Bongtae Han

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

176	3,038	27	50
papers	citations	h-index	g-index
216	3,652	2.1	5.41
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
176	EMC Oxidation Under High-Temperature Aging **2022**, 53-80		0
175	Effect of critical properties of epoxy molding compound on warpage prediction: A critical review. *Microelectronics Reliability*, **2022**, 130, 114480	1.2	0
174	Thermal Performance of Cryogenic Micro-Pin Fin Coolers with Two-Phase Liquid Nitrogen Flows. *Applied Sciences (Switzerland)*, **2021**, 11, 11071	2.6	0
173	High temperature aging of epoxy-based molding compound and its effect on mechanical behavior of molded electronic package. *Polymer Degradation and Stability*, **2021**, 188, 109572	4.7	2
172	Degradation Estimation and Prediction of Electronic Packages using Data Driven Approach. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	5
171	Thermal and optical performance of cryogenically cooled laser diode bars mounted on pin-finned microcoolers. *Applied Physics B: Lasers and Optics*, **2021**, 127, 1	1.9	1
170	Towards virtual twin for electronic packages in automotive applications. *Microelectronics Reliability*, **2021**, 122, 114134	1.2	2
169	Volumetric effective cure shrinkage measurement of dual curable adhesives by fiber Bragg grating sensor. *Journal of Materials Science*, **2020**, 55, 9655-9664	4.3	4
168	In-situ service load monitoring of automotive electronic systems using silicon-based piezoresistive stress sensor. *Microelectronics Reliability*, **2020**, 110, 113650	1.2	2
167	Moisture Transport Through Housing Materials Enclosing Critical Automotive Electronics. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2020**, 10, 541-550	1.7	1
166	Stacking Yield Prediction of Package-on-Package Assembly Using Advanced Uncertainty Propagation Analysis: Part I Stochastic Model Development. *Journal of Electronic Packaging, Transactions of the ASME*, **2020**, 142,	2	3
165	Stacking Yield Prediction of Package-on-Package Assembly Using Uncertainty Propagation AnalysisPart II: Implementation of Stochastic Model. *Journal of Electronic Packaging, Transactions of the ASME*, **2020**, 142,	2	3
164	. *IEEE Sensors Journal*, **2019**, 19, 9139-9148	4	6
163	Measurements of Inelastic Strain Evolution of Single Solder Grain Subject to Nominal Shear Loading. *Experimental Mechanics*, **2019**, 59, 1075-1086	2.6	
162	Degradation Prediction of Electronic Packages using Machine Learning **2019**,		2
161	Advanced Statistical Model Calibration to Determine Manufacturing-Induced Variations of Effective Elastic Properties of SAC Solder Joints in Leadless Chip Resistor Assemblies. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2019**, 9, 797-804	1.7	
160	Hybrid Approach to Conduct Failure Prognostics of Automotive Electronic Control Unit Using Stress Sensor as In Situ Load Counter. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2019**, 9, 28-38	1.7	4

159	Algorithm to Determine the Knee Point on Capacity Fade Curves of Lithium-Ion Cells. *Energies*, **2019**, 12, 2910	3.1	19
158	Nonlinear Compressible Finite Viscoleasticity of Epoxy-Based Polymers **2019**, 335-340		
157	Test Scheme and Degradation Model of Accumulated Electrostatic Discharge (ESD) Damage for Insulated Gate Bipolar Transistor (IGBT) Prognostics. *IEEE Transactions on Device and Materials Reliability*, **2019**, 19, 233-241	1.6	3
156	Study of Thermal Aging Behavior of Epoxy Molding Compound for Applications in Harsh Environments **2019**,		3
155	$In Situ$ Failure Detection of Electronic Control Units Using Piezoresistive Stress Sensor. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 750-763	1.7	6
154	Advanced Mechanical/Optical Configuration of Real-Time Moir▯nterferometry for Thermal Deformation Analysis of Fan-Out Wafer Level Package. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 764-772	1.7	8
