

Ming-yi Tsai

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Geometric Nonlinear Effect on Biaxial Bending Strength of Thin Silicon Die in the Ball-on-Ring Test. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.8	2
2	Thermally-Induced Deformations and Warpages of Flip-Chip and 2.5D IC Packages Measured by Strain Gauges. Materials, 2021, 14, 3723.	2.9	11
3	Backplate-reinforced structures for enhancing solder joint reliability of server CPU assembly under thermal cycling. Journal of Mechanics, 2021, 37, 693-703.	1.4	2
4	A Theoretical Solution for Thermal Warpage of Flip-Chip Packages. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 72-78.	2.5	10
5	Geometric Nonlinear Effect on Biaxial Bending Strength of Thin Silicon Die in the PoEF Test. IEEE Transactions on Device and Materials Reliability, 2020, 20, 442-451.	2.0	3
6	Evaluation of Three-Point Bending Strength of Thin Silicon Die With a Consideration of Geometric Nonlinearity. IEEE Transactions on Device and Materials Reliability, 2019, 19, 615-621.	2.0	8
7	Evaluation of Bending Strength of Window Glass Substrate With Considerations of Uni- and Bi-Axial Loading and Free Edge Stresses. Journal of Electronic Packaging, Transactions of the ASME, 2019, 141, .	1.8	3
8	To Extend Suhir Theory for Predicting Thermally-Induced Warpage of Flip-Chip Packages. , 2018, , .		1
9	Three-Point Bending Strength and Failure of Window Glass Substrate by Considering Edge Stress Distribution. , 2018, , .		4
10	Effects of Metal Frame and Adhesive on Thermally-Induced Warpage and Stress of 2.5D Packages: Experimental and Numerical Studies. IEEE Transactions on Device and Materials Reliability, 2018, 18, 450-455.	2.0	9
11	Bending Strength Evaluation of Si Interposers by PoEF Test Associated With Acoustic Emission Method. IEEE Transactions on Device and Materials Reliability, 2017, 17, 364-370.	2.0	2
12	Measurements of Thermally-Induced Curvatures and Warpages of Printed Circuit Board during a Solder Reflow Process Using Strain Gauges. Applied Sciences (Switzerland), 2017, 7, 739.	2.5	18
13	Thermal reliability analysis of through-aluminium-nitride-via substrate for high-power LED applications. , 2016, , .		3
14	Determination of strength of Si interposers using PoEF test associated with acoustic emission method. , 2016, , .		0
15	Mechanical strength of thin Cu-TSV memory dies used in 3D IC packaging. , 2015, , .		5
16	Investigation on Some Parameters Affecting Optical Degradation of LED Packages During High-Temperature Aging. IEEE Transactions on Device and Materials Reliability, 2015, 15, 335-341.	2.0	9
17	Design and analysis of heat dissipation of LED back light module. , 2014, , .		1
18	Bump and Underfill Effects on Thermal Behaviors of Flip-Chip LED Packages: Measurement and Modeling. IEEE Transactions on Device and Materials Reliability, 2014, 14, 161-168.	2.0	25

