

# Ingrid De Wolf

## List of Publications by Year in descending order

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356  
papers

7,331  
citations

87843

38  
h-index

85498

71  
g-index

360  
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360  
docs citations

360  
times ranked

4738  
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal Modelling of Silicon Photonic Ring Modulator with Substrate Undercut. Journal of Lightwave Technology, 2022, 40, 4357-4363.	2.7	18
2	Gate-Induced-Drain-Leakage (GIDL) in CMOS Enhanced by Mechanical Stress. IEEE Transactions on Electron Devices, 2022, 69, 2214-2217.	1.6	6
3	Significant Enhancement of HCD and TDDB in CMOS FETs by Mechanical Stress. , 2022, , .		1
4	Electromigration Performance Improvement of Metal Heaters for Si Photonic Ring Modulators. IEEE Transactions on Device and Materials Reliability, 2022, , 1-1.	1.5	2
5	Properties of ultrathin molybdenum films for interconnect applications. Materialia, 2022, 24, 101511.	1.3	15
6	Investigation of the Impact of Externally Applied Out-of-Plane Stress on Ferroelectric FET. IEEE Electron Device Letters, 2021, 42, 264-267.	2.2	5
7	A multi-energy level agnostic simulation approach to defect generation. Solid-State Electronics, 2021, 184, 108056.	0.8	2
8	Hot-Electron-Induced Punch-Through (HEIP) Effect in p-MOSFET Enhanced by Mechanical Stress. IEEE Electron Device Letters, 2021, 42, 1424-1427.	2.2	9
9	A Novel Resistance Measurement Methodology for \$In-Situ\$ UBM/Solder Interfacial Reaction Monitoring. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 30-38.	1.4	3
10	Impact of Mechanical Stress on 3-D NAND Flash Current Conduction. IEEE Transactions on Electron Devices, 2020, 67, 4891-4896.	1.6	6
11	Nozzle scaling effects for the thermohydraulic performance of microjet impingement cooling with distributed returns. Applied Thermal Engineering, 2020, 180, 115767.	3.0	11
12	On the impact of mechanical stress on gate oxide trapping. , 2020, , .		5
13	Optical Beam-Based Defect Localization Methodologies for Open and Short Failures in Micrometer-Scale 3-D TSV Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1542-1551.	1.4	8
14	A novel iso-thermal intermetallic compound insertion bonding approach to improve throughput for 3D die to wafer stacking. , 2020, , .		4
15	Magnetic field imaging and light induced capacitance alteration for failure analysis of Cu-TSV interconnects. Microelectronics Reliability, 2020, 114, 113780.	0.9	1
16	Low-frequency noise and thermal equilibrium properties of vacancies. Applied Physics Letters, 2020, 116, 193501.	1.5	0
17	A Novel Intermetallic Compound Insertion Bonding to Improve Throughput for Sequential 3-D Stacking. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 669-678.	1.4	6
18	(Invited) Alternative Metals for Beyond-Cu Interconnects. ECS Meeting Abstracts, 2020, MA2020-01, 1293-1293.	0.0	1

#	ARTICLE	IF	CITATIONS
19	Fault Isolation of Resistive/Open 3-D Wafer Bonding Interconnects by Thermal Laser Stimulation and Light-Induced Capacitance Alteration. , 2020, , .		0
20	Effects of isothermal storage on grain structure of Cu/Sn/Cu microbump interconnects for 3D stacking. Microelectronics Reliability, 2019, 102, 113296.	0.9	12
21	Impact of Mechanical Stress on the Electrical Performance of 3D NAND. , 2019, , .		5
22	Thermal Analysis of Polymer 3D Printed Jet Impingement Coolers for High Performance 2.5D Si Interposer Packages. , 2019, , .		5
23	Study of the effect of Sn grain boundaries on IMC morphology in solid state inter-diffusion soldering. Scientific Reports, 2019, 9, 14862.	1.6	11
24	Study of out-of-plane mechanical stress impact on Si BJT and diffusion resistor using in-situ nanoindentation probing. Microelectronics Reliability, 2019, 100-101, 113367.	0.9	1
25	First Demonstration of a Low Cost/Customizable Chip Level 3D Printed Microjet Hotspot-Targeted Cooler for High Power Applications. , 2019, , .		5
26	Low-Frequency Noise Measurements to Characterize Cu-Electromigration Down to 44nm Metal Pitch. , 2019, , .		2
27	New Access to Soft Breakdown Parameters of Low-k Dielectrics Through Localisation-Based Analysis. , 2019, , .		0
28	Study of the Mechanical Stress Impact on Silicide Contact Resistance by 4-Point Bending. , 2019, , .		0
29	Low-frequency noise and defects in copper and ruthenium resistors. Applied Physics Letters, 2019, 114, .	1.5	13
30	A novel electromigration characterization method based on low-frequency noise measurements. Semiconductor Science and Technology, 2019, 34, 075002.	1.0	8
31	Experimental Characterization of a Chip-Level 3-D Printed Microjet Liquid Impingement Cooler for High-Performance Systems. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1815-1824.	1.4	13
32	Experimental characterization and model validation of liquid jet impingement cooling using a high spatial resolution and programmable thermal test chip. Applied Thermal Engineering, 2019, 152, 308-318.	3.0	31
33	Low-Frequency Noise Measurements for Electromigration Characterization in BEOL Interconnects. , 2019, , .		0
34	Characterization of Impact of Vertical Stress on FinFETs. , 2019, , .		3
35	Electromigration Activation Energies in Alternative Metal Interconnects. IEEE Transactions on Electron Devices, 2019, 66, 5278-5283.	1.6	22
36	High-Efficiency Polymer-Based Direct Multi-Jet Impingement Cooling Solution for High-Power Devices. IEEE Transactions on Power Electronics, 2019, 34, 6601-6612.	5.4	40