153	Thermal Characterization of Die-Attach Material Interface of High-Power Light-Emitting Diodes. *Solid State Lighting Technology and Application Series*, **2018**, 159-178	0.7	2
152	Numerical/Experimental Hybrid Approach to Predict Warpage of Thin Advanced Substrates **2018**,		9
151	Stacking Yield Prediction of Package-on-Package Considering the Statistical Distributions of Top/Bottom Package Warpages and Solder Ball Heights **2018**,		1
150	Prediction of Statistical Distribution of Vibration-Induced Solder Fatigue Failure Considering Intrinsic Variations of Mechanical Properties of Anisotropic Sn-Rich Solder Alloys **2018**,		3
149	Effects of Underfill on Thermo-Mechanical Behavior of Fan-out Wafer Level Package Used in PoP: An Experimental Study by Advancements of Real-Time Moir▯nterferometry **2018**,		1
148	Characterization of Linear Viscoelastic Behavior of Epoxy Molding Compound Subjected to Uniaxial Compression and Hydrostatic Pressure. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2018**, 8, 1363-1372	1.7	3
147	Measurement of anisotropic coefficients of thermal expansion of SAC305 solder using surface strains of single grain with arbitrary orientation. *Acta Materialia*, **2018**, 156, 196-204	8.4	7
146	Moisture Ingress, Behavior, and Prediction Inside Semiconductor Packaging: A Review. *Journal of Electronic Packaging, Transactions of the ASME*, **2017**, 139,	2	10
145	Measurement of Elastic Properties of Epoxy Molding Compound by Single Cylindrical Configuration with Embedded Fiber Bragg Grating Sensor. *Experimental Mechanics*, **2017**, 57, 313-324	2.6	7
144	Assembly yield prediction of plastically encapsulated packages with a large number of manufacturing variables by advanced approximate integration method. *Microelectronics Reliability*, **2017**, 78, 319-330	1.2	6
143	Condition Monitoring Algorithm for Piezoresistive Silicon-Based Stress Sensor Data Obtained from Electronic Control Units **2017**,		3
142	Towards prognostics and health monitoring: The potential of fault detection by piezoresistive silicon stress sensor. *Microelectronics Reliability*, **2017**, 74, 165-172	1.2	5

141	Hybrid Approach to Conduct Failure Prognostics of Automotive Electronic Control Unit **2017**,		2
140	Prognostics and health monitoring of electronic system: A review **2017**,		2
139	Non-linear Viscoelastic Modeling of Epoxy Based Molding Compound for Large Deformations Encountered in Power Modules **2017**,		2
138	Deconvolution of spectral power distribution of high-power laser diode arrays. *Applied Optics*, **2017** , 56, 5590-5598	1.7	5
137	Comprehensive Viscoelastic Properties Characterization of EMC Using FBG Sensor. *Conference Proceedings of the Society for Experimental Mechanics*, **2017**, 173-180	0.3	
136	Modified single cantilever adhesion test for EMC/PSR interface in thin semiconductor packages. *Microelectronics Reliability*, **2016**, 63, 134-141	1.2	2
135	In-situ investigation of EMC relaxation behavior using piezoresistive stress sensor. *Microelectronics Reliability*, **2016**, 62, 58-62	1.2	8
134	Probabilistic Lifetime Prediction of Electronic Packages Using Advanced Uncertainty Propagation Analysis and Model Calibration. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2016**, 6, 238-248	1.7	5
133	Autocorrelation-based time synchronous averaging for condition monitoring of planetary gearboxes in wind turbines. *Mechanical Systems and Signal Processing*, **2016**, 70-71, 161-175	7.8	62
132	Method for predicting junction temperature distribution in a high-power laser diode bar. *Applied Optics*, **2016**, 55, 7487-96	0.2	11
131	Effect of junction temperature on heat dissipation of high power light emitting diodes. *Journal of Applied Physics*, **2016**, 119, 125104	2.5	16
