

Xuejun Fan

List of Publications by Year in descending order

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216
papers

3,664
citations

218677

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48
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all docs

218
docs citations

218
times ranked

2353
citing authors

#	ARTICLE	IF	CITATIONS
1	High-temperature nanoindentation characterization of sintered nano-copper particles used in high power electronics packaging. Results in Physics, 2022, 33, 105168.	4.1	11
2	Effects of temperature and grain size on diffusivity of aluminium: electromigration experiment and molecular dynamic simulation. Journal of Physics Condensed Matter, 2022, 34, 175401.	1.8	4
3	Sintering mechanism of Ag nanoparticle-nanoflake: a molecular dynamics simulation. Journal of Materials Research and Technology, 2022, 16, 640-655.	5.8	9
4	Sulfur-Rich Ageing Mechanism of Silicone Encapsulant Used in LED Packaging: An Experimental and Molecular Dynamic Simulation Study. Frontiers in Materials, 2022, 9, .	2.4	3
5	Practical aspects of thermomechanical modeling in electronics packaging: A case study with a SiC power package. Microelectronics Reliability, 2022, 132, 114514.	1.7	3
6	Tensile characterization and constitutive modeling of sintered nano-silver particles over a range of strain rates and temperatures. Microelectronics Reliability, 2022, 132, 114536.	1.7	8
7	Implementation of Fully Coupled Electromigration Theory in COMSOL. , 2022, , .		3
8	Genetic Algorithmâ€‘Assisted Design of Redistribution Layer Vias for a Fan-Out Panel-Level SiC MOSFET Power Module Packaging. , 2022, , .		4
9	Stress/strain characterization in electronic packaging by micro-Raman spectroscopy: A review. Microelectronics Reliability, 2021, 118, 114045.	1.7	13
10	Constitutive Modeling of Sintered Nano-silver Particles: A Variable-order Fractional Model versus an Anand Model. , 2021, , .		2
11	System level reliability assessment for high power light-emitting diode lamp based on a Bayesian network method. Measurement: Journal of the International Measurement Confederation, 2021, 176, 109191.	5.0	14
12	Molecular dynamic study for concentration-dependent volume relaxation of vacancy. Microelectronics Reliability, 2021, 120, 114127.	1.7	12
13	Testing and Modeling of Board Level Reliability of WLCSP under UHAST Conditions. , 2021, , .		0
14	Prognostics of radiation power degradation lifetime for ultraviolet light-emitting diodes using stochastic data-driven models. Energy and AI, 2021, 4, 100066.	10.6	3
15	Evaluating the moisture resistance of Y3Al5O12: Ce3+ phosphor used in high power white LED packaging. Microelectronics Reliability, 2021, 121, 114130.	1.7	4
16	Room temperature ppt-level NO ₂ gas sensor based on SnO _x /SnS nanostructures with rich oxygen vacancies. 2D Materials, 2021, 8, 045006.	4.4	13
17	Design of a Fan-Out Panel-Level SiC MOSFET Power Module Using Ant Colony Optimization-Back Propagation Neural Network. IEEE Transactions on Electron Devices, 2021, 68, 3460-3467.	3.0	11
18	Solder Joint Reliability Risk Estimation by AI-Assisted Simulation Framework with Genetic Algorithm to Optimize the Initial Parameters for AI Models. Materials, 2021, 14, 4835.	2.9	11

