

# Cher-Ming Tan

## List of Publications by Year in descending order

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250  
papers

3,823  
citations

147566

31  
h-index

168136

53  
g-index

259  
all docs

259  
docs citations

259  
times ranked

3764  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of resistor tolerance on the performance of resistor network—An application of the statistical design of experiment. <i>International Journal of Circuit Theory and Applications</i> , 2022, 50, 175-182.	1.3	1
2	Root Cause Analysis of a Printed Circuit Board (PCB) Failure in a Public Transport Communication System. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 640.	1.3	4
3	Statistical distribution of Lithium-ion batteries useful life and its application for battery pack reliability. <i>Journal of Energy Storage</i> , 2022, 51, 104399.	3.9	4
4	Editorial for Special Issue on Reliability Analysis of Electrotechnical Devices. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4086.	1.3	0
5	Multi-criteria decision making (MCDM) for the selection of Li-ion batteries used in electric vehicles (EVs). <i>Materials Today: Proceedings</i> , 2021, 41, 1073-1077.	0.9	29
6	Statistical Method and Non-Destructive Analytical Tools in the Failure Analysis of LED Array. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 025008.	0.9	0
7	GaN-Based Readout Circuit System for Reliable Prompt Gamma Imaging in Proton Therapy. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 5606.	1.3	1
8	Effect of 150 MeV protons on carbon nanotubes for fabrication of a radiation detector. <i>Nanotechnology</i> , 2021, 32, 355501.	1.3	1
9	Application of Gallium Nitride Technology in Particle Therapy Imaging. <i>IEEE Transactions on Nuclear Science</i> , 2021, 68, 1319-1324.	1.2	8
10	Impact of visible light and humidity on the stability of high-power light emitting diode packaging material. <i>Journal of Applied Physics</i> , 2021, 130, 083101.	1.1	3
11	Lineal Energy of Proton in Silicon by a Microdosimetry Simulation. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1113.	1.3	2
12	Electronic Reliability Analysis Under Radiation Environment. <i>Sensors and Materials</i> , 2021, 34, 1.	0.3	2
13	Degradation dynamics of quantum dots in white LED applications. <i>Scientific Reports</i> , 2021, 11, 24153.	1.6	4
14	Electromagnetic Induced Failure in GaN-HEMT High-Frequency Power Amplifier. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 5708-5716.	5.2	6
15	Moisture resistance evaluation on single electronic package moulding compound. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1943-1952.	2.7	4
16	Accurate Real Time On-Line Estimation of State-of-Health and Remaining Useful Life of Li ion Batteries. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7836.	1.3	9
17	In-situ characterisation of the defect density in reduced graphene oxide under electrical stress using fluorescence microscopy. <i>International Journal of Nanotechnology</i> , 2020, 17, 57.	0.1	0
18	Analytical modeling electrical conduction in resistive-switching memory through current-limiting-friendly combination frameworks. <i>AIP Advances</i> , 2020, 10, 085117.	0.6	4