130	Blister Testing for Adhesion Strength Measurement of Polymer Films Subjected to Environmental Conditions. *Journal of Electronic Packaging, Transactions of the ASME*, **2016**, 138,	2	1
129	Towards prognostics and health monitoring: The potential of fault detection by piezoresistive silicon stress sensor **2016**,		9
128	Thermal deformation analysis of automotive electronic control units subjected to passive and active thermal conditions **2015**,		1
127	In-situ investigation of EMC relaxation behavior using piezoresistive stress sensor **2015**,		5
126	Physics-of-Failure, Condition Monitoring, and Prognostics of Insulated Gate Bipolar Transistor Modules: A Review. *IEEE Transactions on Power Electronics*, **2015**, 30, 2413-2426	7.2	242
125	Prognostic approaches for the wirebond failure prediction in power semiconductors: A case study using DPAK package **2015**,		7
124	. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, **2015**, 5, 1635-1643	1.7	4

123	Prediction of Statistical Distribution of Solder Joint Fatigue Lifetime Using Hybrid Probabilistic Approach. *Conference Proceedings of the Society for Experimental Mechanics*, **2015**, 165-169	0.3	1
122	Board level reliability analysis of chip resistor assemblies under thermal cycling: A comparison study between SnPb and SnAgCu. *Journal of Mechanical Science and Technology*, **2014**, 28, 879-886	1.6	13
121	Degradation analysis of secondary lens system and its effect on performance of LED-based luminaire. *Microelectronics Reliability*, **2014**, 54, 131-137	1.2	3
120	Hygrothermal Behavior of Advanced Polymers Above Water Boiling Temperatures. *Journal of Electronic Packaging, Transactions of the ASME*, **2014**, 136,	2	2
119	Measurement of effective chemical shrinkage and equilibrium modulus of silicone elastomer used in potted electronic system. *Journal of Materials Science*, **2014**, 49, 8301-8310	4.3	11
118	Adhesion and Puncture Strength of Polyurethane Coating Used to Mitigate Tin Whisker Growth. *Journal of Electronic Packaging, Transactions of the ASME*, **2014**, 136,	2	8
117	Dual-Configuration Fiber Bragg Grating Sensor Technique to Measure Coefficients of Thermal Expansion and Hygroscopic Swelling. *Experimental Mechanics*, **2014**, 54, 593-603	2.6	9
116	Analytical/Experimental Hybrid Approach Based on Spectral Power Distribution for Quantitative Degradation Analysis of Phosphor Converted LED. *IEEE Transactions on Device and Materials Reliability*, **2014**, 14, 365-374	1.6	21
115	Generalized Hybrid Modeling to Determine Chemical Shrinkage and Modulus Evolutions at Arbitrary Temperatures. *Experimental Mechanics*, **2013**, 53, 1783-1790	2.6	10
114	Hierarchical Reliability Assessment Models for Novel LED-Based Recessed Down Lighting Systems **2013**, 455-495		
113	Optimum design domain of LED-based solid state lighting considering cost, energy consumption and reliability. *Microelectronics Reliability*, **2013**, 53, 435-442	1.2	20
112	Spectral power distribution deconvolution scheme for phosphor-converted white light-emitting diode using multiple Gaussian functions. *Applied Optics*, **2013**, 52, 1016-24	1.7	17
111	Life prediction of LED-based recess downlight cooled by synthetic jet. *Microelectronics Reliability*, **2012**, 52, 937-948	1.2	15
110	Numerical study on the mixing performance of a ring-type electroosmotic micromixer with different obstacle configurations. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 4523-30	1.3	11
109	Measurements of true leak rates of MEMS packages. *Sensors*, **2012**, 12, 3082-104	3.8	9
108	Thermal-structural modeling of polymer Bragg grating waveguides illuminated by a light emitting diode. *Applied Optics*, **2012**, 51, 726-34	1.7	
107	Simultaneous Measurement of Effective Chemical Shrinkage and Modulus Evolutions During Polymerization. *Experimental Mechanics*, **2011**, 51, 1155-1169	2.6	22