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19	Determination of stress components in a complex stress condition using micro-Raman spectroscopy. Optics Express, 2021, 29, 30319.	3.4	2
20	Insights into the high-sulphur aging of sintered silver nanoparticles: An experimental and ReaxFF study. Corrosion Science, 2021, 192, 109846.	6.6	5
21	Die and Package Level Thermal and Thermal/Moisture Stresses in 3-D Packaging: Modeling and Characterization. Springer Series in Advanced Microelectronics, 2021, , 431-469.	0.3	0
22	High-performance humidity sensor using Schottky-contacted SnS nanoflakes for noncontact healthcare monitoring. Nanotechnology, 2020, 31, 055501.	2.6	25
23	Hydrolysis kinetic study of CaAlSiN ₃ :Eu ²⁺ red phosphor with both water immersion test and first-principles calculation. Journal of Luminescence, 2020, 219, 116874.	3.1	14
24	The interface adhesion of CaAlSiN ₃ : Eu ²⁺ phosphor/silicone used in light-emitting diode packaging: A first principles study. Applied Surface Science, 2020, 510, 145251.	6.1	9
25	A Direct Multi-Field Coupling Methodology for Modeling Moisture-Induced Stresses and Delamination in Electronic Packages. , 2020, , .		3
26	Hydrolytic resistant performance evaluation for Y ₃ Al ₅ O ₁₂ : Ce ³⁺ yellow phosphor used in white LED packaging. , 2020, , .		0
27	Recent advances in 2D/nanostructured metal sulfide-based gas sensors: mechanisms, applications, and perspectives. Journal of Materials Chemistry A, 2020, 8, 24943-24976.	10.3	115
28	Machine Learning and Digital Twin Driven Diagnostics and Prognostics of Light-Emitting Diodes. Laser and Photonics Reviews, 2020, 14, 2000254.	8.7	43
29	Thermal kinetic and mechanical behaviors of pressure-assisted Cu nanoparticles sintering: A molecular dynamics study. Results in Physics, 2020, 19, 103486.	4.1	19
30	Implementation of General Coupling Model of Electromigration in ANSYS. , 2020, , .		5
31	Effect of porous Cu addition on the microstructure and mechanical properties of SnBi-xAg solder joints. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	4
32	Lifetime Prediction of Ultraviolet Light-Emitting Diodes Using a Long Short-Term Memory Recurrent Neural Network. IEEE Electron Device Letters, 2020, 41, 1817-1820.	3.9	24
33	Development and application of ANN model for property prediction of supercritical kerosene. Computers and Fluids, 2020, 209, 104665.	2.5	22
34	Machine-Learning Assisted Prediction of Spectral Power Distribution for Full-Spectrum White Light-Emitting Diode. IEEE Photonics Journal, 2020, 12, 1-18.	2.0	14
35	Microchannel Thermal Management System With Two-Phase Flow for Power Electronics Over 500 W/cm ² Heat Dissipation. IEEE Transactions on Power Electronics, 2020, 35, 10592-10600.	7.9	17
36	Deep machine learning of the spectral power distribution of the LED system with multiple degradation mechanisms. Journal of Mechanics, 2020, 37, 172-183.	1.4	17

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37	Experimental Investigation on the Sintering Kinetics of Nanosilver Particles Used in High-Power Electronic Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1101-1109.	2.5	12
38	Dynamic prediction of optical and chromatic performances for a light-emitting diode array based on a thermal-electrical-spectral model. Optics Express, 2020, 28, 13921.	3.4	8
39	Flow Modulation and Mixing Enhancement of Highly Underexpanded Jet by Vortex Excitation. AIAA Journal, 2020, 58, 2462-2474.	2.6	2
40	Wave Height Distribution of Bimodal Spectral Wave based on Simulated Wave Elevation. Journal of Engineering Science and Technology Review, 2020, 13, 37-45.	0.4	0
41	Liquid-phase exfoliated SnS as a semiconductor coating filler to enhance corrosion protection performance. Physical Chemistry Chemical Physics, 2019, 21, 18179-18187.	2.8	8
42	High Moisture Accelerated Mechanical Behavior Degradation of Phosphor/Silicone Composites Used in White Light-Emitting Diodes. Polymers, 2019, 11, 1277.	4.5	17
43	Electrical and optical characterization of MoS ₂ thin film transistors and the effect of strain on their performances. , 2019, , .		0
44	A SPICE-based Transient Thermal-Electronic Model for LEDs. , 2019, , .		3
45	Lifetime Prediction of Ultraviolet Light-emitting Diodes with Accelerated Wiener Degradation Process. , 2019, , .		3
46	Effects of humidity and phosphor on silicone/phosphor composite in white light-emitting diode package. Journal of Materials Science: Materials in Electronics, 2019, 30, 20471-20478.	2.2	7
47	Improved Finite Element Modeling of Moisture Diffusion Considering Discontinuity at Material Interfaces in Electronic Packages. , 2019, , .		6
48	Ultra-High Sensitive NO ₂ Gas Sensor Based on Tunable Polarity Transport in CVD-WS ₂ /IGZO p-N Heterojunction. ACS Applied Materials & Interfaces, 2019, 11, 40850-40859.	8.0	105
49	A Reliability Prediction Methodology for LED Arrays. IEEE Access, 2019, 7, 8127-8134.	4.2	4
50	Reliability Assessment of Light-Emitting Diode Packages With Both Luminous Flux Response Surface Model and Spectral Power Distribution Method. IEEE Access, 2019, 7, 68495-68502.	4.2	17
51	Tunable electronic and optical properties of the WS ₂ /IGZO heterostructure <i>via</i> an external electric field and strain: a theoretical study. Physical Chemistry Chemical Physics, 2019, 21, 14713-14721.	2.8	4
52	General coupling model for electromigration and one-dimensional numerical solutions. Journal of Applied Physics, 2019, 125, .	2.5	20
53	How Much Baking Time is Needed for Moisture-Sensitive Packages?. , 2019, , .		1
54	Stress analysis of pressure-assisted sintering for the double-side assembly of power module. Soldering and Surface Mount Technology, 2019, 31, 20-27.	1.5	9