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37	Non-invasive soft breakdown localisation in low k dielectrics using photon emission microscopy and thermal laser stimulation. Microelectronics Reliability, 2019, 92, 73-78.	0.9	4
38	Defect localization of metal interconnection lines in 3-dimensional through-silicon-via structures by differential scanning photocapacitance microscopy. Applied Physics Letters, 2018, 112, 071904.	1.5	4
39	Expected Failures in 3-D Technology and Related Failure Analysis Challenges. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 711-718.	1.4	18
40	Physics of self-aligned assembly at room temperature. Physics of Fluids, 2018, 30, .	1.6	2
41	Anisotropic stress in narrow sGe fin field-effect transistor channels measured using nano-focused Raman spectroscopy. APL Materials, 2018, 6, .	2.2	9
42	Fast and Distributed Thermal Model for Thermal Modeling of GaN Power Devices. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 1747-1755.	1.4	21
43	Method to assess the impact of LER and spacing variation on BEOL dielectric reliability using 2D-field simulations for <20nm spacing. , 2018, , .		0
44	In-situ Investigation of the Impact of Externally Applied Vertical Stress on III-V Bipolar Transistor. , 2018, , .		7
45	An in-situ resistance measurement to extract IMC resistivity and kinetic parameter of alternative metallurgies for 3D stacking. , 2018, , .		2
46	Stress Induced Densification of Thin Porous Low-K Films During Nanoindentation. , 2018, , .		0
47	(Invited) Raman Stress Measurements at the Nanoscale. ECS Transactions, 2018, 86, 311-320.	0.3	2
48	(Invited) Determining Si Composition in SiGe Alloys with < 1% Si Concentrations Using Raman Spectroscopy. ECS Transactions, 2018, 86, 397-407.	0.3	1
49	Detection of failure mechanisms in 24-40nm FinFETs with (spectral) photon emission techniques using InGaAs camera. Microelectronics Reliability, 2018, 88-90, 334-338.	0.9	0
50	Photon emission as a characterization tool for bipolar parasitics in FinFET technology. Microelectronics Reliability, 2018, 88-90, 273-276.	0.9	3
51	Contactless Fault Isolation of Ultra Low k Dielectrics in Soft Breakdown Condition. , 2018, , .		1
52	Stress mitigation of 3D-stacking/package induced stresses. , 2018, , .		1
53	Edge Trimming Induced Defects on Direct Bonded Wafers. Journal of Electronic Packaging, Transactions of the ASME, 2018, 140, .	1.2	6
54	Novel Failure Analysis Techniques for 1.8 $\mu\text{m}$ Pitch Wafer-to-Wafer Bonding. , 2018, , .		1

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55	3D Printed Liquid Jet Impingement Cooler: Demonstration, Opportunities and Challenges. , 2018, , .		10
56	The first observation of p-type electromigration failure in full ruthenium interconnects. , 2018, , .		9
57	Novel technology for microlenses for imaging applications. Applied Optics, 2018, 57, 9296.	0.9	4
58	(Invited) Raman Stress Measurements at the Nanoscale. ECS Meeting Abstracts, 2018, , .	0.0	0
59	(Invited) Determining Si Composition in SiGe Alloys with < 1% Si concentrations using Raman Spectroscopy. ECS Meeting Abstracts, 2018, , .	0.0	0
60	Detection of Local Cu-to-Cu Bonding Defects in Wafer-to-Wafer Hybrid Bonding Using GHz-SAM. , 2018, , .		0
61	Advanced Raman Spectroscopy Using Nanofocusing of Light. Advanced Engineering Materials, 2017, 19, 1600612.	1.6	10
62	Convolution-Based Fast Thermal Model for 3-D-ICs: Transient Experimental Validation. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2017, , 1-16.	1.4	1
63	Substrate Independent Elastic Modulus of Thin Low Dielectric Constant Materials. Advanced Engineering Materials, 2017, 19, 1600653.	1.6	12
64	Correlation between temperature dependence of Raman shifts and in-plane strains in an AlGaN/GaN stack. Journal of Applied Physics, 2017, 121, .	1.1	8
65	Direct correlation between low-frequency noise measurements and electromigration lifetimes. , 2017, , .		4
66	Study of the enhanced electromigration performance of Cu(Mn) by low-frequency noise measurements and atom probe tomography. Applied Physics Letters, 2017, 111, .	1.5	8
67	Study of GHz-SAM sensitivity to delamination in BEOL layers. Microelectronics Reliability, 2017, 76-77, 238-242.	0.9	1
68	LER and spacing variability on BEOL TDDDB using E-field mapping: Impact of field acceleration. Microelectronics Reliability, 2017, 76-77, 131-135.	0.9	3
69	Impact of via density and passivation thickness on the mechanical integrity of advanced Back-End-Of-Line interconnects. Microelectronics Reliability, 2017, 79, 297-305.	0.9	1
70	Study of electromigration mechanisms in 22nm half-pitch Cu interconnects by 1/f noise measurements. , 2017, , .		3
71	Lock-in thermal laser stimulation for non-destructive failure localization in 3-D devices. Microelectronics Reliability, 2017, 76-77, 188-193.	0.9	3
72	Distributed electro-thermal model based on fast and scalable algorithm for GaN power devices and circuit simulations. , 2017, , .		3

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73	Statistical Distribution of Through-Silicon via Cu Pumping. IEEE Transactions on Device and Materials Reliability, 2017, 17, 549-559.	1.5	13
74	Demonstration of low-frequency noise measurements for studying electromigration mechanisms in advanced nano-scaled interconnects. , 2017, , .		2
75	A novel in-situ resistance measurement to extract IMC resistivity and kinetic parameter for CoSn 3D stacks. , 2017, , .		2
76	High efficiency direct liquid jet impingement cooling of high power devices using a 3D-shaped polymer cooler. , 2017, , .		12
77	Use of 3D X-Ray Microscopy for BEOL and Advanced Packaging Failure Analysis. , 2017, , .		0
78	A photoelastic microscopy study of the temperature dependency of stress induced by through silicon vias in silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1700028.	0.8	0
79	Impact of ELD layers in mechanical properties of microbumps for 3D stacking. , 2016, , .		1
80	Liquid mediated direct bonding and bond propagation. , 2016, , .		1
81	A spectroscopic study of the chromatic properties of GaFChromicâ„¢EBT3 films. Medical Physics, 2016, 43, 1156-1166.	1.6	29
82	Extraction of elastic modulus of porous ultra-thin low-k films by two-dimensional finite-element simulations of nanoindentation. Journal of Applied Physics, 2016, 119, .	1.1	14
83	1/f Noise measurements for faster electromigration characterization. , 2016, , .		7
84	Nanofocusing of light into semiconducting fin photonic crystals. Applied Physics Letters, 2016, 108, .	1.5	9
85	1/f noise measurements for faster evaluation of electromigration in advanced microelectronics interconnections. Journal of Applied Physics, 2016, 119, .	1.1	29
86	Nondestructive Monitoring of Die Warpage in Encapsulated Chip Packages. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 653-662.	1.4	6
87	Fine Pitch Rapid Heat Self-Aligned Assembly and Liquid-Mediated Direct Bonding of Si Chips. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 946-953.	1.4	4
88	Copper Through Silicon Vias Studied by Photo-elastic Scanning Infrared Microscopy. Microelectronics Reliability, 2016, 64, 330-335.	0.9	1
89	Investigating stress measurement capabilities of GHz Scanning Acoustic Microscopy for 3D failure analysis. Microelectronics Reliability, 2016, 64, 336-340.	0.9	11
90	Surface Treatment to Enable Low Temperature and Pressure Copper Direct Bonding. , 2016, , .		3