106	Reliability Evaluation of Conformal Coatings for Tin Whisker Failure Mitigation in Accelerated Testing Conditions. *Conference Proceedings of the Society for Experimental Mechanics*, **2011**, 107-108	0.3	

105	Rapid Characterization of Visco-elastic Properties of Polymeric Materials. *Conference Proceedings of the Society for Experimental Mechanics*, **2011**, 287-288	0.3	
104	Hierarchical Reliability Model for Life Prediction of Actively Cooled LED-Based Luminaire. *Conference Proceedings of the Society for Experimental Mechanics*, **2011**, 189-190	0.3	
103	Modeling of Moisture Diffusion and Moisture-Induced Stresses in Semiconductor and MEMS Packages **2010**, 181-219		2
102	Analytical and molecular simulation study of water condensation behavior in mesopores with closed ends. *Journal of Chemical Physics*, **2010**, 132, 104702	3.9	5
101	Modified coupled-mode model for thermally chirped polymer Bragg gratings. *Applied Optics*, **2010**, 49, 2079-84	0.2	
100	Measurement of the Hygroscopic Swelling Coefficient of Thin Film Polymers Used in Semiconductor Packaging. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 340-346		18
99	Direct Submount Cooling of High-Power LEDs. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 698-712		39
98	Hierarchical Life Prediction Model for Actively Cooled LED-Based Luminaire. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 728-737		27
97	Development of a High-Lumen Solid State Down Light Application. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 668-679		7
96	. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 809-818		21
95	Coupled Thermal and Thermo-Mechanical Design Assessment of High Power Light Emitting Diode. *IEEE Transactions on Components and Packaging Technologies*, **2010**, 33, 688-697		12
94	Forward-stepwise regression analysis for fine leak batch testing of wafer-level hermetic MEMS packages. *Microelectronics Reliability*, **2010**, 50, 507-513	1.2	2
93	Nano-Pattern Recognition and Correlation Technique for Sub-Nanometer In-Plane Displacement Measurement. *Experimental Mechanics*, **2010**, 50, 1169-1181	2.6	3
92	Recent Applications of Moir�nterferometry. *Experimental Mechanics*, **2010**, 50, 1129-1147	2.6	37
91	Characterization of Hygroscopic Deformations by Moir�nterferometry **2010**, 113-130		
90	Analytical solutions of gas transport problems in inorganic/organic hybrid structures for gas barrier applications. *Journal of Applied Physics*, **2009**, 105, 093532	2.5	7
89	In situ measurement of gas diffusion properties of polymeric seals used in MEMS packages by optical gas leak testing. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2009**, 8, 043025	0.7	4
88	Hermeticity Evaluation of Polymer-Sealed MEMS Packages by Gas Diffusion Analysis. *Journal of Microelectromechanical Systems*, **2009**, 18, 577-587	2.5	9

87	Quantitative Characterization of True Leak Rate of Micro to Nanoliter Packages Using Helium Mass Spectrometer. *IEEE Transactions on Advanced Packaging*, **2009**, 32, 440-447		3
86	THE TILTED-PLATE METHOD FOR INTRODUCING CARRIER FRINGES OF EXTENSION IN MOIRÉ INTERFEROMETRY. *Experimental Techniques*, **2008**, 13, 25-29	1.4	7
85	Geometric Moiré *Springer Handbooks*, **2008**, 601-626	1.3	3
84	Thermofluid characteristics of two-phase flow in micro-gap channels. *Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronic Systems*, **2008**,		2
83	Ideal laminate theory for water transport analysis of metal-coated polymer films. *Applied Physics Letters*, **2008**, 93, 133307	3.4	9
82	Nonlinear Stress Modeling Scheme to Analyze Semiconductor Packages Subjected to Combined Thermal and Hygroscopic Loading. *Journal of Electronic Packaging, Transactions of the ASME*, **2008**, 130,	2	18
