

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 Temperature on the Aging rate of Li Ion Battery Operating above Room Temperature. Scientific Reports, 2015, 5, 12967.	1.6	339
2	Electromigration in ULSI interconnects. Materials Science and Engineering Reports, 2007, 58, 1-75.	14.8	198
3	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
4	Preparation and characterization of copper oxide thin films deposited by filtered cathodic vacuum arc. Journal Physics D: Applied Physics, 2004, 37, 81-85.	1.3	137
5	Electrowetting Control of Cassie-to-Wenzel Transitions in Superhydrophobic Carbon Nanotube-Based Nanocomposites. ACS Nano, 2009, 3, 3031-3036.	7.3	120
6	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
7	A framework to practical predictive maintenance modeling for multi-state systems. Reliability Engineering and System Safety, 2008, 93, 1138-1150.	5.1	75
8	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
9	Aligned carbon nanotubes for through-wafer interconnects. Applied Physics Letters, 2007, 91, .	1.5	74
10	Development of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2011, 22, 315-322.	1.1	74
11	FTIR spectroscopy as a tool for nano-material characterization. Infrared Physics and Technology, 2010, 53, 434-438.	1.3	72
12	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
13	Electromigration performance of Through Silicon Via (TSV) – A modeling approach. Microelectronics Reliability, 2010, 50, 1336-1340.	0.9	63
14	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
15	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
16	Temperature Dependence of Creep and Hardness of Sn-Ag-Cu Lead-Free Solder. Journal of Electronic Materials, 2010, 39, 223-229.	1.0	58
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Revisit to the finite element modeling of electromigration for narrow interconnects. Journal of Applied Physics, 2007, 102, 033705.	1.1	54
20	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
21	Temperature dependence of the field emission of multiwalled carbon nanotubes. Applied Physics Letters, 2005, 86, 263104.	1.5	48
22	Current crowding effect on copper dual damascene via bottom failure for ULSI applications. IEEE Transactions on Device and Materials Reliability, 2005, 5, 198-205.	1.5	47
23	Analysis of humidity effects on the degradation of high-power white LEDs. Microelectronics Reliability, 2009, 49, 1226-1230.	0.9	47
24	Semi-Empirical Capacity Fading Model for SoH Estimation of Li-Ion Batteries. Applied Sciences (Switzerland), 2019, 9, 3012.	1.3	43
25	A new method for deposition of cubic Ta diffusion barrier for Cu metallization. Thin Solid Films, 2003, 434, 126-129.	0.8	42
26	Dynamic Study of the Physical Processes in the Intrinsic Line Electromigration of Deep-Submicron Copper and Aluminum Interconnects. IEEE Transactions on Device and Materials Reliability, 2004, 4, 450-456.	1.5	41
27	Comparison of medium-vacuum and plasma-activated low-temperature wafer bonding. Applied Physics Letters, 2006, 88, 114102.	1.5	38
28	Modeling and analysis of gate-all-around silicon nanowire FET. Microelectronics Reliability, 2014, 54, 1103-1108.	0.9	37
29	Using power diode models for circuit simulations-a comprehensive review. IEEE Transactions on Industrial Electronics, 1999, 46, 637-645.	5.2	36
30	Hierarchical degradation processes in lithium-ion batteries during ageing. Electrochimica Acta, 2017, 256, 52-62.	2.6	34
31	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
32	Customer-focused build-in reliability: a case study. International Journal of Quality and Reliability Management, 2003, 20, 378-397.	1.3	30
33	Multi-criteria decision making (MCDM) for the selection of Li-ion batteries used in electric vehicles (EVs). Materials Today: Proceedings, 2021, 41, 1073-1077.	0.9	29
34	Characterisation of pyramid formation arising from the TMAH etching of silicon. Sensors and Actuators A: Physical, 1998, 71, 238-243.	2.0	28
35	Probing into the asymmetric nature of electromigration performance of submicron interconnect via structure. Thin Solid Films, 2007, 515, 3867-3874.	0.8	28
36	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

