Ga-Won Lee

List of Publications by Year
in descending order

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113 papers	625 citations	12 h-index	20 g-index
		759233	752698

115 all docs	115 docs citations	115 times ranked	809 citing authors

#	Article	IF	Citations
1	300 mm Large Area Wire Grid Polarizers with 50 nm Half-Pitch by ArF Immersion Lithography. Nanomaterials, 2022, 12, 481.	4.1	2
2	Modeling and Verification of Interface and Bulk Trap Level Density Extraction in SONOS Memory Charge Trapping Layer. Transactions on Electrical and Electronic Materials, 2021, 22, 372-377.	1.9	0
3	Extraction of Effective Charge Diffusivity in the Charge Trapping Layer of SONOS Flash Memory. Transactions on Electrical and Electronic Materials, 2021, 22, 432-438.	1.9	1
4	Process effect analysis on nitride trap distribution in silicon-oxide-nitride-oxide-silicon flash memory based on charge retention model. Materials Express, 2021, 11, 1615-1618.	0.5	0
5	High Pressure Deuterium Passivation of Charge Trapping Layer for Nonvolatile Memory Applications. Micromachines, 2021, 12, 1316.	2.9	4
6	Physical and Electrical Analysis of Poly-Si Channel Effect on SONOS Flash Memory. Micromachines, 2021, 12, 1401.	2.9	4
7	Investigation of Random Telegraph Noise Characteristics with Intentional Hot Carrier Aging. , 2020, , .		0
8	Reliability Analysis by Charge Migration of 3D SONOS Flash Memory. , 2020, , .		2
9	Test Structures for Noise Reduction of Fully Depleted-Silicon on Insulator p-Type Tunneling FET Using Channel Orientation. , 2020, , .		0
10	Effective Schottky barrier lowering of NiGe/p-Ge(100) using Terbium interlayer structure for high performance p-type MOSFETs. Scientific Reports, 2020, 10, 4054.	3.3	5
11	Temperature Dependence of Low Frequency Noise in Silicon on Insulator Tunneling Field Effect Transistor. Journal of Nanoscience and Nanotechnology, 2020, 20, 4699-4703.	0.9	0
12	Investigation of Intra-Nitride Charge Migration Suppression in SONOS Flash Memory. Micromachines, 2019, 10, 356.	2.9	4
13	Gate Voltage Dependence of Low Frequency Noise in Tunneling Field Effect Transistors. Journal of Nanoscience and Nanotechnology, 2019, 19, 6083-6086.	0.9	2
14	Investigation of Positive Bias Temperature Instability Characteristics of Fully Depleted Silicon on Insulator Tunneling Field Effect Transistor with High-k Dielectric Gate Stacks. Journal of Nanoscience and Nanotechnology, 2019, 19, 6131-6134.	0.9	1
15	Low frequency noise of silicon based tunneling field effect transistors. , 2018, , .		1
16	Fabrication and characteristic analysis of gas sensor using nano-structure. , 2018, , .		0
17	High performance SONOS flash memory with in-situ silicon nanocrystals embedded in silicon nitride charge trapping layer. Solid-State Electronics, 2018, 140, 134-138.	1.4	12
18	Selective UVâ€"O3treatment for indium zinc oxide thin film transistors with solution-based multiple active layer. Japanese Journal of Applied Physics, 2018, 57, 06KB01.	1.5	2