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19	Optimization of a T-Shaped MIMO Antenna for Reduction of EMI. Applied Sciences (Switzerland), 2020, 10, 3117.	1.3	1
20	Investigate the Equivalence of Neutrons and Protons in Single Event Effects Testing: A Geant4 Study. Applied Sciences (Switzerland), 2020, 10, 3234.	1.3	4
21	Evaluation of the Potential Electromagnetic Interference in Vertically Stacked 3D Integrated Circuits. Applied Sciences (Switzerland), 2020, 10, 748.	1.3	3
22	High-Frequency Electromagnetic Simulation and Optimization for GaN-HEMT Power Amplifier IC. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 564-571.	1.4	15
23	Semi-Empirical Capacity Fading Model for SoH Estimation of Li-Ion Batteries. Applied Sciences (Switzerland), 2019, 9, 3012.	1.3	43
24	Additional IC Layout Rule from the Perspective of Electromagnetic Emissions for High Frequency Integrated Circuits. , 2019, , .		0
25	Investigation of the Impact of Drive Current and Phosphor Thickness on the Reliability of High Power White LED Lamp. IEEE Transactions on Device and Materials Reliability, 2019, 19, 290-297.	1.5	1
26	Pulse Oximeter for Low SpO2 Level Detection Using Discrete Time Signal Processing Algorithm. Journal of Medical Devices, Transactions of the ASME, 2019, 13, .	0.4	1
27	Dependence of operating conditions on lifetime of Phosphor Quantum dots-based white LEDs. , 2019, , .		0
28	Optimization of sandblasting process of complex 3D surface polishing using variable viscoelastic diamond particles abrasive. Machining Science and Technology, 2019, 23, 118-130.	1.4	6
29	ELECTROMAGNETIC HOTSPOTS IDENTIFICATION IN INTEGRATED CIRCUITS. Progress in Electromagnetics Research Letters, 2019, 86, 121-128.	0.4	1
30	Uncover the Degradation Science of Silicone Under the Combined Temperature and Humidity Conditions. IEEE Access, 2018, 6, 1302-1311.	2.6	18
31	Physical Limitations of Phosphor layer thickness and concentration for White LEDs. Scientific Reports, 2018, 8, 2452.	1.6	21
32	Reliability Ranking of Nodes: A Case of Revolution. , 2018, , .		1
33	Graphene as a Reducing Agent for Electroless Plating of Metal. , 2018, , .		1
34	Degradation Mechanisms for CdSe Quantum dot down converted LEDs. , 2018, , .		1
35	Reliability Perspective on the IoT and Nanoelectronics. , 2018, , .		0
36	Time evolution of packaged LED lamp degradation in outdoor applications. Optical Materials, 2018, 86, 148-154.	1.7	17

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37	Electroless Deposition: Metal on Graphenated Metal for VLSI Interconnects (Adv. Mater. Interfaces) Tj ETQq1 1 0.784314 rgBJ /Overlo	1.9	0
38	Electromagnetic emissions from GaN power IC at varying distance and frequency. , 2018, , .		0
39	RGB-Stack Light Emitting Diode Modules with Transparent Glass Circuit Board and Oil Encapsulation. Materials, 2018, 11, 365.	1.3	2
40	Metal on Graphenated Metal for VLSI Interconnects. Advanced Materials Interfaces, 2018, 5, 1800270.	1.9	3
41	Qualitative Analysis of Growth Parameters for PECVD Based Low Temperature Synthesis of Graphene Using Design of Experiments. Frontiers in Materials, 2018, 5, .	1.2	3
42	A miniaturized T-shaped MIMO antenna for X-band and Ku-band applications with enhanced radiation efficiency. , 2018, , .		5
43	Quality Decision for Overcharged Li-Ion Battery from Reliability and Safety Perspective. , 2017, , 223-232.		1
44	Engineering a PVD-Based Graphene Synthesis Method. IEEE Nanotechnology Magazine, 2017, 16, 784-789.	1.1	4
45	Growth Mechanism for Low Temperature PVD Graphene Synthesis on Copper Using Amorphous Carbon. Scientific Reports, 2017, 7, 44112.	1.6	23
46	Reliability paradox for worldwide automotive electronics. , 2017, , .		3
47	Hierarchical degradation processes in lithium-ion batteries during ageing. Electrochimica Acta, 2017, 256, 52-62.	2.6	34
48	Challenges in reliability screening for high power diodes. , 2017, , .		0
49	Overview of Reliability Engineering. , 2017, , 3-23.		3
50	Component-Level Reliability: Physical Models and Testing Regulations. , 2017, , 223-238.		0
51	Output Properties of Transparent Submount Packaged FlipChip Light-Emitting Diode Modules. Applied Sciences (Switzerland), 2016, 6, 179.	1.3	2
52	Determining the Parameters of Importance of a Graphene Synthesis Process Using Design-of-Experiments Method. Applied Sciences (Switzerland), 2016, 6, 204.	1.3	11
53	Graphene as a buffer layer for high quality GaN deposition on substrates in electronics. , 2016, , .		0
54	Engineering a PVD based graphene synthesis method. , 2016, , .		0