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91	Investigation of Advanced Dicing Technologies for Ultra Low-k and 3D Integration. , 2016, , .		9
92	New fast distributed thermal model for analysis of GaN based power devices. , 2016, , .		7
93	New breakdown mechanism investigation: Barrier metal penetration induced soft breakdown in low-k dielectrics. , 2016, , .		5
94	Impact of Via Density on the Mechanical Integrity of Advanced Back-End-of-Line During Packaging. , 2016, , .		9
95	Assessment of dielectric charging in capacitive MEMS switches fabricated on Si substrate with thin oxide film. Microelectronic Engineering, 2016, 159, 209-214.	1.1	5
96	Experimental Benchmarking of Electrical Methods and $\mu$ -Raman Spectroscopy for Channel Temperature Detection in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2016, 63, 2321-2327.	1.6	16
97	Reliability Challenges Related to TSV Integration and 3-D Stacking. IEEE Design and Test, 2016, 33, 37-45.	1.1	29
98	Evaluation of via density and low-k Young's modulus influence on mechanical performance of advanced node multi-level Back-End-Of-Line. Microelectronics Reliability, 2016, 56, 93-100.	0.9	8
99	Fast Transient Convolution-Based Thermal Modeling Methodology for Including the Package Thermal Impact in 3D ICs. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 424-431.	1.4	10
100	B-Spline X-Ray Diffraction Imaging " Rapid non-destructive measurement of die warpage in ball grid array packages. Microelectronics Reliability, 2016, 59, 108-116.	0.9	6
101	50Gb/s C-band GeSi Waveguide Electro-Absorption Modulator. , 2016, , .		14
102	Relation between Raman frequency and triaxial stress in Si for surface and cross-sectional experiments in microelectronics components. Journal of Applied Physics, 2015, 118, .	1.1	40
103	Correlation between stress-induced leakage current and dielectric degradation in ultra-porous SiOCH low-k materials. Journal of Applied Physics, 2015, 118, .	1.1	12
104	Through silicon via to FinFET noise coupling in 3-D integrated circuits. , 2015, , .		2
105	Materials characterization and device analysis for evaluation of semiconductor processes by highly-sophisticated photoelastic stress measurement technique. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 1085-1089.	0.8	4
106	Effect of test structure on electromigration characteristics in three-dimensional through silicon via stacked devices. Japanese Journal of Applied Physics, 2015, 54, 05EE01.	0.8	16
107	Edge-enhanced Raman scattering in narrow sGe fin field-effect transistor channels. Applied Physics Letters, 2015, 106, .	1.5	12
108	3D-convolution based fast transient thermal model for 3D integrated circuits: methodology and applications. , 2015, , .		6

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109	Microstructure simulation of grain growth in Cu through silicon vias using phase-field modeling. Microelectronics Reliability, 2015, 55, 765-770.	0.9	13
110	Towards understanding intrinsic degradation and breakdown mechanisms in SiOCH low-k dielectrics. Journal of Applied Physics, 2015, 117, .	1.1	6
111	Effect of 4-point bending test procedure on crack propagation in thin film stacks. Microelectronic Engineering, 2015, 137, 59-63.	1.1	4
112	Advanced experimental back-end-of-line (BEOL) stability test: Measurements and simulations. Microelectronic Engineering, 2015, 137, 54-58.	1.1	7
113	Formation, processing and characterization of Co-Sn intermetallic compounds for potential integration in 3D interconnects. Microelectronic Engineering, 2015, 140, 72-80.	1.1	39
114	Three-dimensional micro-Raman spectroscopy mapping of stress induced in Si by Cu-filled through-Si vias. Applied Physics Letters, 2015, 106, 191901.	1.5	14
115	Influence of Field-Plate Configuration on Power Dissipation and Temperature Profiles in AlGaN/GaN on Silicon HEMTs. IEEE Transactions on Electron Devices, 2015, 62, 2416-2422.	1.6	26
116	Noise coupling between TSVs and active devices: Planar nMOSFETs vs. nFinFETs. , 2015, , .		6
117	Effects of packaging on mechanical stress in 3D-ICs. , 2015, , .		9
118	Constant voltage electromigration for advanced BEOL copper interconnects. , 2015, , .		1
119	Impact of oxide liner properties on TSV Cu pumping and TSV stress. , 2015, , .		13
120	A modeling and experimental method for accurate thermal analysis of AlGaN/GaN powerbars. , 2015, , .		4
121	SU-8: A Micro-Raman Spectroscopy Study of the Dose-Dependence of EBT3 GafChromic™ Films for Quantifying the Degree of Molecular Polymerization. Medical Physics, 2015, 42, 3340-3341.	1.6	0
122	3D stacking induced mechanical stress effects. , 2014, , .		26
123	In-situ scanning electron microscopy study of fracture events during back-end-of-line microbeam bending tests. Applied Physics Letters, 2014, 105, .	1.5	17
124	Gas leak rate study of MEMS thin film packages in different environments. , 2014, , .		1
125	Raman spectroscopy study of stress in 3D-stacked chips and correlation with FEM and electrical measurements. , 2014, , .		6
126	Room temperature and zero pressure high quality oxide direct bonding for 3D self-aligned assembly. , 2014, , .		2



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127	Hydrogen outgassing induced liner/barrier reliability degradation in through silicon via's. Applied Physics Letters, 2014, 104, 142906.	1.5	9
128	Correlation between Cu microstructure and TSV Cu pumping. , 2014, , .		39
129	Impact of Cu TSVs on BEOL metal and dielectric reliability. , 2014, , .		9
130	In-situ scanning electron microscope observation of electromigration-induced void growth in 30Å pitch Cu interconnect structures. Journal of Applied Physics, 2014, 115, 074305.	1.1	9
131	Towards the understanding of intrinsic degradation and breakdown mechanisms of a SiOCH low-k dielectric. , 2014, , .		6
132	Development of B-spline X-ray Diffraction Imaging techniques for die warpage and stress monitoring inside fully encapsulated packaged chips. , 2014, , .		5
133	Degradation of Cu <sub>6</sub> Sn <sub>5</sub> intermetallic compound by pore formation in solid-liquid interdiffusion Cu/Sn microbump interconnects. Microelectronic Engineering, 2014, 117, 26-34.	1.1	56
134	Chip-Package Interaction in 3D stacked IC packages using Finite Element Modelling. Microelectronics Reliability, 2014, 54, 1200-1205.	0.9	16
135	A Systematical Method to Determine the Internal Pressure and Hermeticity of MEMS Packages. Journal of Microelectromechanical Systems, 2014, 23, 862-870.	1.7	2
136	Defect detection in Through Silicon Vias by GHz Scanning Acoustic Microscopy: Key ultrasonic characteristics. , 2014, , .		7
137	Design aspects for CPI robust BEOL. , 2014, , .		3
138	Convolution based compact thermal model application to the evaluation of the thermal impact of die to die interface including interconnections. , 2014, , .		3
139	Reliability challenges for barrier/liner system in high aspect ratio through silicon vias. Microelectronics Reliability, 2014, 54, 1949-1952.	0.9	9
140	Sn whisker evaluations in 3D microbumped structures. Microelectronics Reliability, 2014, 54, 1982-1987.	0.9	6
141	As-grown donor-like traps in low-k dielectrics and their impact on intrinsic TDDB reliability. Microelectronics Reliability, 2014, 54, 1675-1679.	0.9	9
142	The underfill-microbump interaction mechanism in 3D ICs: Impact and mitigation of induced stresses. , 2014, , .		6
143	Mechanical stability of Cu/low-k BEOL interconnects. , 2014, , .		8
144	Microstructure simulation of grain growth in Cu Through Silicon Via using phase-field modeling. , 2014, , .		0