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37	Humidity study of a-Si PV cell. Microelectronics Reliability, 2010, 50, 1871-1874.	0.9	26
38	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
39	Intrinsic mechanical properties of diamond-like carbon thin films deposited by filtered cathodic vacuum arc. Journal of Applied Physics, 2004, 95, 3509-3515.	1.1	23
40	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
41	A modified constitutive model for creep of Sn ^{3.5} Ag ^{0.7} Cu solder joints. Journal Physics D: Applied Physics, 2009, 42, 125411.	1.3	23
42	Growth Mechanism for Low Temperature PVD Graphene Synthesis on Copper Using Amorphous Carbon. Scientific Reports, 2017, 7, 44112.	1.6	23
43	Study of resonant tunneling structures: A hybrid incremental Airy function plane-wave approach. Journal of Applied Physics, 1990, 67, 3011-3017.	1.1	22
44	Very high current density package level electromigration test for copper interconnects. Journal of Applied Physics, 2008, 103, 093707.	1.1	22
45	Circuit level interconnect reliability study using 3D circuit model. Microelectronics Reliability, 2010, 50, 376-390.	0.9	22
46	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
47	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
48	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
49	Reliability study of LED driver – A case study of black box testing. Microelectronics Reliability, 2012, 52, 1940-1944.	0.9	21
50	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
51	Physical Limitations of Phosphor layer thickness and concentration for White LEDs. Scientific Reports, 2018, 8, 2452.	1.6	21
52	Application of gamma distribution in electromigration for submicron interconnects. Journal of Applied Physics, 2007, 102, .	1.1	20
53	A review on the humidity reliability of high power white light LEDs. Microelectronics Reliability, 2016, 61, 129-139.	0.9	20
54	Effect of test condition and stress free temperature on the electromigration failure of Cu dual damascene submicron interconnect line-via test structures. Microelectronics Reliability, 2005, 45, 1443-1448.	0.9	18

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55	Dynamic simulation of void nucleation during electromigration in narrow integrated circuit interconnects. Journal of Applied Physics, 2009, 105, 014305.	1.1	18
56	Uncover the Degradation Science of Silicone Under the Combined Temperature and Humidity Conditions. IEEE Access, 2018, 6, 1302-1311.	2.6	18
57	Influence of applied load on vacuum wafer bonding at low temperature. Sensors and Actuators A: Physical, 2004, 115, 67-72.	2.0	17
58	Covalent functionalization of carbon nanotubes and their use in dielectric epoxy composites to improve heat dissipation. Carbon, 2011, 49, 2362-2369.	5.4	17
59	Rapid ULSI Interconnect Reliability Analysis Using Neural Networks. IEEE Transactions on Device and Materials Reliability, 2014, 14, 400-407.	1.5	17
60	Time evolution of packaged LED lamp degradation in outdoor applications. Optical Materials, 2018, 86, 148-154.	1.7	17
61	Thermal stability of Cu/Ta/SiO ₂ /Si structures. Thin Solid Films, 2004, 462-463, 284-287.	0.8	16
62	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
63	Electromigration in damascene copper interconnects of line width down to 100 nm. Semiconductor Science and Technology, 2006, 21, 1369-1372.	1.0	15
64	High-Frequency Electromagnetic Simulation and Optimization for GaN-HEMT Power Amplifier IC. IEEE Transactions on Electromagnetic Compatibility, 2019, 61, 564-571.	1.4	15
65	3D circuit model for 3D IC reliability study. , 2009, , .		14
66	Copper induced synthesis of graphene using amorphous carbon. Microelectronics Reliability, 2016, 61, 87-90.	0.9	14
67	Failure mechanisms of aluminum bondpad peeling during thermosonic bonding. IEEE Transactions on Device and Materials Reliability, 2003, 3, 44-50.	1.5	13
68	Electromigration reliability of interconnections in RF low noise amplifier circuit. Microelectronics Reliability, 2012, 52, 446-454.	0.9	13
69	Root cause analysis based maintenance policy. International Journal of Quality and Reliability Management, 2007, 24, 203-228.	1.3	12
70	Humidity Effect on the Degradation of Packaged Ultra-bright White LEDs. , 2008, , .		12
71	INDENTATION SIZE EFFECT ON THE CREEP BEHAVIOR OF A SnAgCu SOLDER. International Journal of Modern Physics B, 2010, 24, 267-275.	1.0	12
72	Applications of multi-walled carbon nanotube in electronic packaging. Nanoscale Research Letters, 2012, 7, 183.	3.1	12