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55	Design of experiments for determination of key factors for graphene synthesis on copper using amorphous carbon – A statistical approach. , 2016, , .		1
56	Non-destructive degradation study of copper wire bond for its temperature cycling reliability evaluation. Microelectronics Reliability, 2016, 61, 56-63.	0.9	5
57	Simulation of EMI at design level for integrated circuits. , 2016, , .		6
58	Determination of key factors for low temperature graphene synthesis using design of experiments approach. , 2016, , .		0
59	Degradation Physics of High Power LEDs in Outdoor Environment and the Role of Phosphor in the degradation process. Scientific Reports, 2016, 6, 24052.	1.6	55
60	Effect of ULSI interconnect layout on its Electromagnetic Emission. , 2016, , .		0
61	A review on the humidity reliability of high power white light LEDs. Microelectronics Reliability, 2016, 61, 129-139.	0.9	20
62	Early degradation of high power packaged LEDs under humid conditions and its recovery – Myth of reliability rejuvenation. Microelectronics Reliability, 2016, 61, 145-153.	0.9	22
63	Copper induced synthesis of graphene using amorphous carbon. Microelectronics Reliability, 2016, 61, 87-90.	0.9	14
64	Component-Level Reliability: Physical Models and Testing Regulations. , 2016, , 1-16.		0
65	Effect of Temperature on the Aging rate of Li Ion Battery Operating above Room Temperature. Scientific Reports, 2015, 5, 12967.	1.6	339
66	A reliability-based design concept for lithium-ion battery pack in electric vehicles. Reliability Engineering and System Safety, 2015, 134, 169-177.	5.1	58
67	Application of Particle Filter Technique for Lifetime Determination of a LED Driver. IEEE Transactions on Device and Materials Reliability, 2015, 15, 163-173.	1.5	11
68	Revisit resistance monitoring techniques for measuring TSV/Solder resistance during Electromigration test. , 2014, , .		1
69	Extrapolation of lifetime of high power LEDs under temperature-humidity conditions. , 2014, , .		6
70	Maintenance Scheduling of Plasma Etching Chamber in Wafer Fabrication for High-Yield Etching Process. IEEE Transactions on Semiconductor Manufacturing, 2014, 27, 204-211.	1.4	12
71	Methodology of reliability enhancement for high power LED driver. Microelectronics Reliability, 2014, 54, 1150-1159.	0.9	11
72	A practical framework of electrical based online state-of-charge estimation of lithium ion batteries. Journal of Power Sources, 2014, 255, 423-430.	4.0	53

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73	The effect of temperature on the electrochemistry in Lithium-ion batteries. , 2014, , .		11
74	Time Evolution Degradation Physics in High Power White LEDs Under High Temperature-Humidity Conditions. IEEE Transactions on Device and Materials Reliability, 2014, 14, 742-750.	1.5	60
75	Electromigration simulation at circuit levels. , 2014, , .		1
76	Degradation Model of a Linear-Mode LED Driver and its Application in Lifetime Prediction. IEEE Transactions on Device and Materials Reliability, 2014, 14, 904-913.	1.5	6
77	Degradation mechanisms in gate-all-around silicon Nanowire field effect transistor under electrostatic discharge stress "a modeling approach. Nano Convergence, 2014, 1, 11.	6.3	2
78	Modeling and analysis of gate-all-around silicon nanowire FET. Microelectronics Reliability, 2014, 54, 1103-1108.	0.9	37
79	Damage threshold determination and non-destructive identification of possible failure sites in PIN limiter. Microelectronics Reliability, 2014, 54, 960-964.	0.9	1
80	Special section reliability and variability of devices for circuits and systems. Microelectronics Reliability, 2014, 54, 1057.	0.9	0
81	Rapid ULSI Interconnect Reliability Analysis Using Neural Networks. IEEE Transactions on Device and Materials Reliability, 2014, 14, 400-407.	1.5	17
82	Ab initio simulation of electronic and mechanical properties of aluminium for fatigue early feature investigation. International Journal of Nanotechnology, 2014, 11, 373.	0.1	2
83	Random dopant fluctuation in gate-all-around nanowire FET. , 2014, , .		2
84	Investigation of work function and surface energy of aluminum: An ab-initio study. , 2013, , .		5
85	Systematic Root Cause Analysis for GaP Green Light LED Degradation. IEEE Transactions on Device and Materials Reliability, 2013, 13, 156-160.	1.5	2
86	Optimal maintenance strategy of deteriorating system under imperfect maintenance and inspection using mixed inspectionscheduling. Reliability Engineering and System Safety, 2013, 113, 21-29.	5.1	64
87	Effects of Carbon Loading on the Performance of Functionalized Carbon Nanotube Polymer Heat Sink for High Power Light-Emitting Diode in Switching Applications. IEEE Nanotechnology Magazine, 2013, 12, 1104-1110.	1.1	3
88	Comparison of EM Performances in Circuit and Test Structures. SpringerBriefs in Applied Sciences and Technology, 2013, , 49-74.	0.2	0
89	3D Circuit Model Construction and Simulation. SpringerBriefs in Applied Sciences and Technology, 2013, , 7-47.	0.2	0
90	Interconnect EM Reliability Modeling at Circuit Layout Level. SpringerBriefs in Applied Sciences and Technology, 2013, , 75-99.	0.2	1