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145	Fast convolution based thermal model for 3D-ICs: Methodology, accuracy analysis and package impact. Microelectronics Journal, 2014, 45, 1746-1752.	1.1	13
146	Correlation between field dependent electrical conduction and dielectric breakdown in a SiCOH based low-k ( $k \approx 2.0$ ) dielectric. Applied Physics Letters, 2013, 103, .	1.5	11
147	Copper through silicon via induced keep out zone for 10nm node bulk FinFET CMOS technology. , 2013, , .		19
148	A novel method to measure the internal pressure of MEMS thin-film packages. Microelectronics Reliability, 2013, 53, 1663-1666.	0.9	1
149	High frequency scanning acoustic microscopy applied to 3D integrated process: Void detection in Through Silicon Vias. , 2013, , .		14
150	Convolution based compact thermal model for 3D-ICs: Methodology and accuracy analysis. , 2013, , .		6
151	Impact of post-plating anneal and through-silicon via dimensions on Cu pumping. , 2013, , .		46
152	Metrology and inspection challenges for manufacturing 3D stacked IC's. , 2013, , .		4
153	IC-Package Interaction. , 2013, , .		0
154	Reliability of RF MEMS. , 2013, , 291-342.		2
155	Residual Stress in Silicon Caused by Cu-Sn Wafer-Level Packaging. , 2013, , .		3
156	Simulation of Cu pumping during TSV fabrication. , 2013, , .		8
157	Impact of barrier integrity on liner reliability in 3D through silicon vias. , 2013, , .		5
158	Printed circuit board technology inspired stretchable circuits. MRS Bulletin, 2012, 37, 254-260.	1.7	130
159	In-depth Raman spectroscopy analysis of various parameters affecting the mechanical stress near the surface and bulk of Cu-TSVs. , 2012, , .		30
160	Reliability test methodology for MEMS and MOEMS under electrical overstress and electrostatic discharge stress. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2012, 11, 021204-1.	1.0	0
161	SCB and SMI: two stretchable circuit technologies, based on standard printed circuit board processes. Circuit World, 2012, 38, 232-242.	0.7	22
162	Analysis of microbump induced stress effects in 3D stacked IC technologies. , 2012, , .		16

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163	Impact of through silicon vias on front-end-of-line performance after thermal cycling and thermal storage. , 2012, , .		17
164	FET arrays as CPI sensors for 3D stacking and packaging characterization. , 2012, , .		15
165	Reliability concerns in copper TSV's: Methods and results. , 2012, , .		8
166	3D chip package interaction thermo-mechanical challenges: Proximity effects of Through Silicon vias and &#x03BC;-bumps. , 2012, , .		8
167	Comparison of x-ray diffraction, wafer curvature and Raman spectroscopy to evaluate the stress evolution in Copper TSV's. , 2012, , .		6
168	A study of blister formation in ALD Al<math>\text{inf}&gt;2</math><math>\text{inf}&gt;O</math><math>\text{inf}&gt;3</math><math>\text{inf}&gt;</math> grown on silicon. , 2012, , .		11
169	Comparison of three methods to measure the internal pressure of empty MEMS packages. , 2012, , .		3
170	Impact of through silicon via induced mechanical stress on fully depleted Bulk FinFET technology. , 2012, , .		28
171	Design and fabrication of SiGe MEMS structures with high intrinsic ESD robustness. , 2012, , .		1
172	Investigation of temporary stiction in poly-SiGe micromirror arrays. Sensors and Actuators A: Physical, 2012, 188, 320-328.	2.0	3
173	Study of glass frit induced stiction using a micromirror array. Microelectronics Reliability, 2012, 52, 2256-2260.	0.9	1
174	Effect of the functionalization process on the performance of SiGe MEM resonators used for bio-molecular sensing. Microelectronics Reliability, 2012, 52, 2272-2277.	0.9	4
175	Diffusion growth of Cu <sub>3</sub> Sn phase in the bump and thin film Cu/Sn structures. Microelectronics Reliability, 2012, 52, 1971-1974.	0.9	13
176	MEMS packaging and reliability: An undividable couple. Microelectronics Reliability, 2012, 52, 2228-2234.	0.9	28
177	Chip package interaction (CPI): Thermo mechanical challenges in 3D technologies. , 2012, , .		18
178	Device and method for the measurement of anchor shear strength in MEMS devices. , 2012, , .		3
179	Poly-SiGe-Based MEMS Thin-Film Encapsulation. Journal of Microelectromechanical Systems, 2012, 21, 110-120.	1.7	16
180	Developing an Advanced Module for Back-Contact Solar Cells. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2011, 1, 1319-1327.	1.4	17