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55	Indentation hardness, plasticity and initial creep properties of nanosilver sintered joint. Results in Physics, 2019, 12, 712-717.	4.1	24
56	Effects of Sintering Pressure on the Densification and Mechanical Properties of Nanosilver Double-Side Sintered Power Module. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 963-972.	2.5	13
57	Polarized Raman spectroscopy's stress relationship considering shear stress effect. Optics Letters, 2019, 44, 4682.	3.3	10
58	A Novel Interconnected Structure of Graphene-Carbon Nanotubes for the Application of Methane Adsorption. IEEE Sensors Journal, 2018, 18, 1555-1561.	4.7	5
59	Effects of Voids on Mechanical and Thermal Properties of the Die Attach Solder Layer Used in High-Power LED Chip-Scale Packages. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1254-1262.	2.5	35
60	A design and qualification of LED flip Chip-on-Board module with tunable color temperatures. Microelectronics Reliability, 2018, 84, 140-148.	1.7	5
61	A new hermetic sealing method for ceramic package using nanosilver sintering technology. Microelectronics Reliability, 2018, 81, 143-149.	1.7	11
62	A Review on Water Vapor Pressure Model for Moisture Permeable Materials Subjected to Rapid Heating. Applied Mechanics Reviews, 2018, 70, .	10.1	10
63	Effect of Sintering Pressure on the Porosity and the Shear Strength of the Pressure-Assisted Silver Sintering Bonding. IEEE Transactions on Device and Materials Reliability, 2018, 18, 240-246.	2.0	29
64	Reliability Prediction of Integrated LED Lamps with Electrolytic Capacitor-Less LED Drivers. Solid State Lighting Technology and Application Series, 2018, , 455-486.	0.3	0
65	Degradation Mechanisms of Mid-power White-Light LEDs. Solid State Lighting Technology and Application Series, 2018, , 381-432.	0.3	0
66	Advances in Reliability Testing and Standards Development for LED Packages and Systems. Solid State Lighting Technology and Application Series, 2018, , 77-114.	0.3	0
67	LED-Based Luminaire Color Shift Acceleration and Prediction. Solid State Lighting Technology and Application Series, 2018, , 201-219.	0.3	0
68	High Selective Gas Detection for small molecules based on Germanium selenide monolayer. Applied Surface Science, 2018, 433, 575-581.	6.1	68
69	Engineering Design and Manufacturing Education through Research Experience for High School Teachers. Procedia Manufacturing, 2018, 26, 1340-1348.	1.9	4
70	Study of ultraviolet assisted cure mechanism of the phosphor/silicone composites used in White LEDs. , 2018, , .		1
71	Application of water activity-based theory for moisture diffusion in electronic packages using ANSYS. , 2018, , .		6
72	A probabilistic physics-of-failure reliability assessment approach for integrated LED lamps. , 2018, , .		1

