

# Ee Hua Wong

## List of Publications by Year in descending order

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109  
papers

2,588  
citations

257450

24  
h-index

265206

42  
g-index

109  
all docs

109  
docs citations

109  
times ranked

1352  
citing authors

#	ARTICLE	IF	CITATIONS
1	A new creep fatigue model for solder joints. <i>Microelectronics Reliability</i> , 2019, 98, 153-160.	1.7	7
2	Derivation of novel creep-integrated fatigue equations. <i>International Journal of Fatigue</i> , 2019, 128, 105184.	5.7	3
3	Characterizing the kinetics of free and bound water using a non-isothermal sorption technique. <i>Drying Technology</i> , 2017, 35, 46-54.	3.1	12
4	Creep-integrated fatigue equation for metals. <i>International Journal of Fatigue</i> , 2017, 98, 167-175.	5.7	20
5	Interface and interconnection stresses in electronic assemblies – A critical review of analytical solutions. <i>Microelectronics Reliability</i> , 2017, 79, 206-220.	1.7	17
6	The mechanics of bondline thickness in balanced sandwich structures. <i>International Journal of Adhesion and Adhesives</i> , 2017, 78, 4-12.	2.9	2
7	Design Analysis of Adhesively Bonded Structures. <i>Polymers</i> , 2017, 9, 664.	4.5	6
8	The Unified Creep-Fatigue Equation for Stainless Steel 316. <i>Metals</i> , 2016, 6, 219.	2.3	11
9	On the oscillatory of viscoelastic functions. <i>International Journal of Solids and Structures</i> , 2016, 96, 136-144.	2.7	3
10	Constitutive modeling of solder alloys for drop-impact applications. <i>Microelectronics Reliability</i> , 2016, 67, 135-142.	1.7	4
11	Moisture diffusion modeling – A critical review. <i>Microelectronics Reliability</i> , 2016, 65, 318-326.	1.7	34
12	Creep fatigue models of solder joints: A critical review. <i>Microelectronics Reliability</i> , 2016, 59, 1-12.	1.7	44
13	A new representation for anisotropic viscoelastic functions. <i>Mathematics and Mechanics of Solids</i> , 2016, 21, 685-708.	2.4	5
14	Design analysis of sandwiched structures experiencing differential thermal expansion and differential free-edge stretching. <i>International Journal of Adhesion and Adhesives</i> , 2016, 65, 19-27.	2.9	4
15	On non-monotonicity of linear viscoelastic functions. <i>Mathematics and Mechanics of Solids</i> , 2015, 20, 600-613.	2.4	3
16	Thermal stresses in the discrete joints of sandwiched structures. <i>Composite Structures</i> , 2015, 125, 72-80.	5.8	5
17	The fundamentals of thermal-mass diffusion analogy. <i>Microelectronics Reliability</i> , 2015, 55, 588-595.	1.7	21
18	Characterising Arrhenius moisture diffusivity constants using non-isothermal sorption. <i>Microelectronics Reliability</i> , 2015, 55, 2331-2335.	1.7	2