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181	Above-IC generic poly-SiGe thin film wafer level packaging and MEM device technology: Application to accelerometers. , 2011, , .		15
182	Si Trench Around Drain (STAD) technology of GaN-DHFETs on Si substrate for boosting power performance. , 2011, , .		12
183	Design Issues and Considerations for Low-Cost 3-D TSV IC Technology. IEEE Journal of Solid-State Circuits, 2011, 46, 293-307.	3.5	236
184	Raman Spectroscopy Analysis Of Mechanical Stress Near Cu-TSVs. AIP Conference Proceedings, 2011, , .	0.3	16
185	Cu pumping in TSVs: Effect of pre-CMP thermal budget. Microelectronics Reliability, 2011, 51, 1856-1859.	0.9	122
186	Outgassing study of thin films used for poly-SiGe based vacuum packaging of MEMS. Microelectronics Reliability, 2011, 51, 1878-1881.	0.9	9
187	Thermal optimization of GaN-on-Si HEMTs with plastic package. Microelectronics Reliability, 2011, 51, 1788-1791.	0.9	8
188	Electrical characterization and reliability study of integrated GaN power amplifier in multi-layer thin-film technology. Microelectronics Reliability, 2011, 51, 1721-1724.	0.9	2
189	Influence of test structure design on stress-induced-voiding using an experimentally validated Finite Element Modeling approach. Microelectronics Reliability, 2011, 51, 1578-1581.	0.9	0
190	Polyimide-Enhanced Stretchable Interconnects: Design, Fabrication, and Characterization. IEEE Transactions on Electron Devices, 2011, 58, 2680-2688.	1.6	91
191	The effects of encapsulation on deformation behavior and failure mechanisms of stretchable interconnects. Thin Solid Films, 2011, 519, 2225-2234.	0.8	71
192	An investigation of stiction in poly-SiGe micromirror. , 2011, , .		1
193	Metrology and inspection for process control during bonding and thinning of stacked wafers for manufacturing 3D SIC's. , 2011, , .		10
194	Investigation of temporary stiction in poly-SiGe micromirror arrays. , 2011, , .		3
195	The Impact of Back-Side Cu Contamination on 3D Stacking Architecture. Electrochemical and Solid-State Letters, 2010, 13, H39.	2.2	5
196	Processing assessment and adhesion evaluation of copper through-silicon vias (TSVs) for three-dimensional stacked-integrated circuit (3D-SIC) architectures. Microelectronics Reliability, 2010, 50, 1636-1640.	0.9	18
197	Impact of design factors and environment on the ESD sensitivity of MEMS micromirrors. Microelectronics Reliability, 2010, 50, 1383-1387.	0.9	4
198	Performance of a new type of module based on back-contact solar cells. Proceedings of SPIE, 2010, , .	0.8	2

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199	Investigating ESD sensitivity in electrostatic SiGe MEMS. Journal of Micromechanics and Microengineering, 2010, 20, 055005.	1.5	8
200	Design and analysis of a novel fine pitch and highly stretchable interconnect. Microelectronics International, 2010, 27, 33-38.	0.4	7
201	The effect of pitch on deformation behavior and the stretching-induced failure of a polymer-encapsulated stretchable circuit. Journal of Micromechanics and Microengineering, 2010, 20, 075036.	1.5	54
202	Mechanical characterization of poly-SiGe layers for CMOS-MEMS integrated application. Journal of Micromechanics and Microengineering, 2010, 20, 015014.	1.5	16
203	11-Megapixel CMOS-Integrated SiGe Micromirror Arrays for High-End Applications. Journal of Microelectromechanical Systems, 2010, 19, 202-214.	1.7	27
204	Impact of thinning and through silicon via proximity on High-k / Metal Gate first CMOS performance. , 2010, , .		13
205	Reliability assessment of stretchable interconnects. , 2010, , .		11
206	Comprehensive analysis of the impact of single and arrays of through silicon vias induced stress on high-k / metal gate CMOS performance. , 2010, , .		97
207	Compact thermal modeling of hot spots in advanced 3D-stacked ICs. , 2009, , .		23
208	In situ observations on deformation behavior and stretching-induced failure of fine pitch stretchable interconnect. Journal of Materials Research, 2009, 24, 3573-3582.	1.2	48
209	Functionality, Yield and Reliability Analysis of SiGe Micro-mirrors using Automated Optical Measurement Techniques. ECS Transactions, 2009, 18, 199-204.	0.3	2
210	Nano-scale resonant sensors for gas and bio detection: Expectations and challenges. , 2009, , .		0
211	New methods and instrumentation for functional, yield and reliability testing of MEMS on device, chip and wafer level. Proceedings of SPIE, 2009, , .	0.8	1
212	Methods to Measure Mechanical Properties of NEMS and MEMS: Challenges and Pitfalls. Materials Research Society Symposia Proceedings, 2009, 1185, 32.	0.1	2
213	A Novel Interconnect Design with High Stretchability and Fine Pitch Capability for Applications in Stretchable Electronics. Materials Research Society Symposia Proceedings, 2009, 1192, 27.	0.1	2
214	A Novel Mechanism of Embrittlement Affecting the Impact Reliability of Tin-Based Lead-Free Solder Joints. Journal of Electronic Materials, 2009, 38, 1881-1895.	1.0	23
215	A new characterization method for electrostatically actuated resonant MEMS: Determination of the mechanical resonance frequency, quality factor and dielectric charging. Sensors and Actuators A: Physical, 2009, 154, 304-315.	2.0	18
216	Effect of substrate charging on the reliability of capacitive RF MEMS switches. Sensors and Actuators A: Physical, 2009, 154, 261-268.	2.0	32

#	ARTICLE	IF	CITATIONS
217	Polysilicon MEMS accelerometers exposed to shocks: numericalâ€œexperimental investigation. Journal of Micromechanics and Microengineering, 2009, 19, 035023.	1.5	39
218	AlCuMgMn micro-tensile samples. Sensors and Actuators A: Physical, 2008, 143, 120-128.	2.0	11
219	Detection of failure sites by focused ion beam and nano-probing in the interconnect of three-dimensional stacked circuit structures. Microelectronics Reliability, 2008, 48, 1517-1520.	0.9	13
220	Charging and discharging phenomena in electrostatically-driven single-crystal-silicon MEM resonators: DC bias dependence and influence on the series resonance frequency. Microelectronics Reliability, 2008, 48, 1221-1226.	0.9	13
221	Multi-physics simulation and reliability analysis for RF-MEMS devices. , 2008, , .		1
222	Extraction of the Appropriate Material Property for Realistic Modeling of Through-Silicon-Vias using 1/4-Raman Spectroscopy. , 2008, , .		50
223	Probabilistic design approach for integrated passive devices in RF applications. , 2008, , .		0
224	A new method to determine the mechanical resonance frequency, quality factor and charging in electrostatically actuated MEMS. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	8
225	Influence of the substrate on the lifetime of capacitive RF MEMS switches. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	19
226	Statistical Analysis of the Influence of Thinning Processes on the Strength of Silicon. Materials Research Society Symposia Proceedings, 2008, 1112, 1.	0.1	4
227	Process induced sub-surface damage in mechanically ground silicon wafers. Semiconductor Science and Technology, 2008, 23, 075038.	1.0	32
228	New insights into charging in capacitive RF MEMS switches. , 2008, , .		19
229	Highly reliable CMOS-integrated 11MPixel SiGe-based micro-mirror arrays for high-end industrial applications. , 2008, , .		25
230	Reliability study of tunable ferroelectric capacitors. Journal of Applied Physics, 2008, 104, 064104.	1.1	3
231	Long-term reliability measurements on MEMS using a laser-Doppler vibrometer. , 2008, , .		7
232	High throughput measurement techniques for wafer level yield inspection of MEMS devices. Proceedings of SPIE, 2008, , .	0.8	8
233	Electrostatic fringing-field actuator (EFFA): Application towards a low-complexity RF-MEMS technology. , 2007, , .		4
234	Hermeticity Testing and Failure Analysis of MEMS Packages. , 2007, , .		11