#	ARTICLE	IF	CITATIONS
19	A Study of Overlaying Dielectric Layer and Its Local Geometry Effects on TSV-Induced KOZ in 3-D IC. IEEE Transactions on Electron Devices, 2014, 61, 3090-3095.	3.0	8
20	Mechanics of back-plate reinforced structure for server CPU assembly under mechanical loading: Measurements and simulation. , 2014, , .		0
21	Warpage measurements of printed circuit board during reflow process using strain gauges. , 2014, , .		5
22	Investigation on Cu TSV-Induced KOZ in Silicon Chips: Simulations and Experiments. IEEE Transactions on Electron Devices, 2013, 60, 2331-2337.	3.0	40
23	Effects of overlaying dielectric layer and its local geometry on TSV-induced KOZ in 3D IC. , 2013, , .		0
24	Strength evaluation of thin 3D-TSV memory chips by pin-on-elastic-foundation test. , 2013, , .		4
25	The impact of through silicon via proximity on CMOS device. , 2012, , .		2
26	Determination of TSV-induced KOZ in 3D-stacked DRAMs: Simulations and experiments. , 2012, , .		3
27	Warpage, stresses and KOZ of 3D TSV DRAM package during manufacturing processes. , 2012, , .		3
28	The role of thermal properties of PCB substrates in heat dissipation of LED back light bars. , 2012, , .		2
29	Characterization of thermal and optical behaviors of flip-chip LED packages with various underfills. , 2011, , .		3
30	Warpage and curvature determination of PCB with DIMM socket during reflow process by strain gage measurement. , 2010, , .		10
31	Residual Strain Measurement of Thin-Layer Cured Adhesives and Their Effects on Warpage in Electronic Packaging. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 71-78.	1.3	4
32	Thermal Resistance and Reliability of High-Power LED Packages Under WHTOL and Thermal Shock Tests. IEEE Transactions on Components and Packaging Technologies, 2010, 33, 738-746.	1.3	24
33	Comparison of Printed Circuit Board Property Variations in Response to Simulated Lead-Free Soldering. IEEE Transactions on Electronics Packaging Manufacturing, 2010, 33, 98-111.	1.4	13
34	Thermal measurements and analysis of flip-chip LED packages with and without underfills. , 2010, , .		7
35	Thermal stresses and deformations of Cu pillar flip chip BGA package: Analyses and measurements. , 2010, , .		15
36	Warpage Analysis of Flip-Chip PBGA Packages Subject to Thermal Loading. IEEE Transactions on Device and Materials Reliability, 2009, 9, 419-424.	2.0	62

#	ARTICLE	IF	CITATIONS
37	Warpage measurement and design of wBGA package under thermal loading. , 2009, , .		3
38	Optical analysis and measurements of high-power COP LED packages. , 2009, , .		1
39	Thermal analyses and measurements of low-Cost COP package for high-power LED. , 2008, , .		20
40	Thermal resistance and reliability of low-cost high-power LED packages under WHTOL test. , 2008, , .		13
41	Effect of lead-free soldering on key material properties of FR-4 printed circuit board laminates. , 2008, , .		2
42	Correlation Between Measurement and Simulation of Thermal Warpage in PBGA With Consideration of Molding Compound Residual Strain. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 683-690.	1.3	37
43	Characterization of residual strains of the EMC in PBGA during manufacturing and IR solder reflow process. , 2007, , .		4
44	Moisture Ingression Effect on Stress Distributions in NCF-Bonded COG Packages. , 2007, , .		3
45	Hygro-Thermal Warpings of COG Package With Nonconductive Paste Adhesive. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 517-525.	1.3	3
46	Experimental and Numerical Studies of Warpings of ACF-Bonded COG Packages Induced From Manufacturing and Thermal Cycling. IEEE Transactions on Advanced Packaging, 2007, 30, 665-673.	1.6	8
47	Testing and Evaluation of Silicon Die Strength. IEEE Transactions on Electronics Packaging Manufacturing, 2007, 30, 106-114.	1.4	34
48	Comparison between Experimental Measurement and Numerical Analysis of Warpage in PBGA Package and Assembly with the Consideration of Residual Strain in the Molding Compound. , 2006, , .		2
49	Test Methods for Silicon Die Strength. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 419-426.	1.8	28
50	Determination of Residual Strains of Cured Adhesives and Their Effects on Warpings in Electronic Packaging. , 2006, , .		0
51	Study of Some Parameter Effects on Warpage and Bump-Joint Stresses of COG Packages. IEEE Transactions on Advanced Packaging, 2006, 29, 587-598.	1.6	23
52	Thermal deformations and stresses of flip-chip BGA packages with low- and high-T/sub g/ underfills. IEEE Transactions on Electronics Packaging Manufacturing, 2005, 28, 328-337.	1.4	16
53	A Note on Suhir's Solution of Thermal Stresses for a Die-Substrate Assembly. Journal of Electronic Packaging, Transactions of the ASME, 2004, 126, 115-119.	1.8	77
54	Investigation of Thermomechanical Behaviors of Flip Chip BGA Packages During Manufacturing Process and Thermal Cycling. IEEE Transactions on Components and Packaging Technologies, 2004, 27, 568-576.	1.3	85