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19	Interfacial stresses in sandwich structures subjected to temperature and mechanical loads. <i>Composite Structures</i> , 2015, 134, 226-236.	5.8	12
20	Frequency-dependent strain-life characteristics of Sn1.0Ag0.1Cu solder on copper pad at high cyclic frequency. <i>International Journal of Fatigue</i> , 2014, 59, 43-49.	5.7	6
21	Frequency-Dependent Low Cycle Fatigue of Sn1Ag0.1Cu(In/Ni) Solder Joints Subjected to High-Frequency Loading. <i>Journal of Electronic Materials</i> , 2014, 43, 586-593.	2.2	4
22	A unified equation for creep-fatigue. <i>International Journal of Fatigue</i> , 2014, 68, 186-194.	5.7	26
23	A Study of Crack Propagation in Pb-Free Solder Joints. <i>IEEE Transactions on Electronics Packaging Manufacturing</i> , 2010, 33, 84-90.	1.4	12
24	Analytical Solution for the Damped-Dynamics of Printed Circuit Board and Applied to Study the Effects of Distorted Half-Sine Support Excitation. <i>IEEE Transactions on Advanced Packaging</i> , 2009, 32, 536-545.	1.6	6
25	High-Speed Cyclic Bend Tests and Board-Level Drop Tests for Evaluating the Robustness of Solder Joints in Printed Circuit Board Assemblies. <i>Journal of Electronic Materials</i> , 2009, 38, 884-895.	2.2	23
26	Advances in the drop-impact reliability of solder joints for mobile applications. <i>Microelectronics Reliability</i> , 2009, 49, 139-149.	1.7	56
27	Approximate solutions for the stresses in the solder joints of a printed circuit board subjected to mechanical bending. <i>International Journal of Mechanical Sciences</i> , 2009, 51, 152-158.	6.7	19
28	The damped dynamics of printed circuit board and analysis of distorted and deformed half-sine excitation. <i>Microelectronics Reliability</i> , 2009, 49, 916-923.	1.7	10
29	Frequency dependent S-N curves for predicting drop impact robustness of Pb-free solder interconnects. , 2009, , .		1
30	Analytical Solutions for PCB Assembly Subjected to Mismatched Thermal Expansion. <i>IEEE Transactions on Advanced Packaging</i> , 2009, 32, 602-611.	1.6	13
31	A review of board level solder joints for mobile applications. <i>Microelectronics Reliability</i> , 2008, 48, 1747-1758.	1.7	88
32	Stress-strain Characteristics of Tin-Based Solder Alloys for Drop-Impact Modeling. <i>Journal of Electronic Materials</i> , 2008, 37, 829-836.	2.2	74
33	Correlation studies for component level ball impact shear test and board level drop test. <i>Microelectronics Reliability</i> , 2008, 48, 1069-1078.	1.7	38
34	Stress-strain characteristics of tin-based solder alloys at medium strain rate. <i>Materials Letters</i> , 2008, 62, 3031-3034.	2.6	30
35	Recent advances in drop-impact reliability. , 2008, , .		12
36	DNA Sensing by Silicon Nanowire: Charge Layer Distance Dependence. <i>Nano Letters</i> , 2008, 8, 1066-1070.	9.1	267

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37	A Study of Component-Level Measure of Board-Level Drop Impact Reliability by Ball Impact Test. , 2008, , .		4
38	A More Comprehensive Solution for Tri-Material Layers Subjected to Thermal Stress. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 54-64.	1.3	11
39	A Comprehensive Test Method for Bridging the Gap between Product and Board Level Drop Tests. , 2008, , .		2
40	Tri-Layer Structures Subjected to Combined Temperature and Mechanical Loadings. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 790-800.	1.3	24
41	Development of Stretch Solder Interconnections for Wafer Level Packaging. IEEE Transactions on Advanced Packaging, 2008, 31, 377-385.	1.6	3
42	A study of crack propagation in Pb-free solder joints under drop impact. , 2008, , .		17
43	Integrated Process-Aging Modeling Methodology for Flip Chip on Flex Interconnections With Nonconductive Adhesives. IEEE Transactions on Advanced Packaging, 2008, 31, 882-889.	1.6	3
44	Fracture mechanics study of fatigue crack growth in solder joints under drop impact. , 2008, , .		7
45	HART: A new highly accelerated robustness test for conductive adhesive interconnects. , 2008, , .		3
46	Analytical Solution of the Dynamic Response of Printed Circuit Board to Support Excitation. , 2007, , .		0
47	A Component Level Test Method for Evaluating the Resistance of Pb-free BGA Solder Joints to Brittle Fracture under Shock Impact. , 2007, , .		24
48	Constitutive Properties of Bulk Solder at `Drop-Impact' Strain Rates. , 2007, , .		1
49	Analytical Solutions for Interconnect Stress in Board Level Drop Impact. IEEE Transactions on Advanced Packaging, 2007, 30, 654-664.	1.6	21
50	Evolution of Contact Resistance during the Bonding Process of NCA Flip-Chip Interconnections. Journal of Electronic Materials, 2007, 36, 1719-1723.	2.2	2
51	Improvement of mechanical impact resistance of BGA packages with Pb-free solder bumps. , 2006, , .		13
52	Reliability Performance of Stretch Solder Interconnections. Electronics Manufacturing Technology Symposium (IEMT), IEEE/CPMT International, 2006, , .	0.0	9
53	Advances in Vapor Pressure Modeling for Electronic Packaging. IEEE Transactions on Advanced Packaging, 2006, 29, 751-759.	1.6	30
54	High strain rate testing of solder interconnections. Soldering and Surface Mount Technology, 2006, 18, 12-17.	1.5	27