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91	Rapid Light Output Degradation of GaN-Based Packaged LED in the Early Stage of Humidity Test. IEEE Transactions on Device and Materials Reliability, 2012, 12, 44-48.	1.5	28
92	Integration of Low- $\kappa$ Dielectric Liner in Through Silicon Via and Thermomechanical Stress Relief. Applied Physics Express, 2012, 5, 126601.	1.1	9
93	Interfacial reaction and shear strength of Ni-coated carbon nanotubes reinforced Sn-Ag-Cu solder joints during thermal cycling. Intermetallics, 2012, 31, 72-78.	1.8	75
94	Comparison of electromigration simulation in test structure and actual circuit. Applied Mathematical Modelling, 2012, 36, 4908-4917.	2.2	2
95	Applications of multi-walled carbon nanotube in electronic packaging. Nanoscale Research Letters, 2012, 7, 183.	3.1	12
96	Effectiveness of reservoir length on electromigration lifetime enhancement for ULSI interconnects with advanced technology nodes. , 2012, , .		1
97	Ensuring accuracy in optical and electrical measurement of ultra-bright LEDs during reliability test. Microelectronics Reliability, 2012, 52, 1632-1635.	0.9	6
98	Applications of finite element methods for reliability study of ULSI interconnections. Microelectronics Reliability, 2012, 52, 1539-1545.	0.9	11
99	Effect of IC layout on the reliability of CMOS amplifiers. Microelectronics Reliability, 2012, 52, 1575-1580.	0.9	4
100	ICMAT 2011 - Reliability and variability of semiconductor devices and ICs. Microelectronics Reliability, 2012, 52, 1531.	0.9	0
101	Reliability study of LED driver - A case study of black box testing. Microelectronics Reliability, 2012, 52, 1940-1944.	0.9	21
102	Degradation behavior of high power light emitting diode under high frequency switching. Microelectronics Reliability, 2012, 52, 2168-2173.	0.9	4
103	Effect of Ni-Coated Carbon Nanotubes on Interfacial Reaction and Shear Strength of Sn-Ag-Cu Solder Joints. Journal of Electronic Materials, 2012, 41, 2478-2486.	1.0	21
104	Creep mitigation in Sn-Ag-Cu composite solder with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2012, 23, 1108-1115.	1.1	31
105	Electromigration reliability of interconnections in RF low noise amplifier circuit. Microelectronics Reliability, 2012, 52, 446-454.	0.9	13
106	Black's equation for today's ULSI interconnect Electromigration reliability &#x2014; A revisit. , 2011, , .		10
107	On-chip RF energy harvesting circuit for image sensor. , 2011, , .		2
108	Automated wafer defect map generation for process yield improvement. , 2011, , .		4