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73	Fatigue Damage Assessment of LED Chip Scale Packages with Finite Element Simulation. , 2018, , .		0
74	Investigation of affecting parameters on the effective modulus and natural frequency of wavy carbon nanotubes. Journal of Physics and Chemistry of Solids, 2018, 121, 121-127.	4.0	2
75	Prediction of kerosene properties at supercritical pressures by Artificial Neural Network. , 2018, , .		2
76	Interfacial properties of Cu/SiO ₂ using a multiscale modelling approach in electronic packages. , 2018, , .		0
77	The Effects of Graphene Stacking on the Performance of Methane Sensor: A First-Principles Study on the Adsorption, Band Gap and Doping of Graphene. Sensors, 2018, 18, 422.	3.8	9
78	In-situ characterization of moisture absorption and hygroscopic swelling of silicone/phosphor composite film and epoxy mold compound in LED packaging. Microelectronics Reliability, 2018, 84, 208-214.	1.7	20
79	On the Uniqueness and Sensitivity of Nanoindentation Testing for Determining Elastic and Plastic Material Properties of Electroplating Copper Filled in Through-Silicon-Via (TSV). , 2018, , .		2
80	A stochastic process based reliability prediction method for LED driver. Reliability Engineering and System Safety, 2018, 178, 140-146.	8.9	14
81	A novel lifetime prediction for integrated LED lamps by electronic-thermal simulation. Reliability Engineering and System Safety, 2017, 163, 14-21.	8.9	35
82	Thermal/luminescence characterization and degradation mechanism analysis on phosphor-converted white LED chip scale packages. Microelectronics Reliability, 2017, 74, 179-185.	1.7	21
83	Studies of the light output properties for a GaN based blue LED using an electro-optical simulation method. Microelectronics Reliability, 2017, 74, 173-178.	1.7	6
84	Luminescence mechanism analysis on high power tunable color temperature Chip-on-Board white LED modules. , 2017, , .		1
85	In-situ characterization of moisture absorption and hygroscopic swelling of silicone/phosphor composite film and epoxy mold compound in LED packaging. , 2017, , .		5
86	Thermal conductivity of functionalized graphene-polymer nanocomposite: A non-equilibrium molecular dynamics study. , 2017, , .		0
87	Prediction of Lumen Depreciation and Color Shift for Phosphor-Converted White Light-Emitting Diodes Based on A Spectral Power Distribution Analysis Method. IEEE Access, 2017, 5, 24054-24061.	4.2	28
88	A PoF and statistics combined reliability prediction for LED arrays in lamps. , 2017, , .		1
89	A Reliability Prediction for Integrated LED Lamp With Electrolytic Capacitor-Free Driver. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1081-1088.	2.5	16
90	Color shift acceleration on mid-power LED packages. Microelectronics Reliability, 2017, 78, 294-298.	1.7	7

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91	Phosphor-silicone interaction effects in high power white light emitting diode packages. Journal of Materials Science: Materials in Electronics, 2017, 28, 17557-17569.	2.2	14
92	Overdriving reliability of chip scale packaged LEDs: Quantitatively analyzing the impact of component. Microelectronics Reliability, 2017, 78, 197-204.	1.7	3
93	Experimental Verification and Optimization Analysis of Warpage for Panel-Level Fan-Out Package. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, 7, 1721-1728.	2.5	47
94	Modeling nonlinear moisture diffusion in inhomogeneous media. Microelectronics Reliability, 2017, 75, 162-170.	1.7	18
95	Degradation mechanism analysis for phosphor/silicone composites aged under high temperature and high humidity condition. , 2017, , .		7
96	Investigation of dimensional and heat source effects in Lock-In Thermography applications in semiconductor packages. Applied Thermal Engineering, 2017, 113, 673-683.	6.0	7
97	Luminous flux modeling for high power LED automotive headlamp module. , 2017, , .		4
98	Optimization of reflow soldering process for white LED chip-scale-packages on substrate. , 2017, , .		2
99	A Unified and Versatile Model Study for Moisture Diffusion. , 2017, , .		4
100	Electromigration simulation of flip chip CSP LED. , 2017, , .		5
101	Color Shift Failure Prediction for Phosphor-Converted White LEDs by Modeling Features of Spectral Power Distribution with a Nonlinear Filter Approach. Materials, 2017, 10, 819.	2.9	22
102	Photometric and Colorimetric Assessment of LED Chip Scale Packages by Using a Step-Stress Accelerated Degradation Test (SSADT) Method. Materials, 2017, 10, 1181.	2.9	12
103	A First-Principle Theoretical Study of Mechanical and Electronic Properties in Graphene Single-Walled Carbon Nanotube Junctions. Materials, 2017, 10, 1300.	2.9	15
104	Design and adjustment of the graphene work function via size, modification, defects, and doping: a first-principle theory study. Nanoscale Research Letters, 2017, 12, 642.	5.7	28
105	Die and Package Level Thermal and Thermal/Moisture Stresses in 3D Packaging: Modeling and Characterization. Springer Series in Advanced Microelectronics, 2017, , 293-332.	0.3	6
106	PoF-Simulation-Assisted Reliability Prediction for Electrolytic Capacitor in LED Drivers. IEEE Transactions on Industrial Electronics, 2016, 63, 6726-6735.	7.9	86
107	Lumen decay prediction in LED lamps. , 2016, , .		6
108	Electrical-thermo-mechanical Simulation for aluminum wire bonds in SiC Schottky diode packages. , 2016, , .		2