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19	Effects of Al2O3 gate insulator on the instability of amorphous indium-gallium zinc oxide thin film transistors. AIP Advances, 2018, 8, .	1.3	6
20	Effects of Fluorine on the NBTI Reliability and Low-Frequency Noise Characteristics of p-MOSFETs. IEEE Journal of the Electron Devices Society, 2018, , 1-1.	2.1	11
21	Analysis of Anomalously Large RTS Noise Amplitudes in Tunneling Field-effect Transistors. Journal of Semiconductor Technology and Science, 2018, 18, 193-199.	0.4	2
22	Identification of Interface States and Shallow and Deep Hole Traps under NBTI Stress using Fast, Normal, and Charge-pumping Measurement Techniques. Journal of Semiconductor Technology and Science, 2018, 18, 160-166.	0.4	1
23	Investigation of atomic-layer-deposited Al-doped ZnO film for AZO/ZnO double-stacked active layer thin-film transistor application. Thin Solid Films, 2017, 638, 89-95.	1.8	18
24	The Bilayer Structure for Low-Temperature, Solution-Processed Indium Zinc Oxide Thin-Film Transistors. Journal of Nanoscience and Nanotechnology, 2016, 16, 8692-8695.	0.9	1
25	Simplified Bilayer White Phosphorescent Organic Light-Emitting Diodes. ETRI Journal, 2016, 38, 260-264.	2.0	21
26	Currentâ€“voltage and low-frequency noise analysis of heterojunction diodes with various passivation layers. Thin Solid Films, 2016, 598, 109-114.	1.8	2
27	A Study on Contact Resistance Reduction in Ni Germanide/Ge using Sb Interlayer. Journal of Semiconductor Technology and Science, 2016, 16, 210-214.	0.4	1
28	Origin of Oxygen-Induced Abnormal Hump in Bottom-Gated Polycrystalline Zinc Oxide Thin Film Transistors. ECS Journal of Solid State Science and Technology, 2015, 4, Q31-Q34.	1.8	1
29	Modeling of T-model equivalent circuit for spiral inductors in 90 nm CMOS technology. , 2015, , .		5
30	Charge Spreading Effect of Stored Charge on Retention Characteristics in SONOS NAND Flash Memory Devices. Transactions on Electrical and Electronic Materials, 2015, 16, 183-186.	1.9	3
31	Enhanced Photo Current in n-ZnO/p-Si Diode Via Embedded Ag Nanoparticles for the Solar Cell Application. Journal of Semiconductor Technology and Science, 2015, 15, 35-40.	0.4	6
32	Decrease of Parasitic Capacitance for Improvement of RF Performance of Multi-finger MOSFETs in 90-nm CMOS Technology. Journal of Semiconductor Technology and Science, 2015, 15, 312-317.	0.4	9
33	Novel silicon surface passivation by Al₂O₃/ZnO/Al₂O₃ films deposited by thermal atomic layer deposition. Japanese Journal of Applied Physics, 2014, 53, 04ER19.	1.5	9
34	Novel Ni silicide formed with a Ni/Er/Ni/TiN structure for thermal stable and low contact resistance source/drain in MOSFETs. Japanese Journal of Applied Physics, 2014, 53, 08NE05.	1.5	1
35	Effect of fluorine implantation on recovery characteristics of p-channel MOSFET after negative bias temperature instability stress. Japanese Journal of Applied Physics, 2014, 53, 08LA03.	1.5	4
36	Effect of surface pretreatment in the thermal atomic layer deposition of Al2O3for passivation of crystal Si solar cells. Japanese Journal of Applied Physics, 2014, 53, 08LC04.	1.5	2

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37	Channel engineering of ZnO-based thin film transistors using Al2O3interlayer grown by atomic layer deposition. Japanese Journal of Applied Physics, 2014, 53, 091101.	1.5	0
38	Analysis of stability improvement in ZnO thin film transistor with dual-gate structure under negative bias stress. Japanese Journal of Applied Physics, 2014, 53, 04EF11.	1.5	8
39	Colored semi-transparent organic light-emitting diodes. Journal of Information Display, 2014, 15, 177-184.	4.0	11
40	A Light-induced Threshold Voltage Instability Based on a Negative-U Center in a-IGZO TFTs with Different Oxygen Flow Rates. Transactions on Electrical and Electronic Materials, 2014, 15, 315-319.	1.9	9
41	Blistering Induced Degradation of Thermal Stability Al₂O₃Passivation Layer in Crystal Si Solar Cells. Journal of Semiconductor Technology and Science, 2014, 14, 53-60.	0.4	11
42	Characterization of Dielectric Relaxation and Reliability of High-k MIM Capacitor Under Constant Voltage Stress. Journal of Semiconductor Technology and Science, 2014, 14, 543-548.	0.4	3
43	Analysis of SOHOS Flash Memory with 3-level Charge Pumping Method. Journal of Semiconductor Technology and Science, 2014, 14, 34-39.	0.4	1
44	A Novel Atomic Layer Deposited Al2O3Film with Diluted NH4OH for High-Efficient c-Si Solar Cell. Journal of Semiconductor Technology and Science, 2014, 14, 40-47.	0.4	1
45	Investigation of zinc interstitial ions as the origin of anomalous stress-induced hump in amorphous indium gallium zinc oxide thin film transistors. Applied Physics Letters, 2013, 102, .	3.3	35
46	Investigation of the instability of low-temperature poly-silicon thin film transistors under a negative bias temperature stress. Electronic Materials Letters, 2013, 9, 13-16.	2.2	3
47	Characterization of polycrystalline silicon-oxide-nitride-oxide-silicon devices on a SiO2 or Si3N4 buffer layer. Electronic Materials Letters, 2013, 9, 23-27.	2.2	1
48	Effects of the Al₂O₃interlayer in ZnO thin-film transistors fabricated via atomic layer deposition. Journal of Information Display, 2013, 14, 61-65.	4.0	9
49	3D gate-all-around bandgap-engineered SONOS flash memory in vertical silicon pillar with metal gate. Solid-State Electronics, 2013, 86, 6-10.	1.4	2
50	Tunneling oxide engineering by ion implantation of nitrogen for 3D vertical silicon pillar SONOS flash memory. Microelectronic Engineering, 2013, 103, 33-35.	2.4	6
51	Additive Effect of Poly(4-vinylphenol) Gate Dielectric in Organic Thin Film Transistor at Low Temperature Process. Journal of Nanoscience and Nanotechnology, 2013, 13, 3313-3316.	0.9	6
52	Investigation of the Gate Bias Stress Instability in ZnO Thin Film Transistors by Low-Frequency Noise Analysis. Japanese Journal of Applied Physics, 2013, 52, 04CF04.	1.5	4
53	A novel BJT structure for high- performance analog circuit applications. , 2013, , .		0
54	Pillar Type Silicon-Oxide-Nitride-Oxide-Silicon Flash Memory Cells with Modulated Tunneling Oxide. Transactions on Electrical and Electronic Materials, 2013, 14, 250-253.	1.9	1