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55	Time-temperature transformation (TTT) cure diagram of a fast cure non-conductive adhesive. Thin Solid Films, 2006, 504, 331-335.	1.8	10
56	New insights into board level drop impact. Microelectronics Reliability, 2006, 46, 930-938.	1.7	38
57	Direct Measurement of Cure-Induced Stress in Thermosetting Materials by Means of a Dynamic Mechanical Analyzer. Macromolecular Rapid Communications, 2006, 27, 1393-1397.	3.9	12
58	Investigation of cure kinetics and its effect on adhesion strength of nonconductive adhesives used in flip chip assembly. IEEE Transactions on Components and Packaging Technologies, 2006, 29, 71-79.	1.3	15
59	Understanding and Testing for Drop Impact Failure. , 2005, , 1089.		22
60	Dynamics Of Board-Level Drop Impact. Journal of Electronic Packaging, Transactions of the ASME, 2005, 127, 200-207.	1.8	27
61	Board Level Drop Impact-Fundamental and Parametric Analysis. Journal of Electronic Packaging, Transactions of the ASME, 2005, 127, 496-502.	1.8	45
62	Effect of temperature on the cure shrinkage measurement of non-conductive adhesives for flip chip interconnects. Journal of Materials Research, 2005, 20, 1324-1329.	2.6	20
63	Characterization of optical properties of acrylate based adhesives exposed to different temperature conditions. Journal of Applied Polymer Science, 2005, 98, 950-956.	2.6	23
64	Observations of Gelation and Vitrification of a Thermosetting Resin during the Evolution of Polymerization Shrinkage. Macromolecular Rapid Communications, 2005, 26, 1483-1487.	3.9	30
65	Development of process modeling methodology for flip chip on flex interconnections with non-conductive adhesives. Microelectronics Reliability, 2005, 45, 1215-1221.	1.7	13
66	Cure shrinkage measurement of nonconductive adhesives by means of a thermomechanical analyzer. Journal of Electronic Materials, 2005, 34, 1177-1182.	2.2	53
67	Drop Impact: Fundamentals and Impact Characterisation of Solder Joints. , 2005, , .		68
68	Correlation of material properties to reliability performance of anisotropic conductive adhesive flip chip packages. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 157-164.	1.3	19
69	High Strain Rate Testing of Solder Interconnections. , 2005, , .		1
70	Drop Impact Reliability - A Comprehensive Summary. , 2005, , .		10
71	Moisture-induced failures of adhesive flip chip interconnects. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 506-516.	1.3	57
72	Swelling and time-dependent subcritical debonding of underfill during temperature-humidity aging of flip chip packages. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 862-868.	1.3	11