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109	Investigation of Geometry, Frequency and Material's Effects in Lock-In Thermography Applications in Semiconductor Packages. , 2016, , .		1
110	Colour shift and mechanism investigation on the PMMA diffuser used in LED-based luminaires. Optical Materials, 2016, 54, 282-287.	3.6	24
111	Thermal, optical and electrical analysis on phosphor-converted white LED Chip Scale Packages with both experiment and simulation. , 2016, , .		11
112	Thermal analysis and optimization of IGBT power electronic module based on layout model. , 2016, , .		3
113	Analysis of photoluminescence mechanisms and thermal quenching effects for multicolor phosphor films used in high color rendering white LEDs. , 2016, , .		6
114	Thermal Inductance in GaN Devices. IEEE Electron Device Letters, 2016, 37, 1473-1476.	3.9	6
115	Finite-Element Analysis and Experimental Test for a Capped-Die Flip-Chip Package Design. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1308-1316.	2.5	16
116	Development of a radiative heating system for studies of heat transfer in fuel-cooled structures. , 2016, , .		0
117	A systematic approach for reliability assessment of electrolytic capacitor-free LED drivers. , 2016, , .		2
118	Modeling of moisture over-saturation and vapor pressure in die-attach film for stacked-die chip scale packages. Journal of Materials Science: Materials in Electronics, 2016, 27, 481-488.	2.2	12
119	Electro-optical simulation of a GaN based blue LED chip. , 2016, , .		2
120	Lumen degradation modeling of white-light LEDs in step stress accelerated degradation test. Reliability Engineering and System Safety, 2016, 154, 152-159.	8.9	48
121	Degradation Mechanism Decoupling of Mid-Power White-Light LEDs by SPD Simulation. IEEE Transactions on Electron Devices, 2016, 63, 2807-2814.	3.0	10
122	Effects of Nanostructure and Coating on the Mechanics of Carbon Nanotube Arrays. Advanced Functional Materials, 2016, 26, 1233-1242.	14.9	25
123	Buckling of a stiff thin film on a compliant substrate under anisotropic biaxial prestrain. Science China: Physics, Mechanics and Astronomy, 2016, 59, 1.	5.1	2
124	Dynamic stability of flexible electronic structures under step loads. European Journal of Mechanics, A/Solids, 2016, 58, 247-255.	3.7	9
125	A hybrid prediction method on luminous flux maintenance of high-power LED lamps. Applied Thermal Engineering, 2016, 95, 482-490.	6.0	21
126	A review of small heat pipes for electronics. Applied Thermal Engineering, 2016, 96, 1-17.	6.0	224