#	ARTICLE	IF	CITATIONS
235	Highly reliable and extremely stable SiGe micro-mirrors. , 2007, , .		6
236	Micro-tensile tests to characterize MEMS. , 2007, , .		2
237	An electrostatic fringing-field actuator (EFFA): application towards a low-complexity thin-film RF-MEMS technology. Journal of Micromechanics and Microengineering, 2007, 17, S204-S210.	1.5	31
238	Novel Effa-Based Thin-Film RF-MEMS Technology. , 2007, , .		1
239	Impact Induced Metal-Crush Failures. , 2007, , .		3
240	Stress-Induced Mobility Enhancement for Integrated Power Transistors. , 2007, , .		21
241	Analytical Model of the DC Actuation of Electrostatic MEMS Devices With Distributed Dielectric Charging and Nonplanar Electrodes. Journal of Microelectromechanical Systems, 2007, 16, 1243-1253.	1.7	123
242	Laser Bonding of Glass to Silicon Using Polymer for Microsystems Packaging. Journal of Microelectromechanical Systems, 2007, 16, 571-580.	1.7	32
243	Numerical analysis of the process-induced stresses in silicon microstructures: application to micromachined cantilever. Smart Materials and Structures, 2006, 15, S47-S56.	1.8	1
244	RF-MEMS technology platform for agile mobile and satellite communications. , 2006, , .		2
245	Laser joining of glass to silicon using adhesive for MEMS packaging applications. , 2006, , .		0
246	RF-MEMS technology platform for agile mobile and satellite communications. , 2006, , .		6
247	A physical model to predict stiction in MEMS. Journal of Micromechanics and Microengineering, 2006, 16, 189-189.	1.5	41
248	Characterization of (near) hermetic zero-level packages for MEMS. , 2005, , .		3
249	Theoretical and experimental Raman spectroscopy study of mechanical stress induced by electronic packaging. IEEE Transactions on Components and Packaging Technologies, 2005, 28, 484-492.	1.4	30
250	Creep-resistant aluminum alloys for use in MEMS. Journal of Micromechanics and Microengineering, 2005, 15, S165-S170.	1.5	36
251	Mechanical and electrical characterization of BCB as a bond and seal material for cavities housing (RF-)MEMS devices. Journal of Micromechanics and Microengineering, 2005, 15, S89-S96.	1.5	75
252	(Selective) Epitaxial Growth of Strained Si to Fabricate Low Cost and High Performance CMOS Devices. Materials Research Society Symposia Proceedings, 2004, 809, B1.2.1.	0.1	5

#	ARTICLE	IF	CITATIONS
253	Characterization and failure analysis of MEMS: high resolution optical investigation of small out-of-plane movements and fast vibrations. <i>Microsystem Technologies</i> , 2004, 10, 89-96.	1.2	23
254	Materials issues in the processing, the operation and the reliability of MEMS. <i>Microelectronic Engineering</i> , 2004, 76, 245-257.	1.1	60
255	Creep as a reliability problem in MEMS. <i>Microelectronics Reliability</i> , 2004, 44, 1733-1738.	0.9	44
256	Creep characterization of Al alloy thin films for use in MEMS applications. <i>Microelectronic Engineering</i> , 2004, 76, 272-278.	1.1	46
257	Reliability and Failure Analysis of Sn-Ag-Cu Solder Interconnections for PSGA Packages on Ni/Au Surface Finish. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004, 4, 5-10.	1.5	49
258	A comprehensive model to predict the charging and reliability of capacitive RF MEMS switches. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, 514-521.	1.5	227
259	Mechanical Issues of Cu-to-Cu Wire Bonding. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2004, 27, 539-545.	1.4	40
260	From photon emission microscopy to Raman spectroscopy: Failure analysis in microelectronics. <i>EPJ Applied Physics</i> , 2004, 27, 59-65.	0.3	2
261	Numerical analysis of the process-induced stresses in silicon microstructures. , 2004, , .		0
262	The Role of Preamorphization and Activation for Ultra Shallow Junction Formation on Strained Si Layers Grown on SiGe Buffer. <i>Materials Research Society Symposia Proceedings</i> , 2004, 809, B9.6.1/C9.6.1.	0.1	0
263	Comparison of the effect of gate dielectric layer on 2DEG carrier concentration in strained AlGaIn/GaN heterostructure. <i>Materials Research Society Symposia Proceedings</i> , 2004, 831, 625.	0.1	0
264	The reliability of RF-MEMS: failure modes, test procedures, and instrumentation. , 2004, 5343, 1.		8
265	Study of damage and stress induced by backgrinding in Si wafers. <i>Semiconductor Science and Technology</i> , 2003, 18, 261-268.	1.0	92
266	Techniques for mechanical strain analysis in sub-micrometer structures: TEM/CBED, micro-Raman spectroscopy, X-ray micro-diffraction and modeling. <i>Microelectronic Engineering</i> , 2003, 70, 425-435.	1.1	44
267	The prediction of stiction failures in MEMS. <i>IEEE Transactions on Device and Materials Reliability</i> , 2003, 3, 167-172.	1.5	39
268	On the physics of stiction and its impact on the reliability of microstructures. <i>Journal of Adhesion Science and Technology</i> , 2003, 17, 563-582.	1.4	95
269	Strain determination in silicon microstructures by combined convergent beam electron diffraction, process simulation, and micro-Raman spectroscopy. <i>Journal of Applied Physics</i> , 2003, 94, 5574-5583.	1.1	101
270	A low frequency electrical test set-up for the reliability assessment of capacitive RF MEMS switches. <i>Journal of Micromechanics and Microengineering</i> , 2003, 13, 604-612.	1.5	43



