Didier Goguenheim

List of Publications by Year
in descending order

54	632	687363 13	610901 24
papers	citations	h-index	g-index

54	54	54	614
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Octadecyltrichlorosilane monolayers as ultrathin gate insulating films in metalâ€insulatorâ€semiconductor devices. Applied Physics Letters, 1993, 62, 2256-2258.	3.3	92
2	Theoretical and experimental aspects of the thermal dependence of electron capture coefficients. Journal of Applied Physics, 1990, 68, 1059-1069.	2.5	53
3	New insights on the electronic properties of the trivalent silicon defects at oxidized â€˜100â€‰ silicon surfaces. Applied Physics Letters, 1990, 57, 1206-1208.	3.3	45
4	Oxidation kinetics of Ni metallic films: Formation of NiO-based resistive switching structures. Thin Solid Films, 2008, 516, 4083-4092.	1.8	42
5	Impact of chain length, temperature, and humidity on the growth of long alkyltrichlorosilane self-assembled monolayers. Physical Chemistry Chemical Physics, 2011, 13, 2870-2879.	2.8	39
6	Theoretical calculation of the electron-capture cross section due to a dangling bond at the Si(111)-SiO2interface. Physical Review B, 1991, 44, 1724-1733.	3.2	37
7	Portable microstimulator for chronic deep brain stimulation in freely moving rats. Journal of Neuroscience Methods, 2012, 209, 50-57.	2.5	36
8	Nature of the defects generated by electric field stress at the Siâ€SiO2interface. Applied Physics Letters, 1991, 58, 490-492.	3.3	22
9	Degradation and recovery of polarization under synchrotron x rays in SrBi2Ta2O9 ferroelectric capacitors. Journal of Applied Physics, 2005, 97, 044106.	2.5	22
10	Accurate measurements of capture cross sections of semiconductor insulator interface states by a trapâ€filling experiment: The chargeâ€potential feedback effect. Journal of Applied Physics, 1990, 68, 1104-1113.	2.5	21
11	Analysis of high temperature effects on performances and hot-carrier degradation in DC/AC stressed 0.35 Î¼m n-MOSFETs. Microelectronics Reliability, 1999, 39, 35-44.	1.7	18
12	Hot-carrier injections in SiO2. Microelectronics Reliability, 1998, 38, 7-22.	1.7	17
13	Off state incorporation into the 3 energy mode device lifetime modeling for advanced 40nm CMOS node. , 2010, , .		15
14	A coupled I(V) and charge-pumping analysis of Stress Induced Leakage Currents in 5nm-thick gate oxides. Microelectronic Engineering, 1997, 36, 141-144.	2.4	13
15	Hole injection enhanced hot-carrier degradation in PMOSFETs used for systems on chip applications with 6.5â€“2 nm thick gate-oxides. Microelectronics Reliability, 2004, 44, 65-77.	1.7	13
16	Stress induced leakage currents in N-MOSFETs submitted to channel hot carrier injections. Journal of Non-Crystalline Solids, 1999, 245, 41-47.	3.1	12
17	Influence of various process steps on the reliability of PMOSFETs submitted to negative bias temperature instabilities. Microelectronics Reliability, 2009, 49, 1008-1012.	1.7	12
18	Injection Mechanisms and Lifetime Prediction with the Substrate Voltage in 0.15Î¼m Channel-Length N-MOSFETs. Microelectronics Reliability, 2001, 41, 1313-1318.	1.7	10