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109	Contamination assessment of inductive couple plasma etching chamber under mixture of recipes using statistical method. , 2011, , .		3
110	Electricalâ€“Thermalâ€“Stress Coupled-Field Effect in SOI and Partial SOI Lateral Power Diode. IEEE Transactions on Power Electronics, 2011, 26, 1723-1732.	5.4	4
111	Effect of hydrophilicity of carbon nanotube arrays on the release rate and activity of recombinant human bone morphogenetic protein-2. Nanotechnology, 2011, 22, 295712.	1.3	21
112	Microstructure and mechanical properties of CrN films fabricated by high power pulsed magnetron discharge plasma immersion ion implantation and deposition. Applied Surface Science, 2011, 258, 242-246.	3.1	21
113	Comparison of SOI and Partial-SOI LDMOSFETs Using Electricalâ€“Thermalâ€“Stress Coupled-Field Effect. IEEE Transactions on Electron Devices, 2011, 58, 3494-3500.	1.6	3
114	Development of a Snâ€“Agâ€“Cu solder reinforced with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2011, 22, 315-322.	1.1	74
115	Covalent functionalization of carbon nanotubes and their use in dielectric epoxy composites to improve heat dissipation. Carbon, 2011, 49, 2362-2369.	5.4	17
116	Applications of Finite Element Methods for Reliability Studies on ULSI Interconnections. Springer Series in Reliability Engineering, 2011, , .	0.3	10
117	Development of Physics-Based Modeling for ULSI Interconnections Failure Mechanisms: Electromigration and Stress-Induced Voiding. Springer Series in Reliability Engineering, 2011, , 5-38.	0.3	0
118	Finite Element Method for Electromigration Study. Springer Series in Reliability Engineering, 2011, , 73-112.	0.3	3
119	Introduction and General Theory of Finite Element Method. Springer Series in Reliability Engineering, 2011, , 39-71.	0.3	0
120	Electromigration performance of Through Silicon Via (TSV) â€“ A modeling approach. Microelectronics Reliability, 2010, 50, 1336-1340.	0.9	63
121	Modeling the effect of barrier thickness and low-k dielectric on circuit reliability using 3D model. Microelectronics Reliability, 2010, 50, 1327-1331.	0.9	2
122	Width dependence of the effectiveness of reservoir length in improving electromigration for Cu/Low-k interconnects. Microelectronics Reliability, 2010, 50, 1332-1335.	0.9	8
123	Temperature Dependence of Creep and Hardness of Sn-Ag-Cu Lead-Free Solder. Journal of Electronic Materials, 2010, 39, 223-229.	1.0	58
124	Circuit level interconnect reliability study using 3D circuit model. Microelectronics Reliability, 2010, 50, 376-390.	0.9	22
125	Addressing the challenges in solder resistance measurement for electromigration test. Microelectronics Reliability, 2010, 50, 1352-1354.	0.9	4
126	Humidity study of a-Si PV cell. Microelectronics Reliability, 2010, 50, 1871-1874.	0.9	26

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127	FTIR spectroscopy as a tool for nano-material characterization. Infrared Physics and Technology, 2010, 53, 434-438.	1.3	72
128	INTERFACE FRACTURE TOUGHNESS ASSESSMENT OF SOLDER JOINTS USING DOUBLE CANTILEVER BEAM TEST. International Journal of Modern Physics B, 2010, 24, 164-174.	1.0	5
129	Study of humidity reliability of high power LEDs. , 2010, , .		4
130	Hot-Carrier Reliability of Power SOI EDNMOS. IEEE Transactions on Power Electronics, 2010, 25, 1685-1691.	5.4	3
131	NANOMECHANICAL PROPERTIES OF A Sn-Ag-Cu SOLDER REINFORCED WITH Ni-COATED CARBON NANOTUBES. International Journal of Nanoscience, 2010, 09, 283-287.	0.4	5
132	INDENTATION SIZE EFFECT ON THE CREEP BEHAVIOR OF A SnAgCu SOLDER. International Journal of Modern Physics B, 2010, 24, 267-275.	1.0	12
133	Antibacterial action of dispersed single-walled carbon nanotubes on Escherichia coli and Bacillus subtilis investigated by atomic force microscopy. Nanoscale, 2010, 2, 2744.	2.8	153
134	Ageing study of interfacial intermetallic growth in a lead-free solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
135	Imperfect predictive maintenance model for multi-state systems with multiple failure modes and element failure dependency. , 2010, , .		4
136	Indentation creep and hardness of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
137	Effect of Ni-coated carbon nanotubes on the microstructure and properties of a Sn-Ag-Cu solder. , 2010, , .		3
138	A possible reality on battery-less low-power portable electronics. , 2010, , .		1
139	Going green for discrete power diode manufacturers. , 2009, , .		0
140	Effect of Ni-coated carbon nanotubes on interfacial intermetallic layer growth. , 2009, , .		1
141	Comparative study of non-standard power diodes. , 2009, , .		0
142	A modified constitutive model for creep of Sn-3.5Ag-0.7Cu solder joints. Journal Physics D: Applied Physics, 2009, 42, 125411.	1.3	23
143	Comparison of stress-induced voiding phenomena in copper line-via structures with different dielectric materials. Semiconductor Science and Technology, 2009, 24, 085014.	1.0	7
144	Electromigration in width transition copper interconnect. Microelectronics Reliability, 2009, 49, 1086-1089.	0.9	3

