Jeong Hyun Moon

List of Publications by Citations

35 papers	395 citations	8 h-index	19 g-index
48 ext. papers	439 ext. citations	1.7 avg, IF	2.8 L-index

#	Paper	IF	Citations
35	Current conduction mechanisms in atomic-layer-deposited HfO2/nitrided SiO2 stacked gate on 4H silicon carbide. *Journal of Applied Physics*, **2008**, 103, 084113	2.5	110
34	Crystal splitting and enhanced photocatalytic behavior of TiO2 rutile nano-belts induced by dislocations. *Nanoscale*, **2013**, 5, 753-8	7.7	44
33	Fabrication and characterization of 4H-SiC planar MESFETs. *Microelectronic Engineering*, **2006**, 83, 160-164	1.5	40
32	Analysis of current conduction mechanisms in atomic-layer-deposited Al2O3 gate on 4H silicon carbide. *Applied Physics Letters*, **2007**, 90, 162113	3.4	33
31	Electronic Properties of Atomic-Layer-Deposited Al[sub 2]O[sub 3]/Thermal-Nitrided SiO[sub 2] Stacking Dielectric on 4H SiC. *Electrochemical and Solid-State Letters*, **2007**, 10, H69		32
30	Effects of post-oxidation annealing temperature on ZrO2 thin film deposited on 4H-SiC substrate. *Materials Science in Semiconductor Processing*, **2011**, 14, 13-17	4.3	22
29	Homoepitaxial growth and electrical characterization of iron-doped semi-insulating 4H-SiC epilayer. *Applied Physics Letters*, **2006**, 89, 152112	3.4	18
28	Effect of Postoxidation Annealing on High Temperature Grown SiO[sub 2]/4H-SiC Interfaces. *Journal of the Electrochemical Society*, **2010**, 157, H196	3.9	11
27	Fabrication of 4H-SiC lateral double implanted MOSFET on an on-axis semi-insulating substrate without using epi-layer. *Japanese Journal of Applied Physics*, **2017**, 56, 120305	1.4	8
26	Electrical Properties of Atomic-Layer-Deposited La2O3/Thermal-Nitrided SiO2 Stacking Dielectric on 4H-SiC(0001). *Materials Science Forum*, **2007**, 556-557, 643-646	0.4	8
25	Effects of rapid thermal annealing on Al2O3/SiN reaction barrier layer/thermal-nitrided SiO2 stacking gate dielectrics on n-type 4H-SiC. *Applied Physics Letters*, **2010**, 96, 122108	3.4	6
24	Homoepitaxial Growth of Vanadium-Doped Semi-insulating 4H-SiC Using Bis-trimethylsilylmethane and Bis-cyclopentadienylvanadium Precursors. *Journal of the Electrochemical Society*, **2008**, 155, H11	3.9	6
23	Heavily nitrogen-doped 4H-SiC homoepitaxial films grown on porous SiC substrates. *Journal of Crystal Growth*, **2007**, 305, 83-87	1.6	6
22	Investigation of thermally grown oxide on 4H-SiC by a combination of H2O and HNO3 vapor with varied HNO3 solution heating temperature. *Applied Surface Science*, **2013**, 285, 795-804	6.7	5
21	4H-SiC Planar MESFETs on High-Purity Semi-Insulating Substrates. *Materials Science Forum*, **2007**, 556-557, 763-766	0.4	5
20	High-voltage lateral double-implanted MOSFETs implemented on high-purity semi-insulating 4H-SiC substrates with gate field plates. *Japanese Journal of Applied Physics*, **2018**, 57, 06HC08	1.4	4
19	Effect of sweeping direction on the capacitance–voltage behavior of sputtered SiO2/4H-SiC metal-oxide semiconductors after nitric oxide post-deposition annealing. *Physica Scripta*, **2019**, 94, 125811	2.6	3

18	Investigation of SiO2 film growth on 4H-SiC by direct thermal oxidation and postoxidation annealing techniques in HNO3 & H2O vapor at varied process durations. *Thin Solid Films*, **2014**, 570, 138-149	2.2	3
17	Improved 4H-SiC metal oxide semiconductor interface produced by using an oxidized SiN gate oxide that had undergone post-oxidation annealing. *Journal of the Korean Physical Society*, **2014**, 64, 1363-1369	0.6	3
16	Observation of stacking faults formed during homoepitaxial growth of p-type 4H-SiC. *Applied Physics Letters*, **2009**, 94, 112109	3.4	3
15	TEOS-based low-pressure chemical vapor deposition for gate oxides in 4H-SiC MOSFETs using nitric oxide post-deposition annealing. *Current Applied Physics*, **2020**, 20, 1386-1390	2.6	3
14	Ultra-Wide Bandgap β-Ga2O3 Heterojunction Field-Effect Transistor Using p-Type 4H-SiC Gate for Efficient Thermal Management. *ECS Journal of Solid State Science and Technology*, **2020**, 9, 065006	2	3
13	Impact of Stacking Fault on the I-V Characteristics of 4H-SiC Schottky Barrier Diode. *Materials Science Forum*, **2015**, 821-823, 563-566	0.4	2
12	Double p-base structure for 1.2-kV SiC trench MOSFETs with the suppression of electric-field crowding at gate oxide. *Microelectronic Engineering*, **2020**, 225, 111280	2.5	2
11	Oxygen- and photoresist-related interface states of 4H-SiC Schottky diode observed by deep-level transient spectroscopy. *Journal of Applied Physics*, **2017**, 122, 094504	2.5	2
10	Effect of surface passivation on breakdown voltages of 4H-SiC Schottky barrier diodes. *Journal of the Korean Physical Society*, **2017**, 71, 707-710	0.6	2
9	Effects of wet-oxidized 4H-SiC annealed in HNO3/H2O vapour. *Microelectronics International*, **2013**, 31, 42-53	0.8	2
8	Improved 4H-SiC MOS Interface Produced by Oxidized-SiN Gate Oxide. *Materials Science Forum*, **2010**, 645-648, 511-514	0.4	2
7	Fabrication of a 1.7-kV Schottky barrier diode with improved forward current-voltage characteristics. *Journal of the Korean Physical Society*, **2016**, 68, 810-814	0.6	1
6	High-voltage LDIMOSFETs on HPSI 4H-SiC substrate with dual field plates. *Physica Scripta*, **2019**, 94, 105809	2.9	1
5	Effects of heat treatment in vacuum on the physical properties of thermal nitrided silicon dioxide gate on 4H-silicon carbide. *Thin Solid Films*, **2008**, 516, 7921-7924	2.2	1
4	Electrical Properties of Metal-Oxide-Semiconductor (MOS) Structures on 4H-SiC(0001) Formed by Oxidizing Pre-Deposited SixNy. *Materials Science Forum*, **2007**, 556-557, 647-650	0.4	1
3	Role of the oxidizing agent in the etching of 4H-SiC substrates with molten KOH. *Journal of the Korean Physical Society*, **2016**, 69, 1677-1682	0.6	1
2	Homoepitaxial Growth of Vanadium-Doped 4H-SiC Using Bis-Trimethylsilylmethane and Verrocene Precursors. *Materials Science Forum*, **2007**, 556-557, 113-116	0.4	
1	Formation of the Uniform Interface Ni/4H-SiC Ohmic Contact with Titanium as Barrier Layer. *Materials Science Forum*, **2018**, 924, 397-400	0.4	