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73	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
74	An approach to statistical analysis of gate oxide breakdown mechanisms. Microelectronics Reliability, 2007, 47, 1336-1342.	0.9	11
75	Stress-induced voiding study in integrated circuit interconnects. Semiconductor Science and Technology, 2008, 23, 075023.	1.0	11
76	Applications of finite element methods for reliability study of ULSI interconnections. Microelectronics Reliability, 2012, 52, 1539-1545.	0.9	11
77	Methodology of reliability enhancement for high power LED driver. Microelectronics Reliability, 2014, 54, 1150-1159.	0.9	11
78	The effect of temperature on the electrochemistry in Lithium-ion batteries. , 2014, , .		11
79	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
80	Determining the Parameters of Importance of a Graphene Synthesis Process Using Design-of-Experiments Method. Applied Sciences (Switzerland), 2016, 6, 204.	1.3	11
81	Temperature and stress distribution in the SOI structure during fabrication. IEEE Transactions on Semiconductor Manufacturing, 2003, 16, 314-318.	1.4	10
82	Development of highly accelerated electromigration test. Microelectronics Reliability, 2006, 46, 1638-1642.	0.9	10
83	Black's equation for today's ULSI interconnect Electromigration reliability — A revisit. , 2011, , .		10
84	Applications of Finite Element Methods for Reliability Studies on ULSI Interconnections. Springer Series in Reliability Engineering, 2011, , .	0.3	10
85	Failure analysis of bond pad metal peeling using FIB and AFM. IEEE Transactions on Components and Packaging Technologies, 1998, 21, 585-591.	0.7	9
86	Effect of BOE etching time on wire bonding quality. IEEE Transactions on Components and Packaging Technologies, 1999, 22, 551-557.	1.4	9
87	Overcoming intrinsic weakness of ULSI metallization electromigration performances. Thin Solid Films, 2004, 462-463, 263-268.	0.8	9
88	Barrier layer effects on reliabilities of copper metallization. Thin Solid Films, 2004, 462-463, 288-291.	0.8	9
89	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
90	Lifetime modeling for stress-induced voiding in integrated circuit interconnections. Applied Physics Letters, 2007, 91, .	1.5	9