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145	Behavior of hot carrier generation in power SOI LDNMOS with shallow trench isolation (STI). Microelectronics Reliability, 2009, 49, 1038-1043.	0.9	7
146	Analysis of humidity effects on the degradation of high-power white LEDs. Microelectronics Reliability, 2009, 49, 1226-1230.	0.9	47
147	Reply to comments on "A framework to practical predictive maintenance modeling for multi-state systems". Reliability Engineering and System Safety, 2009, 94, 781-782.	5.1	6
148	3D circuit model for 3D IC reliability study. , 2009, , .		14
149	Electrowetting Control of Cassie-to-Wenzel Transitions in Superhydrophobic Carbon Nanotube-Based Nanocomposites. ACS Nano, 2009, 3, 3031-3036.	7.3	120
150	Dynamic simulation of void nucleation during electromigration in narrow integrated circuit interconnects. Journal of Applied Physics, 2009, 105, 014305.	1.1	18
151	Enhancing the properties of a lead-free solder with the addition of Ni-coated carbon nanotubes. , 2009, , .		5
152	Local bond average for the size and temperature dependence of elastic and vibronic properties of nanostructures. International Journal of Nanotechnology, 2009, 6, 640.	0.1	3
153	Solubility, dispersion and bonding of functionalised carbon nanotubes in epoxy resins. International Journal of Nanotechnology, 2009, 6, 618.	0.1	6
154	Reverse Breakdown Voltage Measurement for Power P+NN+ Rectifier. Journal of Electronic Testing: Theory and Applications (JETTA), 2008, 24, 473-479.	0.9	0
155	A framework to practical predictive maintenance modeling for multi-state systems. Reliability Engineering and System Safety, 2008, 93, 1138-1150.	5.1	75
156	A bimodal three-parameter lognormal mixture distribution for electromigration failure analysis. Thin Solid Films, 2008, 516, 8804-8809.	0.8	4
157	Methodologies for size, and temperature dependent change of materials properties. , 2008, , .		0
158	Humidity Effect on the Degradation of Packaged Ultra-bright White LEDs. , 2008, , .		12
159	The multiple temperature heater platforms for solder Electromigration test conducted at room temperature. , 2008, , .		0
160	A New Creep Model for SnAgCu Lead-Free Composite Solders: Incorporating Back Stress. , 2008, , .		1
161	Stress-induced voiding study in integrated circuit interconnects. Semiconductor Science and Technology, 2008, 23, 075023.	1.0	11
162	Statistical modeling of via redundancy effects on interconnect reliability. , 2008, , .		7