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55	Process Temperature Dependence of Al₂O₃Film Deposited by Thermal ALD as a Passivation Layer for c-Si Solar Cells. Journal of Semiconductor Technology and Science, 2013, 13, 581-588.	0.4	11
56	The Short Channel Effect Immunity of Silicon Nanowire SONOS Flash Memory Using TCAD Simulation. Transactions on Electrical and Electronic Materials, 2013, 14, 139-142.	1.9	3
57	Dependence of the 1/f Noise Characteristics of CMOSFETs on Body Bias in Sub-threshold and Strong Inversion Regions. Journal of Semiconductor Technology and Science, 2013, 13, 655-661.	0.4	0
58	Electrical Characteristic Analysis of Postannealed ZnO Thin-Film Transistors under O₂ Ambient. Japanese Journal of Applied Physics, 2012, 51, 09MF09.	1.5	3
59	Electrical Instabilities in Amorphous InGaZnO Thin Film Transistors with Si$_{3}$N$_{4}$ and Si$_{3}$N$_{4}$/Al$_{2}$O$_{3}$ Gate Dielectrics. Japanese Journal of Applied Physics, 2012, 51, 09MF10.	1.5	0
60	Improvement of Thermal Stability of Ni-Germanide with Ni/Co/Ni/TiN Structure for High Performance Ge Metalâ€“Oxideâ€“Semiconductor Field Effect Transistors. Japanese Journal of Applied Physics, 2012, 51, 02BA02.	1.5	0
61	Studies on transmittance of silicon with AR coating films for IR transparent window. , 2012, , .		0
62	Thermally Robust Ni Germanide Technology Using Cosputtering of Ni and Pt for High-Performance Nanoscale Ge MOSFETs. IEEE Nanotechnology Magazine, 2012, 11, 769-776.	2.0	9
63	Interaction of zinc interstitial with oxygen vacancy in zinc oxide: An origin of n-type doping. Solid State Communications, 2012, 152, 1711-1714.	1.9	54
64	Novel Palladium Germanide Schottky Contact for High Performance Schottky Barrier Ge MOSFETs and Characterization of Its Leakage Current Mechanism. Journal of Nanoscience and Nanotechnology, 2012, 12, 5347-5350.	0.9	2
65	The Effect of Thermal Annealing on Pentacene Thin Film Transistor with Micro Contact Printing. Journal of Nanoscience and Nanotechnology, 2012, 12, 5325-5329.	0.9	3
66	Hysteresis analysis in excimerâ€laserâ€annealed lowâ€temperature polycrystallineâ€silicon thinâ€film transistors. Journal of the Society for Information Display, 2012, 20, 355-359.	2.1	9
67	Study on optimizing the thickness of silicon window of WLP for IR sensor. Proceedings of SPIE, 2012, , .	0.8	1
68	Anomalous Stress-Induced Hump Effects in Amorphous Indium Gallium Zinc Oxide TFTs. Transactions on Electrical and Electronic Materials, 2012, 13, 47-49.	1.9	19
69	Comparative Analysis of Bandgap-Engineered Pillar Type Flash Memory with HfO₂ and S₃N₄ as Trapping Layer. IEICE Transactions on Electronics, 2012, E95.C, 831-836.	0.6	0
70	Improvement of Thermal Stability of Ni-Germanide with Ni/Co/Ni/TiN Structure for High Performance Ge Metalâ€“Oxideâ€“Semiconductor Field Effect Transistors. Japanese Journal of Applied Physics, 2012, 51, 02BA02.	1.5	1
71	Electrical Characteristic Analysis of Postannealed ZnO Thin-Film Transistors under O₂Ambient. Japanese Journal of Applied Physics, 2012, 51, 09MF09.	1.5	0
72	Characterization of Random Telegraph Signal Noise of High-Performance p-MOSFETs With a High-k Dielectric/Metal Gate. IEEE Electron Device Letters, 2011, 32, 686-688.	3.9	29