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91	Integration of Low- κ Dielectric Liner in Through Silicon Via and Thermomechanical Stress Relief. Applied Physics Express, 2012, 5, 126601.	1.1	9
92	Accurate Real Time On-Line Estimation of State-of-Health and Remaining Useful Life of Li ion Batteries. Applied Sciences (Switzerland), 2020, 10, 7836.	1.3	9
93	Effect of medium vacuum on low temperature wafer bonding. Journal of Micromechanics and Microengineering, 2005, 15, 1001-1006.	1.5	8
94	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
95	Application of Gallium Nitride Technology in Particle Therapy Imaging. IEEE Transactions on Nuclear Science, 2021, 68, 1319-1324.	1.2	8
96	Metastability in tritiated amorphous silicon. Journal of Non-Crystalline Solids, 2002, 299-302, 476-481.	1.5	7
97	Study of interactions between \pm -Ta films and SiO ₂ under rapid thermal annealing. Thin Solid Films, 2004, 462-463, 279-283.	0.8	7
98	Change in thermal conductivity of cylindrical silicon nanowires induced by surface bonding modification. Journal of Applied Physics, 2006, 100, 094304.	1.1	7
99	Statistical modeling of via redundancy effects on interconnect reliability. , 2008, , .		7
100	Comparison of stress-induced voiding phenomena in copper lineâ€“via structures with different dielectric materials. Semiconductor Science and Technology, 2009, 24, 085014.	1.0	7
101	Behavior of hot carrier generation in power SOI LDNMOS with shallow trench isolation (STI). Microelectronics Reliability, 2009, 49, 1038-1043.	0.9	7
102	Application of Wigner-Ville distribution in electromigration noise analysis. IEEE Transactions on Device and Materials Reliability, 2002, 2, 30-35.	1.5	6
103	QFD implementation in a discrete semiconductor industry. , 0, , .		6
104	Reliability Improvement in Al Metallization: A Combination of Statistical Prediction and Failure Analytical Methodology. Microelectronics Reliability, 2004, 44, 1843-1848.	0.9	6
105	Thermally induced stress in partial SOI structure during high temperature processing. Microelectronic Engineering, 2004, 71, 150-162.	1.1	6
106	Mathematical model of low-temperature wafer bonding under medium vacuum and its application. IEEE Transactions on Advanced Packaging, 2005, 28, 650-658.	1.7	6
107	Unveiling the electromigration physics of ULSI interconnects through statistics. Semiconductor Science and Technology, 2007, 22, 941-946.	1.0	6
108	Enhanced finite element modelling of Cu electromigration using ANSYS and matlab. Microelectronics Reliability, 2007, 47, 1497-1501.	0.9	6

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109	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
110	Solubility, dispersion and bonding of functionalised carbon nanotubes in epoxy resins. International Journal of Nanotechnology, 2009, 6, 618.	0.1	6
111	Ensuring accuracy in optical and electrical measurement of ultra-bright LEDs during reliability test. Microelectronics Reliability, 2012, 52, 1632-1635.	0.9	6
112	Extrapolation of lifetime of high power LEDs under temperature-humidity conditions. , 2014, , .		6
113	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
114	Simulation of EMI at design level for integrated circuits. , 2016, , .		6
115	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
116	Electromagnetic Induced Failure in GaN-HEMT High-Frequency Power Amplifier. IEEE Transactions on Industrial Electronics, 2020, 67, 5708-5716.	5.2	6
117	Title is missing!. Journal of Electronic Testing: Theory and Applications (JETTA), 2001, 17, 63-68.	0.9	5
118	Effect of vacuum break after the barrier layer deposition on the electromigration performance of aluminum based line interconnects. Microelectronics Reliability, 2005, 45, 1449-1454.	0.9	5
119	Mechanism of sol-gel intermediate layer low temperature wafer bonding. Journal Physics D: Applied Physics, 2005, 38, 1308-1312.	1.3	5
120	Enhancing the properties of a lead-free solder with the addition of Ni-coated carbon nanotubes. , 2009, , .		5
121	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
122	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
123	Investigation of work function and surface energy of aluminum: An ab-initio study. , 2013, , .		5
124	Non-destructive degradation study of copper wire bond for its temperature cycling reliability evaluation. Microelectronics Reliability, 2016, 61, 56-63.	0.9	5
125	A miniaturized T-shaped MIMO antenna for X-band and Ku-band applications with enhanced radiation efficiency. , 2018, , .		5
126	Reliability statistics perspective on standard wafer-level electromigration accelerated test (SWEAT). , 0, , .		4