#	ARTICLE	IF	CITATIONS
271	Origin of substrate hole current after gate oxide breakdown. Journal of Applied Physics, 2002, 91, 2155-2160.	1.1	7
272	A physical model to predict stiction in MEMS. Journal of Micromechanics and Microengineering, 2002, 12, 702-713.	1.5	184
273	Techniques to study the reliability of metal RF MEMS capacitive switches. Microelectronics Reliability, 2002, 42, 1789-1794.	0.9	55
274	<title>High-speed 3D optical imaging and failure analysis of high- and low-frequency movements in micro-electro-mechanical (MEMS) with nanometer resolution</title>. , 2001, , .		2
275	Investigation of stress in shallow trench isolation using UV micro-Raman spectroscopy. Microelectronics Reliability, 2001, 41, 511-515.	0.9	11
276	Spectroscopic photon emission microscopy: a unique tool for failure analysis of microelectronics devices. Microelectronics Reliability, 2001, 41, 1161-1169.	0.9	7
277	The investigation of microsystems using Raman spectroscopy. Optics and Lasers in Engineering, 2001, 36, 213-223.	2.0	60
278	Photo-carrier generation as the origin of Fowler-Nordheim-induced substrate hole current in thin oxides. IEEE Transactions on Electron Devices, 2001, 48, 231-238.	1.6	26
279	Investigation by Convergent Beam Electron Diffraction of the Stress around Shallow Trench Isolation Structures. Journal of the Electrochemical Society, 2001, 148, G597.	1.3	15
280	Spectroscopic identification of light emitted from defects in silicon devices. Journal of Applied Physics, 2001, 89, 249-258.	1.1	9
281	<title>Micro nano technology visualization (MNTV) of micromachined MEMS polysilicon structures</title>. , 2000, , .		5
282	Raman Spectroscopy: A Unique Tool for the Study of Thin Films. Materials Research Society Symposia Proceedings, 2000, 615, 811.	0.1	2
283	Auto-adhesion model for MEMS surfaces taking into account the effect of surface roughness. , 2000, 4175, 104.		6
284	Experimental one- and two-dimensional mechanical stress characterization of silicon microsystems using micro-Raman spectroscopy. , 2000, , .		7
285	Finding the Stress from the Raman Shifts: A Case Study. Springer Series in Materials Science, 2000, , 104-106.	0.4	1
286	Characterization of the local mechanical stress induced during the Ti and Co/Ti salicidation in sub-0.25 $\mu$ m technologies. Journal of Applied Physics, 1999, 86, 4290-4297.	1.1	32
287	Addendum: "Stress measurements in silicon devices through Raman spectroscopy: Bridging the gap between theory and experiment" [J. Appl. Phys. 79, 7148 (1996)]. Journal of Applied Physics, 1999, 85, 7484-7485.	1.1	22
288	Analysis of local mechanical stresses in and near tungsten lines on silicon substrate. Journal of Applied Physics, 1999, 85, 6477-6485.	1.1	25

#	ARTICLE	IF	CITATIONS
289	Non-uniform triggering of gg-nMOS <sub>t</sub> investigated by combined emission microscopy and transmission line pulsing. <i>Microelectronics Reliability</i> , 1999, 39, 1551-1561.	0.9	6
290	Title is missing!. <i>Journal of Materials Science: Materials in Electronics</i> , 1999, 10, 351-358.	1.1	13
291	Influence of process-induced stress on device characteristics and its impact on scaled device performance. <i>IEEE Transactions on Electron Devices</i> , 1999, 46, 1245-1252.	1.6	70
292	Stress measurements in Si microelectronics devices using Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 1999, 30, 877-883.	1.2	168
293	New Technique for Forming Continuous, Smooth, and Uniform Ultrathin (3Å) PtSi Layers. <i>Electrochemical and Solid-State Letters</i> , 1999, 2, 195.	2.2	8
294	Stress measurements using ultraviolet micro-Raman spectroscopy. <i>Applied Physics Letters</i> , 1999, 75, 2450-2451.	1.5	42
295	<title>Fabrication and reliability testing of Ti/TiN heaters</title>. , 1999, , .		12
296	Influence of the as and BF <sub>2</sub> Junction Implantation on Stress Induced Defects During Ti- and Co/Ti-Silicidation. <i>Materials Research Society Symposia Proceedings</i> , 1999, 564, 15.	0.1	2
297	<title>High-resolution stress and temperature measurements in semiconductor devices using micro-Raman spectroscopy</title>. , 1999, 3897, 239.		14
298	Stress measurements in Si microelectronics devices using Raman spectroscopy. , 1999, 30, 877.		10
299	Low frequency noise analysis as a diagnostic tool to assess the quality of 0.25µm Ti-silicided poly lines. <i>Microelectronics Reliability</i> , 1998, 38, 925-929.	0.9	3
300	Mechanical stress measurements using micro-Raman spectroscopy. <i>Microsystem Technologies</i> , 1998, 5, 13-17.	1.2	26
301	Analysis of Iddq failures by spectral photon emission microscopy. <i>Microelectronics Reliability</i> , 1998, 38, 877-882.	0.9	5
302	Electrical field induced ageing of polymer light-emitting diodes in an oxygen-rich atmosphere studied by emission microscopy, scanning electron microscopy and secondary ion mass spectroscopy. <i>Synthetic Metals</i> , 1998, 96, 87-96.	2.1	10
303	Optimization of Polysilicon Encapsulated Local Oxidation of Silicon: Cavity Dimension Effects on Mechanical Stress and Gate Oxide Integrity. <i>Journal of the Electrochemical Society</i> , 1998, 145, 1653-1659.	1.3	4
304	Stress Measurements in sub-1µm Si Structures Using Raman Spectroscopy. <i>Solid State Phenomena</i> , 1998, 63-64, 519-524.	0.3	3
305	A reliability study of titanium silicide lines using micro-Raman spectroscopy and emission microscopy. , 1998, , .		2
306	Damage Evolution and Mechanical Failure in Flip-chip Interconnects. <i>Materials Research Society Symposia Proceedings</i> , 1998, 515, 105.	0.1	0