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163	Nano-tailoring of carbon nanotube as nano-fillers for composite materials applications. , 2008, , .		1
164	Size effect in Cu nano-interconnects and its implication on electromigration. , 2008, , .		3
165	Very high current density package level electromigration test for copper interconnects. Journal of Applied Physics, 2008, 103, 093707.	1.1	22
166	Fracture Toughness Assessment of a Solder Joint using Double Cantilever Beam Specimens. , 2008, , .		0
167	Root cause analysis based maintenance policy. International Journal of Quality and Reliability Management, 2007, 24, 203-228.	1.3	12
168	Unveiling the electromigration physics of ULSI interconnects through statistics. Semiconductor Science and Technology, 2007, 22, 941-946.	1.0	6
169	Aligned carbon nanotubes for through-wafer interconnects. Applied Physics Letters, 2007, 91, .	1.5	74
170	Statistical Analysis of Multi-Censored Electromigration Data using the EM Algorithm. , 2007, , .		2
171	Application of gamma distribution in electromigration for submicron interconnects. Journal of Applied Physics, 2007, 102, .	1.1	20
172	Room temperature observation of point defect on gold surface using thermovoltage mapping. Microelectronics Reliability, 2007, 47, 1580-1584.	0.9	0
173	Dynamic simulation of electromigration in polycrystalline interconnect thin film using combined Monte Carlo algorithm and finite element modeling. Journal of Applied Physics, 2007, 101, 104314.	1.1	24
174	Revisit to the finite element modeling of electromigration for narrow interconnects. Journal of Applied Physics, 2007, 102, 033705.	1.1	54
175	The Physical Limit and Manufacturability of Power Diode with Carrier Lifetime Control. , 2007, , .		2
176	Lifetime modeling for stress-induced voiding in integrated circuit interconnections. Applied Physics Letters, 2007, 91, .	1.5	9
177	Blech Effect in Cu Interconnects with Oxide and Low-k Dielectrics. , 2007, , .		3
178	Predicting Integrated Circuit Reliability from Wafer Fabrication Technology Reliability Data. , 2007, , .		2
179	Size, temperature, and bond nature dependence of elasticity and its derivatives on extensibility, Debye temperature, and heat capacity of nanostructures. Physical Review B, 2007, 75, .	1.1	83
180	Probing into the asymmetric nature of electromigration performance of submicron interconnect via structure. Thin Solid Films, 2007, 515, 3867-3874.	0.8	28

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181	Electromigration in ULSI interconnects. Materials Science and Engineering Reports, 2007, 58, 1-75.	14.8	198
182	An approach to statistical analysis of gate oxide breakdown mechanisms. Microelectronics Reliability, 2007, 47, 1336-1342.	0.9	11
183	Enhanced finite element modelling of Cu electromigration using ANSYS and matlab. Microelectronics Reliability, 2007, 47, 1497-1501.	0.9	6
184	Finite element modeling of capacitive coupling voltage contrast. Microelectronics Reliability, 2007, 47, 1555-1560.	0.9	0
185	Mapping of solder mask covered interconnects on high density printed circuit board. , 2006, , .		1
186	Change in thermal conductivity of cylindrical silicon nanowires induced by surface bonding modification. Journal of Applied Physics, 2006, 100, 094304.	1.1	7
187	Experimental investigation on the impact of stress free temperature on the electromigration performance of copper dual damascene submicron interconnect. Microelectronics Reliability, 2006, 46, 1652-1656.	0.9	23
188	Device level electrical-thermal-stress coupled-field modeling. Microelectronics Reliability, 2006, 46, 1823-1827.	0.9	1
189	Development of highly accelerated electromigration test. Microelectronics Reliability, 2006, 46, 1638-1642.	0.9	10
190	Low-temperature sol-gel intermediate layer wafer bonding. Thin Solid Films, 2006, 496, 560-565.	0.8	4
191	Investigation of the effect of temperature and stress gradients on accelerated EM test for Cu narrow interconnects. Thin Solid Films, 2006, 504, 288-293.	0.8	62
192	Feasibility study of the application of voltage contrast to printed circuit board. Microelectronics Reliability, 2006, 46, 939-948.	0.9	1
193	Electromigration in damascene copper interconnects of line width down to 100 nm. Semiconductor Science and Technology, 2006, 21, 1369-1372.	1.0	15
194	Comparison of medium-vacuum and plasma-activated low-temperature wafer bonding. Applied Physics Letters, 2006, 88, 114102.	1.5	38
195	A comprehensive semi-empirical mobility model for strained-Si N-MOSFETs. , 2006, , .		0
196	Determination of the dice forward I-V characteristics of a power diode from a packaged device and its applications. Microelectronics Reliability, 2005, 45, 179-184.	0.9	16
197	Non-destructive identification of open circuit in wiring on organic substrate with high wiring density covered with solder resist. Microelectronics Reliability, 2005, 45, 1572-1575.	0.9	2
198	Mechanical Properties of Zirconia Thin Films Deposited by Filtered Cathodic Vacuum Arc. Journal of the American Ceramic Society, 2005, 88, 2227-2229.	1.9	9

#	ARTICLE	IF	CITATIONS
199	Effect of test condition and stress free temperature on the electromigration failure of Cu dual damascene submicron interconnect line-via test structures. <i>Microelectronics Reliability</i> , 2005, 45, 1443-1448.	0.9	18
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