#	Article	IF	Citations
19	Impacts of the recovery phenomena on the worst-case of damage in DC/AC stressed ultra-thin NO gate-oxide MOSFETs. Microelectronics Reliability, 2005, 45, 1370-1375.	1.7	10
20	Comparison of oxide leakage currents induced by ion implantation and high field electric stress. Solid-State Electronics, 2001, 45, 1355-1360.	1.4	9
21	Experimental study of the quasi-breakdown failure mechanism in 4.5 nm-thick SiO2 oxides. Microelectronics Reliability, 1999, 39, 165-169.	1.7	8
22	Comparison of degradation modes in 1.2â€“2.1 nm thick SiO2 oxides submitted to uniform and hot carrier injections in NMOSFETS. Journal of Non-Crystalline Solids, 2003, 322, 183-190.	3.1	7
23	Comment on "hot-hole-induced negative oxide charges in n-MOSFETs" [with reply]. IEEE Transactions on Electron Devices, 1996, 43, 1473-1477.	3.0	5
24	Hot-carrier reliability study of second and first impact ionization degradation in 0.15-Î¼m channel-length N-MOSFETS. Microelectronic Engineering, 2001, 59, 101-108.	2.4	5
25	Determination of the electrical properties of ultrathin silicon-based dielectric films: thermally grown SiNx. Solid-State Electronics, 2001, 45, 1265-1270.	1.4	5
26	Impact of carrier injection in 2.2 nm-thick SiO2 oxides after first and substrate enhanced electron injection. Journal of Non-Crystalline Solids, 2003, 322, 199-205.	3.1	5
27	Comparison of oxide leakage currents induced by ion implantation and high field electric stress. Microelectronics Reliability, 2000, 40, 751-754.	1.7	4
28	Temperature and field dependence of stress induced leakage currents in very thin (<5 nm) gate oxides. Journal of Non-Crystalline Solids, 2001, 280, 78-85.	3.1	4
29	Assessment of temperature and voltage accelerating factors for 2.3â€“3.2nm SiO2 thin oxides stressed to hard breakdown. Microelectronics Reliability, 2008, 48, 335-341.	1.7	4
30	HOT-CARRIER RELIABILITY IN n-MOSFETs USED AS PASS-TRANSISTORS. Microelectronics Reliability, 1998, 38, 539-544.	1.7	3
31	Determination of the electrical properties of 2.5 nm thick silicon-based dielectric films: thermally grown SiOx. Journal of Non-Crystalline Solids, 2001, 280, 69-77.	3.1	3
32	Carrier injection efficiency for the reliability study of 3.5â€“1.2 nm thick gate-oxide CMOS technologies. Microelectronics Reliability, 2003, 43, 1241-1246.	1.7	3
33	Efficiency of interface trap generation under hole injections in 2.1 nm thick gate-oxide P-MOSFETs. Journal of Non-Crystalline Solids, 2003, 322, 139-146.	3.1	3
34	Towards a full microscopic approach to the modeling of transistors with nanometer dimensions. Journal of Non-Crystalline Solids, 2003, 322, 160-167.	3.1	3
35	Deep hole trapping effects in the degradation mechanisms of 6.5â€“2 nm thick gate-oxide PMOSFETs. Microelectronic Engineering, 2004, 72, 106-111.	2.4	3
36	Geometry effects on the NBTI degradation of PMOS transistors. , 2008, , .		3

#	Article	IF	Citations
37	Functionalization of Silicon Dioxide Surface with 3-Aminopropyltrimethoxysilane for Fullerene C₆₀ Immobilization. Journal of Nanoscience and Nanotechnology, 2011, 11, 9310-9315.	0.9	3
38	Improved hot-carrier immunity of p-MOSFET's with 8nm thick nitrided gate-oxide during bi-directional stressing. Microelectronic Engineering, 1995, 28, 273-276.	2.4	2
39	Turn-around effects during dynamic operation in 0.25Î¼m CMOS technology from low to high temperature. Microelectronic Engineering, 1999, 48, 163-166.	2.4	2
40	Determination of the electrical properties of thermally grown ultrathin nitride films. Microelectronics Reliability, 2000, 40, 589-592.	1.7	2
41	Impact of wafer charging on hot carrier reliability and optimization of latent damage detection methodology in advanced CMOS technologies. Microelectronics Reliability, 2005, 45, 487-492.	1.7	2
42	A comprehensive study of stress induced leakage current using a floating gate structure for direct applications in EEPROM memories. Microelectronics Reliability, 2007, 47, 1373-1377.	1.7	2
43	Dynamic stress method for accurate NVM oxide robustness evaluation for automotive applications. Microelectronics Reliability, 2008, 48, 1318-1321.	1.7	2
44	Total Recovery of Defects Generated by Negative Bias Temperature Instability (NBTI). , 2008, , .		2
45	Different types of phase separation in binary monolayers of long chain alkyltrichlorosilanes on silicon oxide. RSC Advances, 2012, 2, 3014.	3.6	2
46	MOSFET layout modifications for hump effect removal. Microelectronic Engineering, 2013, 109, 168-171.	2.4	2
47	Influences of the different degradation mechanisms in AC-stressed p-MOSFET's during pass transistor operation. Microelectronic Engineering, 1997, 36, 305-308.	2.4	1
48	Experimental extraction of degradation parameters after constant voltage stress and substrate hot electron injection on ultrathin oxides. Microelectronics Reliability, 2005, 45, 883-886.	1.7	1
49	Defects and relaxation during the negative bias temperature instability in PMOSFET. , 2008, , .		1
50	Advanced On-The-Fly Method with Correction of Initial Values to Characterize Negative Bias Temperature Instability Reliability. , 2008, , .		1
51	Distance measurement using narrowband ZigBee devices. , 2014, , .		1
52	Ultrathin oxide reliability after combined constant voltage stress and substrate hot electron injection. Journal of Non-Crystalline Solids, 2005, 351, 1860-1865.	3.1	0
53	Dry and wet methods of silicon dioxide surface functionalisation with 3-aminopropyl trimethoxysilane: application to fullerene C<SUB align="right">60 anchoring. International Journal of Nanotechnology, 2012, 9, 312.	0.2	0
54	New technique to resolve carrier-phase cycle ambiguity for narrowband low-power systems. , 2014, , .		0