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73	Improvement of Heavy Dopant Doped Ni-Silicide Using Ytterbium Interlayer for Nano-Scale MOSFETs with an Ultra Shallow Junction. Journal of Nanoscience and Nanotechnology, 2011, 11, 5628-5632.	0.9	1
74	Thermal Endurance and Microstructural Evolution of PtGe for High-Performance Nano-Scale Ge-on-Si MOSFETs. Journal of Nanoscience and Nanotechnology, 2011, 11, 5633-5639.	0.9	0
75	Conduction Mechanism and Reliability Characteristics of a Metalâ€“Insulatorâ€“Metal Capacitor with Single ZrO₂ Layer. Japanese Journal of Applied Physics, 2011, 50, 04DD02.	1.5	14
76	Study of Surface-Modified PVP Gate Dielectric in Organic Thin Film Transistors with the Nano-Particle Silver Ink Source/Drain Electrode. Journal of Nanoscience and Nanotechnology, 2011, 11, 5640-5644.	0.9	2
77	Dependence of Hot Carrier Reliability and Low Frequency Noise on Channel Stress in Nanoscale n-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2011, 50, 10PB01.	1.5	6
78	Effect of Nitrogen Concentration on Low-Frequency Noise and Negative Bias Temperature Instability of p-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors with Nitrided Gate Oxide. Japanese Journal of Applied Physics, 2011, 50, 10PB03.	1.5	7
79	Crystal Quality Effect on Low-Frequency Noise in ZnO TFTs. IEEE Electron Device Letters, 2011, 32, 1701-1703.	3.9	21
80	Dependence of Hot Carrier Reliability and Low Frequency Noise on Channel Stress in Nanoscale n-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors. Japanese Journal of Applied Physics, 2011, 50, 10PB01.	1.5	4
81	Effect of Nitrogen Concentration on Low-Frequency Noise and Negative Bias Temperature Instability of p-Channel Metalâ€“Oxideâ€“Semiconductor Field-Effect Transistors with Nitrided Gate Oxide. Japanese Journal of Applied Physics, 2011, 50, 10PB03.	1.5	6
82	Effect of Aluminum on Nitrogen Solubility in Zinc Oxide: Density Functional Theory. Korean Journal of Materials Research, 2011, 21, 639-643.	0.2	0
83	Improvement of reliability characteristics using the N<inf>2</inf> implantation in SOHOS flash memory. , 2010, , .		2
84	An analysis on applicability of Ti-doped ZnO films as the channel layer of TFTs. , 2010, , .		4
85	Maskless Laser Direct Patterning of PEDOT/PSS Layer for Soluble Process Organic Thin Film Transistor. Journal of Nanoscience and Nanotechnology, 2010, 10, 3185-3188.	0.9	5
86	Study on palladium germanide on Ge-on-Si substrate for nanoscale Ge channel Schottky barrier MOSFETs. , 2010, , .		1
87	Tradeoff Between Hot Carrier and Negative Bias Temperature Degradations in High-Performance $hbox{Si}_{1 - x}hbox{Ge}_{x}$ pMOSFETs With High-k/Metal Gate Stacks. IEEE Electron Device Letters, 2010, , .	3.9	0
88	Instability dependent upon bias and temperature stress in amorphousâ€indium gallium zinc oxide (aâ€IGZO) thinâ€film transistors. Journal of the Society for Information Display, 2010, 18, 108-112.	2.1	13
89	Improvement of Thermal Stability of Ni Germanide Using a Niâ€“Pt(1%) Alloy on Ge-on-Si Substrate for Nanoscale Ge MOSFETs. IEEE Nanotechnology Magazine, 2010, 9, 258-263.	2.0	23
90	Improvement of junction characteristics of ultra shallow junction with boron-cluster implantation and Ni-silicide for nano-scale CMOS technology. , 2010, , .		0