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127	Reliability optimization of gold-tin eutectic die attach layer in HEMT package. , 2016, , .		2
128	Fatigue failure modeling of wire bonds of high power LED packages with a multiphysics simulation method. , 2016, , .		2
129	Effects of Vapor Pressure and Super-Hydrophobic Nanocomposite Coating on Microelectronics Reliability. Engineering, 2015, 1, 384-390.	6.7	10
130	Degradation of Microcellular PET reflective materials used in LED-based products. Optical Materials, 2015, 49, 79-84.	3.6	31
131	A convectionâ€“diffusion porous media model for moisture transport in polymer composites: Model development and validation. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1440-1449.	2.1	18
132	Degradation Mechanisms of Mid-Power White-Light LEDs Under High-Temperatureâ€“Humidity Conditions. IEEE Transactions on Device and Materials Reliability, 2015, 15, 220-228.	2.0	52
133	Optimal Design of Life Testing for High-Brightness White LEDs Using the Six Sigma DMAIC Approach. IEEE Transactions on Device and Materials Reliability, 2015, 15, 576-587.	2.0	20
134	Investigation of photoluminescence and thermal effect of phosphor films used in phosphor-converted white LEDs. , 2015, , .		5
135	A POF based breakdown method for LED lighting color shift reliability. , 2015, , .		2
136	Junction temperature measurement to optimize thermal design of LED arrays. , 2015, , .		5
137	Prediction of a statistical distribution of luminous flux for LED modules with an analytical model. , 2015, , .		0
138	LED's luminous flux lifetime prediction using a hybrid numerical approach. , 2015, , .		5
139	Vapor pressure prediction for stacked-chip packages in reflow by convection-diffusion model. , 2015, , .		2
140	Color Shift Investigations for LED Secondary Optical Designs: Comparison between BPA-PC and PMMA. Optical Materials, 2015, 45, 37-41.	3.6	45
141	Optical degradation mechanisms of mid-power white-light LEDs in LM-80-08 tests. Microelectronics Reliability, 2015, 55, 2654-2662.	1.7	11
142	Degradation modeling of mid-power white-light LEDs by using Wiener process. Optics Express, 2015, 23, A966.	3.4	70
143	A degradation model of aluminum electrolytic capacitors for LED drivers. , 2015, , .		13
144	Rapid Degradation of Mid-Power White-Light LEDs in Saturated Moisture Conditions. IEEE Transactions on Device and Materials Reliability, 2015, 15, 478-485.	2.0	47

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145	Achieving warpage-free packaging: A capped-die flip chip package design. , 2015, , .		6
146	Tailoring the Mechanical Properties of High-Aspect-Ratio Carbon Nanotube Arrays using Amorphous Silicon Carbide Coatings. Advanced Functional Materials, 2014, 24, 5737-5744.	14.9	53
147	A lifetime prediction method for Solid State Lighting power converters based on SPICE models and finite element thermal simulations. , 2014, , .		1
148	Does current crowding induce vacancy concentration singularity in electromigration?. , 2014, , .		4
149	Carbon Nanotubes: Tailoring the Mechanical Properties of High-Aspect-Ratio Carbon Nanotube Arrays using Amorphous Silicon Carbide Coatings (Adv. Funct. Mater. 36/2014). Advanced Functional Materials, 2014, 24, 5736-5736.	14.9	0
150	Correlation of activation energy between LEDs and luminaires in the lumen depreciation test. , 2014, , .		1
151	Thermal Stresses in Wafer-Level Packaging. , 2014, , 5432-5442.		2
152	A novel hybrid method for reliability prediction of high-power LED luminaires. , 2013, , .		8
153	Accelerated lifetime test for isolated components in linear drivers of high-voltage LED system. , 2013, , .		4
154	Effects of Package Level Structure and Material Properties on Solder Joint Reliability Under Impact Loading. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 52-60.	2.5	12
155	Validation of the methodology of lumen depreciation acceleration of LED lighting. , 2013, , .		0
156	Cause analysis on highly depreciated indoor LED product in CSA020. , 2013, , .		1
157	Thermal behavior of flip chip LED packages using electrical conductive adhesive and soldering methods. , 2013, , .		3
158	Product level accelerated lifetime test for indoor LED luminaires. , 2013, , .		32
159	Effect of temperature gradient on moisture diffusion in high power devices and the applications in LED packages. , 2013, , .		6
160	Thermal analysis and optimization design of LED streetlight module. , 2013, , .		1
161	Finite element modeling of anomalous moisture diffusion with dual stage model. , 2012, , .		4
162	Simulation of diffusion controlled intermetallic formation of Au/Al interface. , 2012, , .		3

