

Michael Mayer

List of Publications by Year in descending order

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docs citations

37
times ranked

138
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-Stress Thermosonic Copper Ball Bonding. IEEE Transactions on Electronics Packaging Manufacturing, 2009, 32, 176-184.	1.4	39
2	Electromigration of composite Sn-Ag-Cu solder bumps. Electronic Materials Letters, 2015, 11, 1072-1077.	2.2	27
3	Low cost Pd coated Ag bonding wire for high quality FAB in air. , 2012, , .		15
4	Analysis of the electrical characteristics and structure of Cu-Filled TSV with thermal shock test. Electronic Materials Letters, 2014, 10, 649-653.	2.2	13
5	Online methods to measure breaking force of bonding wire using a CMOS stress sensor and a proximity sensor. Sensors and Actuators A: Physical, 2008, 148, 462-471.	4.1	12
6	Complete set of piezoresistive coefficients of CMOS -diffusion. Journal of Micromechanics and Microengineering, 1998, 8, 158-160.	2.6	11
7	Microelectronic Wire Bonding with Insulated Au Wire: Effects of Process Parameters on Insulation Removal and Crescent Bonding. Materials Transactions, 2008, 49, 2347-2353.	1.2	11
8	A New Non-PRM Bumping Process by Electroplating on Si Die for Three Dimensional Packaging. Materials Transactions, 2010, 51, 1887-1892.	1.2	11
9	Sn Bumping Without Photoresist Mould and Si Dice Stacking for 3-D Packaging. IEEE Transactions on Advanced Packaging, 2010, 33, 912-917.	1.6	11
10	Assessing Au-Al wire bond reliability using integrated stress sensors. , 2010, , .		10
11	SAC305 Solder Reflow: Identification of Melting and Solidification Using In-Process Resistance Monitoring. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1623-1631.	2.5	10
12	Analysis of Ultrasonic Wire Bonding by In-situ Piezoresistive Microsensors. , 2001, , 1398-1401.		10
13	Comparison of Insulated with Bare Au Bonding Wire: HAZ Length, HAZ Breaking Force, and FAB Deformability. Journal of Electronic Materials, 2009, 38, 834-842.	2.2	8
14	Sn-Ag-Cu to Cu joint current aging test and evolution of resistance and microstructure. Electronic Materials Letters, 2015, 11, 1078-1084.	2.2	8
15	Real time joint resistance monitoring during solder reflow. Journal of Alloys and Compounds, 2017, 695, 3002-3010.	5.5	6
16	Tail Breaking Force in Thermosonic Wire Bonding with Novel Bonding Wires. Materials Science Forum, 2008, 580-582, 201-204.	0.3	5
17	Effect of ultrasonic capillary dynamics on the mechanics of thermosonic ball bonding. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 241-252.	3.0	5
18	Golden bump for 20micron diameter wire bond enhancement at reduced process temperature. Microelectronic Engineering, 2011, 88, 3024-3029.	2.4	5

#	ARTICLE	IF	CITATIONS
19	Ultrasonic stresses in thermosonic ball bonding. , 2011, , .		4
20	Reliability testing of wire bonds using pad resistance with van der Pauw method. , 2014, , .		4
21	The Electrical Reliability of Silver Wire Bonds under High Temperature Storage. , 2016, , .		4
22	Process Design of Fine Pitch Ball Bonding by Volume Conservation Modelling. , 2016, , .		4
23	Miniature environmental chambers for temperature humidity bias testing of microelectronics. Review of Scientific Instruments, 2017, 88, 034707.	1.3	4
24	Factors affecting activation energy for pd-coated cu ball bond resistance degradation on Al bond pads in high temperature storage. , 2017, , .		4
25	Ultrasonic Friction Power in Microelectronic Wire Bonding. Materials Science Forum, 0, 539-543, 3920-3925.	0.3	3
26	Low-cost Palladium coating process and its effect on free-air-ball softness and second bond strength of Cu bonding wires. , 2012, , .		3
27	Finite Element Modeling of Simultaneous Ultrasonic Bumping With Au Balls. Journal of Electronic Packaging, Transactions of the ASME, 2009, 131, .	1.8	2
28	Electromigration testing of wire bonds. , 2014, , .		2
29	Numerical Simulations of Joint-to-Joint Temperature Variation During Thermo-Compression Bonding. , 2017, , .		2
30	Effects of Epoxy Molding Compound on Electrical Resistance Degradation of Pd-Coated Cu Wire Bonds in the 175 Å°C to 225 Å°C Range. , 2018, , .		2
31	Conductive pathway on cotton fabric created using solution with silver organometallic compound. Materials Research Express, 2017, 4, 106305.	1.6	1
32	Dynamic resistance monitoring of aging process of pressureless sintered nano-silver joints. , 2019, , .		1
33	In-situ Determination of Specimen Temperature during Electromigration Testing of Solder Joint. , 2021, , .		1
34	Wire Bonding UPH and Stitch Bond Improvement using 20 Micron Diameter Insulated Wire with Security Bump. International Symposium on Microelectronics, 2010, 2010, 000667-000674.	0.0	1
35	Simulation of Ultrasonic Stress During Impact Phase in Wire Bonding. Journal of the Microelectronics and Packaging Society, 2013, 20, 7-11.	0.1	1
36	The Fundamentals of Wire Bonding. , 2019, , 23-64.		0