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127	Low-temperature sol-gel intermediate layer wafer bonding. Thin Solid Films, 2006, 496, 560-565.	0.8	4
128	A bimodal three-parameter lognormal mixture distribution for electromigration failure analysis. Thin Solid Films, 2008, 516, 8804-8809.	0.8	4
129	Addressing the challenges in solder resistance measurement for electromigration test. Microelectronics Reliability, 2010, 50, 1352-1354.	0.9	4
130	Study of humidity reliability of high power LEDs. , 2010, , .		4
131	Imperfect predictive maintenance model for multi-state systems with multiple failure modes and element failure dependency. , 2010, , .		4
132	Automated wafer defect map generation for process yield improvement. , 2011, , .		4
133	Electrical-Thermal-Stress Coupled-Field Effect in SOI and Partial SOI Lateral Power Diode. IEEE Transactions on Power Electronics, 2011, 26, 1723-1732.	5.4	4
134	Effect of IC layout on the reliability of CMOS amplifiers. Microelectronics Reliability, 2012, 52, 1575-1580.	0.9	4
135	Degradation behavior of high power light emitting diode under high frequency switching. Microelectronics Reliability, 2012, 52, 2168-2173.	0.9	4
136	Engineering a PVD-Based Graphene Synthesis Method. IEEE Nanotechnology Magazine, 2017, 16, 784-789.	1.1	4
137	Moisture resistance evaluation on single electronic package moulding compound. Journal of Materials Chemistry C, 2020, 8, 1943-1952.	2.7	4
138	Analytical modeling electrical conduction in resistive-switching memory through current-limiting-friendly combination frameworks. AIP Advances, 2020, 10, 085117.	0.6	4
139	Investigate the Equivalence of Neutrons and Protons in Single Event Effects Testing: A Geant4 Study. Applied Sciences (Switzerland), 2020, 10, 3234.	1.3	4
140	Degradation dynamics of quantum dots in white LED applications. Scientific Reports, 2021, 11, 24153.	1.6	4
141	Root Cause Analysis of a Printed Circuit Board (PCB) Failure in a Public Transport Communication System. Applied Sciences (Switzerland), 2022, 12, 640.	1.3	4
142	Statistical distribution of Lithium-ion batteries useful life and its application for battery pack reliability. Journal of Energy Storage, 2022, 51, 104399.	3.9	4
143	Single wafer miniature Hall-effect keyboard. IEEE Transactions on Industrial Electronics, 1989, 36, 446-450.	5.2	3
144	Analysis of electromigration test data. , 0, , .		3

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145	Comparison of the Time-Dependent Physical Processes in the Electromigration of Deep Submicron Copper and Aluminum Interconnects. Materials Research Society Symposia Proceedings, 2003, 766, 3161.	0.1	3
146	Finite element modeling of residual mechanical stress in partial SOI structure due to wafer bonding processing. , 0, , .		3
147	Blech Effect in Cu Interconnects with Oxide and Low-k Dielectrics. , 2007, , .		3
148	Size effect in Cu nano-interconnects and its implication on electromigration. , 2008, , .		3
149	Electromigration in width transition copper interconnect. Microelectronics Reliability, 2009, 49, 1086-1089.	0.9	3
150	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
151	Hot-Carrier Reliability of Power SOI EDMOS. IEEE Transactions on Power Electronics, 2010, 25, 1685-1691.	5.4	3
152	Effect of Ni-coated carbon nanotubes on the microstructure and properties of a Sn-Ag-Cu solder. , 2010, , .		3
153	Contamination assessment of inductive couple plasma etching chamber under mixture of recipes using statistical method. , 2011, , .		3
154	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
155	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
156	Reliability paradox for worldwide automotive electronics. , 2017, , .		3
157	Metal on Graphenated Metal for VLSI Interconnects. Advanced Materials Interfaces, 2018, 5, 1800270.	1.9	3
158	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
159	Evaluation of the Potential Electromagnetic Interference in Vertically Stacked 3D Integrated Circuits. Applied Sciences (Switzerland), 2020, 10, 748.	1.3	3
160	Impact of visible light and humidity on the stability of high-power light emitting diode packaging material. Journal of Applied Physics, 2021, 130, 083101.	1.1	3
161	Overview of Reliability Engineering. , 2017, , 3-23.		3
162	Finite Element Method for Electromigration Study. Springer Series in Reliability Engineering, 2011, , 73-112.	0.3	3