81	On Ultra-Fine Leak Detection of Hermetic Wafer Level Packages. *IEEE Transactions on Advanced Packaging*, **2008**, 31, 14-21		20
80	Advanced Thermal-Moisture Analogy Scheme for Anisothermal Moisture Diffusion Problem. *Journal of Electronic Packaging, Transactions of the ASME*, **2008**, 130,	2	38
79	On the applicability of MIL-Spec-based helium fine leak test to packages with sub-micro liter cavity volumes. *Microelectronics Reliability*, **2008**, 48, 1815-1821	1.2	7
78	Integrated Measurement Technique for Curing Process-Dependent Mechanical Properties of Polymeric Materials Using Fiber Bragg Grating. *Experimental Mechanics*, **2008**, 48, 107-117	2.6	18
77	Moiré Interferometry. *Springer Handbooks*, **2008**, 627-654	1.3	12
76	Thermofluid Characteristics of Two-Phase Microgap Coolers **2007**,		2
75	Advanced iterative algorithm for randomly phase-shifted interferograms with intra- and inter-frame intensity variations. *Optics and Lasers in Engineering*, **2007**, 45, 274-280	4.6	47
74	Thermo-optical modeling of polymer fiber Bragg grating illuminated by light emitting diode. *International Journal of Heat and Mass Transfer*, **2007**, 50, 5241-5248	4.9	8
73	On Moisture Diffusion Modeling Using Thermal-Moisture Analogy. *Journal of Electronic Packaging, Transactions of the ASME*, **2007**, 129, 421-426	2	46
72	Fiber Bragg Grating Sensor to Characterize Curing Process-dependent Mechanical Properties of Polymeric Materials **2007**,		3
71	Advanced Co-Planarity Measurement Tools for the Warpage Investigation of Non-Conventional Packages Caused by Reflow and Assembly Process **2007**,		1
70	An Advanced Real-Time Moiré Interferometry System With Conductive Heating/Cooling and Its Application on a Creep Behavior of Solder **2007**, 479		

69	Phase-shifting in achromatic moir�interferometry system. *Optics Express*, **2007**, 15, 9970-6	3.3	6
68	Thermo-optical modeling of an intrinsically heated polymer fiber Bragg grating. *Applied Optics*, **2007**, 46, 4357-70	1.7	6
67	OS1-2-1 In-situ Nano-scale Thermal Deformation Measurements Using Nano-Pattern Recognition and Correlation Technique. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2007**, 2007.6, _OS1-2-1-1-_OS1-2-1-6	0	
66	Recent Developments and Applications of Photomechanics Methods for Microelectronics Product Development **2007**, 15-16		
65	Characterization of Stresses and Strains in Microelectronics and Photonics Devices Using Photomechanics Methods **2007**, A475-A522		3
64	High Sensitivity Shadow Moir�Using Nonzero-Order Talbot Distance. *Experimental Mechanics*, **2006** , 46, 543-554	2.6	11
63	Error analysis of the phase-shifting technique when applied to shadow moir�*Applied Optics*, **2006**, 45, 1124-33	1.7	20
62	Characterization of flexural and thermo-mechanical behavior of plastic ball grid package assembly using moir�interferometry. *Microelectronics Reliability*, **2005**, 45, 637-646	1.2	14
61	Inverse method to determine elastic constants using a circular disk and moir�interferometry. *Experimental Mechanics*, **2005**, 45, 27-34	2.6	20
60	Contrast of shadow moire� at high-order Talbot distances. *Optical Engineering*, **2005**, 44, 028002	1.1	11
59	Inverse Method to Determine Elastic Constants Using a Circular Disk and Moire Interferometry. *Experimental Mechanics*, **2005**, 45, 27-34	2.6	18
58	Infrared diffraction interferometer for coplanarity measurement of high-density solder bump pattern. *Optical Engineering*, **2004**, 43, 888	1.1	
57	Real-time observation of thermally induced warpage of flip-chip package using far-infrared Fizeau interferometry. *Experimental Mechanics*, **2004**, 44, 628-633	2.6	6
56	Characterization of hygroscopic swelling behavior of mold compounds and plastic packages. *IEEE Transactions on Components and Packaging Technologies*, **2004**, 27, 499-506		84
