

Ming-yi Tsai

List of Publications by Year in descending order

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687363

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54
times ranked

377
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	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
3	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
4	Investigation on Cu TSV-Induced KOZ in Silicon Chips: Simulations and Experiments. IEEE Transactions on Electron Devices, 2013, 60, 2331-2337.	3.0	40
5	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
6	Testing and Evaluation of Silicon Die Strength. IEEE Transactions on Electronics Packaging Manufacturing, 2007, 30, 106-114.	1.4	34
7	Test Methods for Silicon Die Strength. Journal of Electronic Packaging, Transactions of the ASME, 2006, 128, 419-426.	1.8	28
8	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
9	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
10	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
11	Thermal analyses and measurements of low-Cost COP package for high-power LED. , 2008, , .		20
12	Measurements of Thermally-Induced Curvatures and Warpings of Printed Circuit Board during a Solder Reflow Process Using Strain Gauges. Applied Sciences (Switzerland), 2017, 7, 739.	2.5	18
13	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
14	Thermal stresses and deformations of Cu pillar flip chip BGA package: Analyses and measurements. , 2010, , .		15
15	Thermal resistance and reliability of low-cost high-power LED packages under WHTOL test. , 2008, , .		13
16	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
17	Thermally-Induced Deformations and Warpings of Flip-Chip and 2.5D IC Packages Measured by Strain Gauges. Materials, 2021, 14, 3723.	2.9	11
18	Warping and curvature determination of PCB with DIMM socket during reflow process by strain gage measurement. , 2010, , .		10

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	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
22	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
23	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
24	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
25	Thermal measurements and analysis of flip-chip LED packages with and without underfills. , 2010, , .		7
26	Warpage measurements of printed circuit board during reflow process using strain gauges. , 2014, , .		5
27	Mechanical strength of thin Cu-TSV memory dies used in 3D IC packaging. , 2015, , .		5
28	Characterization of residual strains of the EMC in PBGA during manufacturing and IR solder reflow process. , 2007, , .		4
29	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
30	Strength evaluation of thin 3D-TSV memory chips by pin-on-elastic-foundation test. , 2013, , .		4
31	Three-Point Bending Strength and Failure of Window Glass Substrate by Considering Edge Stress Distribution. , 2018, , .		4
32	Moisture Ingression Effect on Stress Distributions in NCF-Bonded COG Packages. , 2007, , .		3
33	Hygro-Thermal Warpings of COG Package With Nonconductive Paste Adhesive. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 517-525.	1.3	3
34	Warpage measurement and design of wBGA package under thermal loading. , 2009, , .		3
35	Characterization of thermal and optical behaviors of flip-chip LED packages with various underfills. , 2011, , .		3
36	Determination of TSV-induced KOZ in 3D-stacked DRAMs: Simulations and experiments. , 2012, , .		3

#	ARTICLE	IF	CITATIONS
37	Warpage, stresses and KOZ of 3D TSV DRAM package during manufacturing processes. , 2012, , .		3
38	Thermal reliability analysis of through-aluminium-nitride-via substrate for high-power LED applications. , 2016, , .		3
39	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
40	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
41	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
42	Effect of lead-free soldering on key material properties of FR-4 printed circuit board laminates. , 2008, , .		2
43	The impact of through silicon via proximity on CMOS device. , 2012, , .		2
44	The role of thermal properties of PCB substrates in heat dissipation of LED back light bars. , 2012, , .		2
45	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
46	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
47	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
48	Optical analysis and measurements of high-power COP LED packages. , 2009, , .		1
49	Design and analysis of heat dissipation of LED back light module. , 2014, , .		1
50	To Extend Suhir Theory for Predicting Thermally-Induced Warpage of Flip-Chip Packages. , 2018, , .		1
51	Determination of Residual Strains of Cured Adhesives and Their Effects on Warpages in Electronic Packaging. , 2006, , .		0
52	Effects of overlaying dielectric layer and its local geometry on TSV-induced KOZ in 3D IC. , 2013, , .		0
53	Mechanics of back-plate reinforced structure for server CPU assembly under mechanical loading: Measurements and simulation. , 2014, , .		0
54	Determination of strength of Si interposers using PoEF test associated with acoustic emission method. , 2016, , .		0