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163	Electronic properties of n-doping superlattices. Journal of Applied Physics, 1993, 73, 2921-2933.	1.1	2
164	Influence of plasma treatment and cleaning on vacuum wafer bonding. , 0, , .		2
165	Nondestructive void size determination in copper metallization under passivation. IEEE Transactions on Device and Materials Reliability, 2003, 3, 69-78.	1.5	2
166	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
167	Making Wafer Bonding Viable for Mass Production. Materials Research Society Symposia Proceedings, 2005, 869, 281.	0.1	2
168	Statistical Analysis of Multi-Censored Electromigration Data using the EM Algorithm. , 2007, , .		2
169	The Physical Limit and Manufacturability of Power Diode with Carrier Lifetime Control. , 2007, , .		2
170	Predicting Integrated Circuit Reliability from Wafer Fabrication Technology Reliability Data. , 2007, , .		2
171	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
172	On-chip RF energy harvesting circuit for image sensor. , 2011, , .		2
173	Comparison of electromigration simulation in test structure and actual circuit. Applied Mathematical Modelling, 2012, 36, 4908-4917.	2.2	2
174	Systematic Root Cause Analysis for GaP Green Light LED Degradation. IEEE Transactions on Device and Materials Reliability, 2013, 13, 156-160.	1.5	2
175	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
176	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
177	Random dopant fluctuation in gate-all-around nanowire FET. , 2014, , .		2
178	Output Properties of Transparent Submount Packaged FlipChip Light-Emitting Diode Modules. Applied Sciences (Switzerland), 2016, 6, 179.	1.3	2
179	RGB-Stack Light Emitting Diode Modules with Transparent Glass Circuit Board and Oil Encapsulation. Materials, 2018, 11, 365.	1.3	2
180	Lineal Energy of Proton in Silicon by a Microdosimetry Simulation. Applied Sciences (Switzerland), 2021, 11, 1113.	1.3	2

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181	Electronic Reliability Analysis Under Radiation Environment. Sensors and Materials, 2021, 34, 1.	0.3	2
182	<title>New quality control parameter in wafer fabrication for wire-bonding integrity</title>. , 2000, 4229, 149.		1
183	<title>Reliability data analysis software development</title>. , 2000, , .		1
184	Integrating device modeling in QFD implementation for power electronics application. , 0, , .		1
185	A Novel Technique to Re-construct 3D Void in Passivated Metal Interconnects. Materials Research Society Symposia Proceedings, 2003, 766, 481.	0.1	1
186	Reliability screening through electrical testing for press-fit alternator power diode in automotive application. Microelectronics Reliability, 2005, 45, 1723-1727.	0.9	1
187	Investigation of weight-on-wheel switch failure in F-16 aircraft. Engineering Failure Analysis, 2005, 12, 508-519.	1.8	1
188	Mapping of solder mask covered interconnects on high density printed circuit board. , 2006, , .		1
189	Device level electrical-thermal-stress coupled-field modeling. Microelectronics Reliability, 2006, 46, 1823-1827.	0.9	1
190	Feasibility study of the application of voltage contrast to printed circuit board. Microelectronics Reliability, 2006, 46, 939-948.	0.9	1
191	A New Creep Model for SnAgCu Lead-Free Composite Solders: Incorporating Back Stress. , 2008, , .		1
192	Nano-tailoring of carbon nanotube as nano-fillers for composite materials applications. , 2008, , .		1
193	Effect of Ni-coated carbon nanotubes on interfacial intermetallic layer growth. , 2009, , .		1
194	Ageing study of interfacial intermetallic growth in a lead-free solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
195	Indentation creep and hardness of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
196	A possible reality on battery-less low-power portable electronics. , 2010, , .		1
197	Effectiveness of reservoir length on electromigration lifetime enhancement for ULSI interconnects with advanced technology nodes. , 2012, , .		1
198	Revisit resistance monitoring techniques for measuring TSV/Solder resistance during Electromigration test. , 2014, , .		1

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199	Electromigration simulation at circuit levels. , 2014, , .		1
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