55	Advanced iterative algorithm for phase extraction of randomly phase-shifted interferograms. *Optics Letters*, **2004**, 29, 1671-3	3	362
54	Temperature Dependent Deformation Analysis of Ceramic Ball Grid Array Package Assembly Under Accelerated Thermal Cycling Condition. *Journal of Electronic Packaging, Transactions of the ASME*, **2004**, 126, 41-47	2	21
53	Measurement of Hygroscopic Swelling in Mold Compounds and Its Effect on PEM Reliability **2003**, 497		5
52	MEASUREMENT OF THE HYGROSCOPIC SWELLING COEFFICIENT IN MOLD COMPOUNDS USING MOIR�INTERFEROMETRY. *Experimental Techniques*, **2003**, 27, 40-44	1.4	22

(1998-2003)

51	THERMAL STRESSES IN MICROELECTRONICS SUBASSEMBLIES: QUANTITATIVE CHARACTERIZATION USING PHOTOMECHANICS METHODS. *Journal of Thermal Stresses*, **2003**, 26, 583-613	2.2	43
50	Strain Measurements At The Limit - The Moiré Microscope. *Series in Optics and Optoelectronics*, **2003**, 3-48		
49	Electronic Packaging. *Series in Optics and Optoelectronics*, **2003**, 121-175		
48	Out-Of-Plane Deformation, Flatness And Shape Measurement. *Series in Optics and Optoelectronics*, **2003**, 373-424		
47	OBSERVING REAL-TIME THERMAL DEFORMATIONS IN ELECTRONIC PACKAGING. *Experimental Techniques*, **2002**, 26, 25-29	1.4	39
46	MEASUREMENT OF THERMAL EXPANSION COEFFICIENT OF FLEXIBLE SUBSTRATE BY MOIRÉ INTERFEROMETRY. *Experimental Techniques*, **2001**, 25, 22-25	1.4	9
45	Sensitivity enhancement of far-infrared Fizeau interferometry by digital image processing. *Optical Engineering*, **2001**, 40, 1970	1.1	4
44	Moiré interferometry for engineering mechanics: Current practices and future developments. *Journal of Strain Analysis for Engineering Design*, **2001**, 36, 101-117	1.3	67
43	On the design parameters of flip-chip PBGA package assembly for optimum solder ball reliability. *IEEE Transactions on Components and Packaging Technologies*, **2001**, 24, 300-307		24
42	Far-infrared fizeau interferometry. *Applied Optics*, **2001**, 40, 4981-7	1.7	14
41	Micro-Mechanical Deformation Analysis of Surface Laminar Circuit in Organic Flip-Chip Package: An Experimental Study. *Journal of Electronic Packaging, Transactions of the ASME*, **2000**, 122, 294-300	2	22
40	Warpage Measurement on Dielectric Rough Surfaces of Microelectronics Devices by Far Infrared Fizeau Interferometry1. *Journal of Electronic Packaging, Transactions of the ASME*, **2000**, 122, 227-232	2	22
39	Moiré Interferometry **2000**, 375-389		3
38	Moiré Methods for Engineering and Science Moiré Interferometry and Shadow Moiré **2000**, 151-196		21
37	MECHANICAL FRINGE SHIFTING IN MOIRE INTERFEROMETRY. *Experimental Techniques*, **1999**, 23, 16-19	1.4	1
36	Development of real time/variable sensitivity warpage measurement technique and its application to plastic ball grid array package. *IEEE Transactions on Electronics Packaging Manufacturing*, **1999**, 22, 63-70		29
35	Recent advancements of moiré and microscopic moiré interferometry for thermal deformation analyses of microelectronics devices. *Experimental Mechanics*, **1998**, 38, 278-288	2.6	47
34	Study of Residual Stress Distribution by a Combined Method of Moiré Interferometry and Incremental Hole Drilling, Part I: Theory. *Journal of Applied Mechanics, Transactions ASME*, **1998**, 65, 837-843	2.7	55

33	Study of Residual Stress Distribution by a Combined Method of Moire Interferometry and Incremental Hole Drilling, Part II: Implementation. *Journal of Applied Mechanics, Transactions ASME*, **1998**, 65, 844-850	2.7	37
32	Whole-field Displacement Measurement Techniques for Thermal Deformation Analyses of Electronic Packages. *Materials Research Society Symposia Proceedings*, **1998**, 515, 167		1
31	Recent Advancements of Moire and Microscopic Moire Interferometry for Thermal Deformation Analyses of Microelectronics Devices. *Experimental Mechanics*, **1998**, 38, 278-288	2.6	60