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73	<title>Methodology to study the effect of moisture on refractive index of optical adhesive</title>. , 2005, , .		0
74	Characterization and modeling of static and cyclic relaxation in nonconductive adhesives. Journal of Electronic Materials, 2004, 33, 1041-1047.	2.2	8
75	Characterization of nonconductive adhesives for flip-chip interconnection. Journal of Electronic Materials, 2004, 33, 271-276.	2.2	28
76	Thermo-mechanical finite element analysis in a multichip build up substrate based package design. Microelectronics Reliability, 2004, 44, 611-619.	1.7	34
77	Static and cyclic relaxation studies in nonconductive adhesives. Thin Solid Films, 2004, 462-463, 419-426.	1.8	1
78	Development and reliability of non-conductive adhesive flip-chip packages. Thin Solid Films, 2004, 462-463, 446-453.	1.8	60
79	Next Generation of 100- $\mu\text{m}$ -Pitch Wafer-Level Packaging and Assembly for Systems-on-Package. IEEE Transactions on Advanced Packaging, 2004, 27, 413-425.	1.6	12
80	Board Level Reliability Enhancement for A Double-bump Wafer Level Chip Scale Package. Journal of Microelectronics and Electronic Packaging, 2004, 1, 64-71.	0.7	4
81	Moisture absorption and diffusion characterisation of packaging materialsâ€œadvanced treatment. Microelectronics Reliability, 2003, 43, 2087-2096.	1.7	89
82	Hygroscopic swelling and sorption characteristics of epoxy molding compounds used in electronic packaging. IEEE Transactions on Components and Packaging Technologies, 2003, 26, 206-214.	1.3	115
83	Tackling the Drop Impact Reliability of Electronic Packaging. , 2003, , 757.		21
84	New Methodology for Mechanical Characterisation of Solders for IC Packaging. , 2003, , .		0
85	The Mechanics and Impact of Hygroscopic Swelling of Polymeric Materials in Electronic Packaging. Journal of Electronic Packaging, Transactions of the ASME, 2002, 124, 122-126.	1.8	100
86	Comprehensive treatment of moisture induced failure-recent advances. IEEE Transactions on Electronics Packaging Manufacturing, 2002, 25, 223-230.	1.4	60
87	Equality of Radial and Edge Plastic Work Rate for Plates Collapsing in Pseudo-Conical Mode. International Journal of Mechanical Engineering Education, 1999, 27, 275-280.	1.0	1
88	The moving-node finite element: Crack propagation velocity modelling. Finite Elements in Analysis and Design, 1994, 17, 121-130.	3.2	1
89	Moving-node elements: Formulation and stress intensity modelling. Finite Elements in Analysis and Design, 1994, 17, 131-153.	3.2	2
90	Application of moire interferometry in electronics packaging. , 0, , .		5

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91	Non-Fickian moisture properties characterisation and diffusion modeling for electronic packages. , 0, , .		23
92	Underfill swelling and temperature-humidity performance of flip chip PBGA package. , 0, , .		24
93	The mechanics and impact of hygroscopic swelling of polymeric materials in electronic packaging. , 0, , .		98
94	Drop impact test - mechanics & physics of failure. , 0, , .		61
95	Advanced moisture diffusion modeling and characterisation for electronic packaging. , 0, , .		35
96	Mechanical response of PCBs in portable electronic products during drop impact. , 0, , .		36
97	Calibration of a piezoresistive stress sensor in [100] silicon test chips. , 0, , .		10
98	An effective method of characterizing moisture desorption of polymeric materials at high temperature. , 0, , .		8
99	Board level solder joint failures by static and dynamic loads. , 0, , .		19
100	Effects of anisotropic conductive adhesive (ACA) material properties on package reliability performance [flip-chip interconnects]. , 0, , .		9
101	Ultra-high density board technology for sub-100 ?m pitch nano-wafer level packaging. , 0, , .		2
102	Assembly process modeling for flip chip on flex interconnections with non-conductive adhesive. , 0, , .		6
103	Drop impact survey of portable electronic products. , 0, , .		68
104	Prediction of moisture induced failures in flip chip on flex interconnections with non-conductive adhesives. , 0, , .		19
105	High-Speed Bend Test Method and Failure Prediction for Drop Impact Reliability. , 0, , .		20
106	Analytical Solutions for Interconnect Stress in Board Level Drop Impact. , 0, , .		1
107	Micro Impact Characterisation of Solder Joint for Drop Impact Application. , 0, , .		23
108	Failure Mechanisms of Interconnections in Drop Impact. , 0, , .		5

#	ARTICLE	IF	CITATIONS
109	Super Stretched Solder Interconnects for Wafer Level Packaging. , 0, , .		5