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163	The effect of atomic density gradient in electromigration. International Journal of Materials and Structural Integrity, 2012, 6, 36.	0.1	8
164	In-situ moisture desorption characterization of epoxy mold compound. , 2012, , .		4
165	Dynamic analysis of bare printed circuit board under impact. , 2012, , .		0
166	Wafer level system packaging and integration for solid state lighting (SSL). , 2012, , .		3
167	Finite Element Modeling of System Design and Testing Conditions for Component Solder Ball Reliability Under Impact. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1802-1810.	2.5	6
168	Dual stage modeling of moisture absorption and desorption in epoxy mold compounds. Microelectronics Reliability, 2012, 52, 1401-1408.	1.7	66
169	Reliability enhancement of wafer level packages with nano-column-like hollow solder ball structures. , 2011, , .		6
170	Moisture diffusion and integrated stress analysis in encapsulated microelectronics devices. , 2011, , .		13
171	Investigations of solder ball drop reliability: BGA versus WLP. , 2011, , .		2
172	A dual stage model of anomalous moisture diffusion and desorption in epoxy mold compounds. , 2011, , .		23
173	Thermal Cracking and Heat Sink Capacity of Aviation Kerosene Under Supercritical Conditions. Journal of Thermophysics and Heat Transfer, 2011, 25, 450-456.	1.6	42
174	Buckling of Functionally Graded Cylindrical Shells under Combined Loads. Mechanics of Advanced Materials and Structures, 2011, 18, 337-346.	2.6	25
175	Assessment of current density singularity in electromigration of solder bumps. , 2011, , .		9
176	Finite element modeling on electromigration of solder joints in wafer level packages. Microelectronics Reliability, 2010, 50, 547-555.	1.7	21
177	Advances in Wafer Level Packaging (WLP). Microelectronics Reliability, 2010, 50, 479-480.	1.7	9
178	Wafer level packaging (WLP): Fan-in, fan-out and three-dimensional integration. , 2010, , .		45
179	Board level temperature cycling study of large array Wafer Level Package. , 2009, , .		21
180	Improved Lawnmower Blade Design and Optimization. , 2009, , .		1

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181	Experimental investigations and model study of moisture behaviors in polymeric materials. Microelectronics Reliability, 2009, 49, 861-871.	1.7	143
182	Effects of design, structure and material on thermal-mechanical reliability of large array wafer level packages. , 2009, , .		13
183	Heat Transfer of Aviation Kerosene at Supercritical Conditions. Journal of Thermophysics and Heat Transfer, 2009, 23, 543-550.	1.6	177
184	Shock performance study of solder joints in wafer level packages. , 2009, , .		10
185	JEDEC board drop test simulation for wafer level packages (WLPs). , 2009, , .		22
186	Larger Array Fine Pitch Wafer Level Package Drop Test Reliability. , 2009, , .		5
187	Investigation of thermal performance of various power-device packages. , 2008, , .		0
188	Investigation of thermal performance of various power-device packages. , 2008, , .		8
189	Driving Mechanisms of Delamination Related Reliability Problems in Exposed Pad Packages. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 260-268.	1.3	45
190	Design and Reliability in Wafer Level Packaging. , 2008, , .		43
191	A new method for equivalent acceleration of JEDEC moisture sensitivity levels. , 2008, , .		4
192	Interfacial Delamination Mechanisms During Soldering Reflow With Moisture Preconditioning. IEEE Transactions on Components and Packaging Technologies, 2008, 31, 252-259.	1.3	90
193	An acceleration model for lead-free (SAC) solder joint reliability under thermal cycling. , 2008, , .		62
194	Mechanics of moisture for polymers: Fundamental concepts and model study. , 2008, , .		21
195	Modeling techniques for board level drop test for a wafer-level package. , 2008, , .		25
196	Package structural integrity analysis considering moisture. , 2008, , .		12
197	Reliability challenges and design considerations for Wafer-Level packages. , 2008, , .		7
198	Stress Analysis of Hygrothermal Delamination of Quad Flat No-Lead (QFN) Packages. , 2008, , .		5

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199	In-situ Characterization of Moisture Absorption and Desorption in a Thin BT Core Substrate. , 2007, , .		30
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201	Combustion and Ignition of Thermally Cracked Kerosene in Supersonic Model Combustors. Journal of Propulsion and Power, 2007, 23, 317-324.	2.2	60
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