30			
29	Deformation Mechanism of Two-Phase Solder Column Interconnections Under Highly Accelerated Thermal Cycling Condition: An Experimental Study. *Journal of Electronic Packaging, Transactions of the ASME*, **1997**, 119, 189-196	2	26
28	Verification of Numerical Models Used in Microelectronics Packaging Design by Interferometric Displacement Measurement Methods. *Journal of Electronic Packaging, Transactions of the ASME*, **1996**, 118, 157-163	2	40
27	Isochromatic fringe sharpening and interpolation along an isoclinic countour, with application to fracture mechanics. *Experimental Mechanics*, **1996**, 36, 305-311	2.6	
26	Micromechanical deformation analysis of beta alloy titanium in elastic and elastic/plastic tension. *Experimental Mechanics*, **1996**, 36, 120-126	2.6	8
25	Micromechanical thermal deformation analysis of unidirectional boron/aluminum metal-matrix composite. *Optics and Lasers in Engineering*, **1996**, 24, 455-466	4.6	2
24	Determination of an effective coefficient of thermal expansion of electronic packaging components: a whole-field approach. *IEEE Transactions on Components and Packaging Technologies*, **1996**, 19, 240-247		37
23	Thermal Deformation Analysis of Various Electronic Packaging Products by Moire and Microscopic Moire Interferometry. *Journal of Electronic Packaging, Transactions of the ASME*, **1995**, 117, 185-191	2	90
22	A compact, robust and versatile moir interferometer. *Optics and Lasers in Engineering*, **1995**, 23, 29-40	4.6	10
21	Thermal Stresses in a Bimaterial Joint: An Experimental Analysis. *Journal of Applied Mechanics, Transactions ASME*, **1994**, 61, 192-198	2.7	30
20	ISOCHROMATIC FRINGE SHARPENING AND MULTIPLICATION. *Experimental Techniques*, **1994**, 18, 11-13	1.4	2
19	Thermal Stresses Near the Interface of a Bimaterial Joint. *Mechanical Engineering Series*, **1994**, 293-312	0.3	1
18	Textile Composites. *Mechanical Engineering Series*, **1994**, 313-329	0.3	
17	Laminated Composites in Compression: Free-edge Effects. *Mechanical Engineering Series*, **1994**, 273-292	0.3	
16	High Sensitivity Moir *Mechanical Engineering Series*, **1994**,	0.3	325

15	Moiré Interferometry. *Mechanical Engineering Series*, **1994**, 135-226	0.3	13
14	Microscopic Moiré Interferometry: Very High Sensitivity. *Mechanical Engineering Series*, **1994**, 227-255	0.3	2
13	Geometric moiré methods with enhanced sensitivity by optical/digital fringe multiplication. *Experimental Mechanics*, **1993**, 33, 195-200	2.6	8
12	Interferometric methods with enhanced sensitivity by optical/digital fringe multiplication. *Applied Optics*, **1993**, 32, 4713-8	1.7	28
11	Thick Composites in Compression: An Experimental Study of Micromechanical Behavior and Smeared Engineering Properties. *Journal of Composite Materials*, **1992**, 26, 1930-1944	2.7	21
10	Higher sensitivity moire interferometry for micromechanics studies. *Optical Engineering*, **1992**, 31, 1517	1.1	51
9	Immersion interferometer for microscopic moiré interferometry. *Experimental Mechanics*, **1992**, 32, 38-41	2.6	50
8	A localized hybrid method of stress analysis: A combination of moiré interferometry and FEM. *Experimental Mechanics*, **1990**, 30, 195-200	2.6	28
7	Real-time warpage measurement of electronic components with variable sensitivity		5
6			1
5	Non-linear finite element analysis for electronic packages subjected to combined hygroscopic and thermo-mechanical stresses		3
4	A strain range based model for life assessment of Pb-free SAC solder interconnects		15
3			2
2	Bottom leaded plastic (BLP) package: a new design with enhanced solder joint reliability		1
1	Measurement of effective cure shrinkage of epoxy-based molding compound by fiber Bragg grating sensor using two-stage curing process. *Journal of Applied Polymer Science*,51620	2.9	2