/low-K wafer during bonding process. , 2007, , .		2
119	Incorporating Response Spectra and Modal Superposition in Analyzing Transient Responses of Structural Systems Subjected to Half-Sine Impact Acceleration Pulses. , 2007, , .		0
120	Mechanism and Fracturing Modes of Solder Joints Subjected to High-speed Shearing Forces. , 2007, , .		0
121	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
122	Working Temperature Characterizations for Die Attach Films in Stacked-die Process. Electronics Manufacturing Technology Symposium (IEMT), IEEE/CPMT International, 2007, , .	0.0	2
123	Effect of current crowding on whisker growth at the anode in flip chip solder joints. Applied Physics Letters, 2007, 91, 231919.	3.3	48
124	Effect of electromigration in the anodic Al interconnect on melting of flip chip solder joints. Applied Physics Letters, 2007, 90, 211914.	3.3	23
125	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
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	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
128	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
129	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
130	Mechanical Properties of Cu ₆ Sn ₅ , Cu ₃ Sn, and Ni ₃ Sn ₄ Intermetallic Compounds Measured by Nanoindentation. , 2007, , .		2
131	First-principles calculations of elastic properties of Cu-Sn crystalline phases. , 2007, , .		0
132	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
133	Ball impact responses of Sn-Ag-Cu solder joints doped with Ni or Ge. , 2007, , .		0
134	Coupled power and thermal cycling characteristics and reliability of stacked-die packages. , 2007, , .		0
135	Identification of mechanical properties of Cu ₆ Sn ₅ , Cu ₃ Sn, and Ni ₃ Sn ₄ intermetallic compounds using nanoindentation. , 2007, , .		1
136	Characterizations of ZnO thin films deposited onto langasite substrates by r.f. magnetron sputtering. , 2007, , .		0
137	A study of self-assembled monolayer coating for non-stick encapsulation mold. , 2007, , .		1
138	Board-level Reliability of Package-on-Package Stacking Assemblies Subjected to Coupled Power and Thermal Cycling Tests. , 2007, , .		3
139	Evaluation of Thermal Characteristics and Thermomechanical Reliability of Stacked-die Packages Under Coupled Power and Thermal Cycling Test Conditions. Electronics Manufacturing Technology Symposium (IEMT), IEEE/CPMT International, 2007, , .	0.0	0
140	The Effect of Sn _x AgCu and SnAgCu _x on the Mechanical Drop Performance in Lead Free CSP Package. , 2007, , .		1
141	Transient Submodeling Analysis for Board-Level Drop Tests of Electronic Packages. IEEE Transactions on Electronics Packaging Manufacturing, 2007, 30, 54-62.	1.4	27
142	Identifications of Nanomechanical Properties of Cu-Sn Crystalline Phases. , 2007, , .		0
143	Design Guideline for Ball Impact Test Apparatus. Journal of Electronic Packaging, Transactions of the ASME, 2007, 129, 98-104.	1.8	20
144	Atomic-level simulations of nanoindentation-induced phase transformation in mono-crystalline silicon. Applied Surface Science, 2007, 254, 1415-1422.	6.1	50

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145	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
146	Cyclic bending reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2007, 47, 111-117.	1.7	30
147	Empirical correlation between package-level ball impact test and board-level drop reliability. Microelectronics Reliability, 2007, 47, 1127-1134.	1.7	41
148	Response spectra analysis for undamped structural systems subjected to half-sine impact acceleration pulses. Microelectronics Reliability, 2007, 47, 1239-1245.	1.7	17
149	Electromigration of Sn ³⁷ Pb and Sn ³ Ag ^{1.5} Cu/Sn ³ Ag ^{0.5} Cu composite flip-chip solder bumps with Ti/Ni(V)/Cu under bump metallurgy. Microelectronics Reliability, 2007, 47, 1273-1279.	1.7	70
150	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
151	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
152	Optimal design towards enhancement of board-level thermomechanical reliability of wafer-level chip-scale packages. Microelectronics Reliability, 2007, 47, 104-110.	1.7	28
153	Evaluation of solder joint strengths under ball impact test. Microelectronics Reliability, 2007, 47, 2179-2187.	1.7	53
154	Characterizations of Ball Impact Responses of Tin-Silver-Copper Solder Joints Doped With Nickel or Germanium. , 2007, , .		0
155	Thermal-Mechanical Coupling Analysis of Board-Level Chip-Scale Packages Subjected to Power Cycling of Different Powering Durations. , 2007, , .		1
156	Finite Element Analysis Procedure for Board-level Swept Sine Vibration Tests. , 2006, , .		2
157	Application of submodeling technique to transient drop impact analysis of board-level stacked die packages. , 2006, , .		1
158	Comprehensive Dynamic Analysis of Wirebonding on Cu/Low-K Wafers. IEEE Transactions on Advanced Packaging, 2006, 29, 264-270.	1.6	25
159	Underfill selection for reducing Cu/low-K delamination risk of flip-chip assembly. , 2006, , .		14
160	Elastoplastic harmonic analysis of board-level swept sine vibration tests. , 2006, , .		0
161	Ball Impact Responses of Wafer-level Chip-scale Packages. , 2006, , .		0
162	A Numerical Study of Board-level Stacked-die Packages Under Coupled Power and Thermal Cycling Test Conditions. , 2006, , .		0

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163	An experimental investigation of current stressing on wafer-level chip-scale packages. , 2006, , .		1
164	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
165	Ball impact responses and failure analysis of wafer-level chip-scale packages. , 2006, , .		1
166	Finite Element Analysis of Dynamic Drop Impact of Board-level Stacked-Die Packages Using Submodeling Technique. , 2006, , .		1
167	A numerical approach towards the correlation between ball impact test and drop reliability. , 2006, , .		3
168	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
169	Characteristics of current crowding in flip-chip solder bumps. Microelectronics Reliability, 2006, 46, 915-922.	1.7	50
170	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
171	Transient fracturing of solder joints subjected to displacement-controlled impact loads. Microelectronics Reliability, 2006, 46, 885-895.	1.7	42
172	Support excitation scheme for transient analysis of JEDEC board-level drop test. Microelectronics Reliability, 2006, 46, 626-636.	1.7	82
173	Electrothermal coupling analysis of current crowding and Joule heating in flip-chip packages. Microelectronics Reliability, 2006, 46, 1357-1368.	1.7	43
174	Evaluation of board-level reliability of electronic packages under consecutive drops. Microelectronics Reliability, 2006, 46, 1172-1182.	1.7	61
175	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
176	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
177	Calibration of electromigration reliability of flip-chip packages by electrothermal coupling analysis. Journal of Electronic Materials, 2006, 35, 972-977.	2.2	27
178	Local melting induced by electromigration in flip-chip solder joints. Journal of Electronic Materials, 2006, 35, 1005-1009.	2.2	58
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