#	ARTICLE	IF	CITATIONS
307	Finite Element Simulations of the Mechanical Stress in and Around Narrow Tis <sub>2</sub> Lines. Materials Research Society Symposia Proceedings, 1998, 518, 227.	0.1	1
308	Polysilicon Encapsulated Local Oxidation of Silicon for Deep Submicron Lateral Isolation. Japanese Journal of Applied Physics, 1997, 36, 1325-1329.	0.8	6
309	Local identification and mapping of the C49 and C54 titanium phases in submicron structures by micro-Raman spectroscopy. Applied Physics Letters, 1997, 70, 2262-2264.	1.5	36
310	The effect of externally imposed mechanical stress on the hot-carrier-induced degradation of deep-sub micron nMOSFET's. IEEE Transactions on Electron Devices, 1997, 44, 943-950.	1.6	21
311	A reliability study of titanium silicide lines using micro-Raman spectroscopy and emission microscopy. Microelectronics Reliability, 1997, 37, 1591-1594.	0.9	7
312	Modification and application of an emission microscope for continuous wavelength spectroscopy. Microelectronics Reliability, 1997, 37, 1595-1598.	0.9	3
313	Stress measurements in silicon devices through Raman spectroscopy: Bridging the gap between theory and experiment. Journal of Applied Physics, 1996, 79, 7148-7156.	1.1	320
314	Micro-Raman spectroscopy to study local mechanical stress in silicon integrated circuits. Semiconductor Science and Technology, 1996, 11, 139-154.	1.0	877
315	Stresses and strains in lattice-mismatched stripes, quantum wires, quantum dots, and substrates in Si technology. Journal of Applied Physics, 1996, 79, 8145-8165.	1.1	116
316	Phase and Mechanical Stress in and Surrounding Tis <sub>2</sub> and Cosi <sub>2</sub> Lines Studied by Micro-Raman Spectroscopy. Materials Research Society Symposia Proceedings, 1996, 427, 47.	0.1	2
317	Observation of single interface traps in submicron MOSFET's by charge pumping. IEEE Transactions on Electron Devices, 1996, 43, 940-945.	1.6	46
318	Experimental validation of mechanical stress models by micro-Raman spectroscopy. Microelectronics Reliability, 1996, 36, 1751-1754.	0.9	28
319	Characterization of individual interface traps with charge pumping. Applied Physics Letters, 1996, 68, 1383-1385.	1.5	42
320	Residual Stresses in Tungsten Lines: Analysis of Experimental- (Micro-Raman Spectroscopy, Xrd) and Numerical Results. Materials Research Society Symposia Proceedings, 1995, 391, 109.	0.1	2
321	Stress in Silicon Due to the Formation of Self Aligned Poly-CoSi <sub>2</sub> Lines Studied by Micro-Raman Spectroscopy. Materials Research Society Symposia Proceedings, 1995, 402, 251.	0.1	1
322	Stress variation across arrays of lines and its influence on LOCOS oxidation. Microelectronic Engineering, 1995, 28, 79-82.	1.1	1
323	Oxide and interface degradation and breakdown under medium and high field injection conditions: A correlation study. Microelectronic Engineering, 1995, 28, 313-316.	1.1	37
324	Analysis of externally imposed mechanical stress effects on the hot-carrier-induced degradation of MOSFET's., 1994,, .		8

#	ARTICLE	IF	CITATIONS
325	On the assessment of local stress distributions in integrated circuits. Applied Surface Science, 1993, 63, 119-125.	3.1	23
326	Process-induced mechanical stress in isolation structures studied by micro-Raman spectroscopy. Journal of Applied Physics, 1993, 74, 4490-4500.	1.1	70
327	X-Ray Diffraction and Reflectance, Raman Scattering and Photoluminescence Characterization of Thermally Annealed Epitaxial Si1-XGeX Layers. Materials Research Society Symposia Proceedings, 1993, 298, 51.	0.1	0
328	The Influence of Mechanical Stress on Hot-Carrier Degradation in Mosfet's. Materials Research Society Symposia Proceedings, 1993, 308, 349.	0.1	0
329	Variation of Local Mechanical Stress During the Different Processing Steps of Ic-Isolation: a Micro-Raman Spectroscopy Study. Materials Research Society Symposia Proceedings, 1993, 308, 355.	0.1	2
330	The Influence of Mechanical Stress on Hot-Carrier Degradation in Mosfet's. Materials Research Society Symposia Proceedings, 1993, 309, 281.	0.1	0
331	On the assessment of local stress distributions in integrated circuits. , 1993, , 119-125.		0
332	Micro-Raman study of stress distribution in local isolation structures and correlation with transmission electron microscopy. Journal of Applied Physics, 1992, 71, 898-906.	1.1	149
333	Microelectrode study of voltage-dependent Ba <sup>2+</sup> and Cs <sup>+</sup> block of apical K <sup>+</sup> channels in the skin of Rana temporaria. Pflugers Archiv European Journal of Physiology, 1991, 418, 400-407.	1.3	8
334	Non-Destructive Assessment of Thin Film Stresses and Crystal Quality of Silicon on Insulator Materials with Raman Spectroscopy. Materials Research Society Symposia Proceedings, 1990, 188, 53.	0.1	5
335	Forskolin activates gated Cl <sup>-</sup> channels in frog skin. American Journal of Physiology - Cell Physiology, 1989, 256, C1239-C1249.	2.1	14
336	Current-voltage relations of Cs <sup>+</sup> -inhibited K <sup>+</sup> currents through the apical membrane of frog skin. Pflugers Archiv European Journal of Physiology, 1988, 413, 111-117.	1.3	7
337	Voltage-dependent Ba <sup>2+</sup> block of K <sup>+</sup> channels in apical membrane of frog skin. American Journal of Physiology - Cell Physiology, 1986, 251, C696-C706.	2.1	62
338	Oxytocin stimulates the apical K <sup>+</sup> conductance in frog skin. Pflugers Archiv European Journal of Physiology, 1986, 407, 602-606.	1.3	10
339	Far infrared electron paramagnetic resonance in TmVO <sub>4</sub> . Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 108, 221-224.	0.9	7
340	EPR in LiHoF <sub>4</sub> with a far infrared laser. Journal of Physics and Chemistry of Solids, 1985, 46, 1387-1391.	1.9	12
341	An advanced calibration method for modelling oxidation and mechanical stress in sub-micron CMOS isolation structures. , 0, , .		2
342	The influence of oxidation-induced stress on the generation current and its impact on scaled device performance. , 0, , .		10

#	ARTICLE	IF	CITATIONS
343	Non-uniform triggering of gg-nMOSFET investigated by combined emission microscopy and transmission line pulsing. , 0, , .		40
344	Determination of stress in shallow trench isolation for deep submicron MOS devices by UV Raman spectroscopy. , 0, , .		8
345	Substrate hole current origin after oxide breakdown. , 0, , .		9
346	Local stress measurements in packaging by Raman spectroscopy. , 0, , .		5
347	Experimental characterization of stiction due to charging in RF MEMS. , 0, , .		40
348	Bonding on Cu: a new stress evaluation approach by Raman spectroscopy. , 0, , .		4
349	Raman spectroscopy as a stress sensor in packaging: correct formulae for different sample surfaces. , 0, , .		5
350	Instrumentation and methodology for MEMS testing, reliability assessment and failure analysis. , 0, , .		2
351	A systematic study of trade-offs in engineering a locally strained pMOSFET. , 0, , .		21
352	A reliable and compact polymer-based package for capacitive RF-MEMS switches. , 0, , .		9
353	The influence of the package environment on the functioning and reliability of RF-MEMS switches. , 0, , .		9
354	On the scalability of source/drain current enhancement in thin film sSOI. , 0, , .		16
355	Effect of Gas Pressure on the Lifetime of Capacitive RF MEMS Switches. , 0, , .		19
356	Deep Understanding of Electron Beam Effects on 2D Layered Semiconducting Devices Under Bias Applications. Advanced Materials Interfaces, 0, , 2102488.	1.9	1