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91	Novel Ni germanide technology with co-sputtering of Ni and Pt for thermally stable Ge MOSFETs on Ge-on-Si substrate. , 2010, , .		1
92	Improvement of Thermal Stability of Ni-Silicide Using Vacuum Annealing on Boron Cluster Implanted Ultra Shallow Source/Drain for Nano-Scale CMOSFETs. Journal of Semiconductor Technology and Science, 2010, 10, 260-264.	0.4	4
93	Initial Reaction of Zn Precursors with Si (001) Surface for ZnO Thin-Film Growth. Korean Journal of Materials Research, 2010, 20, 463-466.	0.2	0
94	Performance and Stability Characterization of Bottom Gated Amorphous Indium Gallium Zinc Oxide Thin Film Transistors Grown by RF and DC Sputtering. Japanese Journal of Applied Physics, 2009, 48, 04C134.	1.5	5
95	Microstructural Innovation of Ni Germanide on Ge-on-Si Substrate by Using Palladium Incorporation. Electrochemical and Solid-State Letters, 2009, 12, H402.	2.2	8
96	Extraction of Energy Distribution of Nitride Traps Using Charge Pumping Method in Siliconâ€"Oxideâ€"Nitrideâ€"Oxideâ€"Silicon Flash Memory. Japanese Journal of Applied Physics, 2009, 48, 04C068.	1.5	1
97	Ni Germanide Utilizing Ytterbium Interlayer for High-Performance Ge MOSFETs. Electrochemical and Solid-State Letters, 2009, 12, H18.	2.2	20
98	Comparison of La-based high-k dielectrics: HfLaSiON and HfLaON. Microelectronic Engineering, 2009, 86, 268-271.	2.4	3
99	Characterization of Polymetal Gate Transistors With Low-Temperature Atomic-Layer-Deposition-Grown Oxide Spacer. IEEE Electron Device Letters, 2009, 30, 181-184.	3.9	12
100	Effect of source/drain overlap region on device performance in aâ€IGZO thinâ€film transistors. Journal of the Society for Information Display, 2009, 17, 735-738.	2.1	5
101	Suppression of Nickel-germanide (NiGe) Agglomeration and NiPenetration by Hydrogen (H) Ion Shower Doping in NiGe on a ThinEpitaxial Ge-on-Si Substrate. Journal of the Korean Physical Society, 2009, 55, 221-226.	0.7	3
102	Improvement of thermal stability and reduction of Schottky barrier height of Ni germanide utilizing Ni-Pt(1%) alloy on Ge-on-Si substrate. , 2008, , .		0
103	Phase Separation of Ni Germanide Formed on a Ge-on-Si Structure for Ge MOSFETs. Electrochemical and Solid-State Letters, 2008, 11, H1.	2.2	11
104	Source/Drain Overlap Length Dependence of VT in Thin Film Transistor on a-IGZO Channel Deposited by RF and DC Sputtering. Materials Research Society Symposia Proceedings, 2008, 1108, 1.	0.1	1
105	Device Performance and Reliability Characterization of Interface and Bulk Effect in Amorphous Indium Gallium Zinc Oxide (a-IGZO) Thin Film Transistor. Materials Research Society Symposia Proceedings, 2008, 1108, 1.	0.1	0
106	New Charge Pumping Method for Characterization of Charge Trapping Layer in Oxideâ€"Nitrideâ€"Oxide Structure. Japanese Journal of Applied Physics, 2008, 47, 2692-2695.	1.5	2
107	Thermal stability improvement of Ni germanide utilizing Ni-Pd alloy for nano-scale Ge MOSFETs. , 2008, , .		0
108	Work function variation of nickel silicide using an ytterbium buffer layer for Schottky barrier metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2007, 101, 103710.	2.5	11

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109	Thermal Stable Nickel Silicide Utilizing Ni/Co/Ni/TiN structure and Two-Step RTP on Doped Substrate. , 2007, , .		0
110	Thermal Stability of Nickel Silicide with Stressed Inter-Layer Dielectric Layer on Doped Si Substrate. , 2007, , .		0
111	Characterization of the Dopant Dependence of Ni-Silicide on a SOI Substrate for a Nano-Scale CMOSFET. Journal of the Korean Physical Society, 2007, 50, 1883.	0.7	5
112	Impact of initial-oxidation on 1/f noise and subthreshold swing of n-channel MOSFETs. , 2006, , .		0
113	Trap evaluations of metal/oxide/silicon field-effect transistors with high-k gate dielectric using charge pumping method. Applied Physics Letters, 2002, 81, 2050-2052.	3.3	26