Woojin Park

List of Publications by Year in descending order

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50 papers	2,147 citations	257101 24 h-index	223531 46 g-index
53 all docs	53 docs citations	53 times ranked	4160 citing authors

#	Article	IF	Citations
1	The application of graphene as electrodes in electrical and optical devices. Nanotechnology, 2012, 23, 112001.	1.3	329
2	Large-scale patterned multi-layer graphene films as transparent conducting electrodes for GaN light-emitting diodes. Nanotechnology, 2010, 21, 175201.	1.3	259
3	Highly Flexible and Transparent Multilayer MoS₂ Transistors with Graphene Electrodes. Small, 2013, 9, 3295-3300.	5.2	189
4	Enhanced Charge Injection in Pentacene Fieldâ€Effect Transistors with Graphene Electrodes. Advanced Materials, 2011, 23, 100-105.	11.1	124
5	Efficient bulk-heterojunction photovoltaic cells with transparent multi-layer graphene electrodes. Organic Electronics, 2010, 11, 1864-1869.	1.4	113
6	Tuning of a graphene-electrode work function to enhance the efficiency of organic bulk heterojunction photovoltaic cells with an inverted structure. Applied Physics Letters, 2010, 97, .	1.5	92
7	Tuning of the Electronic Characteristics of ZnO Nanowire Field Effect Transistors by Proton Irradiation. ACS Nano, 2010, 4, 811-818.	7.3	62
8	Enhancement in the photodetection of ZnO nanowires by introducing surface-roughness-induced traps. Nanotechnology, 2011, 22, 205204.	1.3	52
9	Thermal stability of multilayer graphene films synthesized by chemical vapor deposition and stained by metallic impurities. Nanotechnology, 2012, 23, 075702.	1.3	52
10	Enhanced Performance of MoS₂ Photodetectors by Inserting an ALDâ€Processed TiO₂ Interlayer. Small, 2018, 14, 1703176.	5.2	51
11	Au nanoparticle-decorated graphene electrodes for GaN-based optoelectronic devices. Applied Physics Letters, 2012, 101, .	1.5	48
12	Modulation of Synaptic Plasticity Mimicked in Al Nanoparticleâ€Embedded IGZO Synaptic Transistor. Advanced Electronic Materials, 2020, 6, 1901072.	2.6	47
13	Diameter-Engineered SnO₂ Nanowires over Contact-Printed Gold Nanodots Using Size-Controlled Carbon Nanopost Array Stamps. ACS Nano, 2010, 4, 1829-1836.	7.3	46
14	Nonvolatile Memory Functionality of ZnO Nanowire Transistors Controlled by Mobile Protons. ACS Nano, 2011, 5, 558-564.	7.3	40
15	Characteristics of a pressure sensitive touch sensor using a piezoelectric PVDF-TrFE/MoS₂ stack. Nanotechnology, 2013, 24, 475501.	1.3	39
16	Low Power MoS₂/Nb₂O₅ Memtransistor Device with Highly Reliable Heterosynaptic Plasticity. Advanced Functional Materials, 2021, 31, 2104174.	7.8	33
17	Logic inverters composed of controlled depletion-mode and enhancement-mode ZnO nanowire transistors. Applied Physics Letters, 2009, 94, 173118.	1.5	32
18	Complementary Unipolar WS₂ Fieldâ€Effect Transistors Using Fermiâ€Level Depinning Layers. Advanced Electronic Materials, 2016, 2, 1500278.	2.6	28

#	Article	IF	Citations
19	Electrical properties of ZnO nanowire field effect transistors with varying high-kâ€ˆAl2O3 dielectric thickness. Journal of Applied Physics, 2010, 107, .	1.1	27
20	A study of graphene films synthesized on nickel substrates: existence and origin of small-base-area peaks. Nanotechnology, 2011, 22, 045706.	1.3	27
21	Novel Exfoliation of High-Quality 2H-MoS2 Nanoflakes for Solution-Processed Photodetector. Nanomaterials, 2020, 10, 1045.	1.9	26
22	Contact Resistance Reduction of WS₂ FETs Using High-Pressure Hydrogen Annealing. IEEE Journal of the Electron Devices Society, 2018, 6, 164-168.	1.2	25
23	Transient drain current characteristics of ZnO nanowire field effect transistors. Applied Physics Letters, 2009, 95, 123101.	1.5	24
24	Enhanced characteristics of pentacene field-effect transistors with graphene electrodes and substrate treatments. Applied Physics Letters, 2011, 99, 083306.	1.5	24
25	Tuning of operation mode of ZnO nanowire field effect transistors by solvent-driven surface treatment. Nanotechnology, 2009, 20, 475702.	1.3	21
26	Highly sensitive wide bandwidth photodetectors using chemical vapor deposited graphene. Applied Physics Letters, 2014, 104, .	1.5	20
27	Al2O3-Induced Sub-Gap Doping on the IGZO Channel for the Detection of Infrared Light. ACS Applied Electronic Materials, 2020, 2, 1478-1483.	2.0	19
28	Highly Stable and Ultrafast Hydrogen Gas Sensor Based on 15 nm Nanogaps Switching in a Palladiumâ€“Gold Nanoribbons Array. Advanced Materials Interfaces, 2019, 6, 1801442.	1.9	18
29	Enhanced Photoresponse of WS₂ Photodetectors through Interfacial Defect Engineering Using a TiO₂ Interlayer. ACS Applied Electronic Materials, 2020, 2, 838-845.	2.0	17
30	Investigation of threshold voltage instability induced by gate bias stress in ZnO nanowire field effect transistors. Nanotechnology, 2012, 23, 485201.	1.3	14
31	Reduction of lowâ€frequency noise in multilayer MoS₂ FETs using a Fermiâ€level depinning layer. Physica Status Solidi - Rapid Research Letters, 2016, 10, 634-638.	1.2	14
32	Stable MoS₂ Fieldâ€Effect Transistors Using TiO₂ Interfacial Layer at Metal/MoS₂ Contact. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1700534.	0.8	14
33	Patterned catalyst arrays of Pd/SnO₂ coreâ€“shell nanowires for electrooxidations of biomass-derived alcohols. Journal of Materials Chemistry A, 2015, 3, 13492-13499.	5.2	13
34	In-Line Tunnel Field Effect Transistor: Drive Current Improvement. IEEE Journal of the Electron Devices Society, 2018, 6, 721-725.	1.2	11
35	Improvement of the Bias Stress Stability in 2D MoS2 and WS2 Transistors with a TiO2 Interfacial Layer. Nanomaterials, 2019, 9, 1155.	1.9	11
36	Artificial 2D van der Waals Synapse Devices via Interfacial Engineering for Neuromorphic Systems. Nanomaterials, 2020, 10, 88.	1.9	11

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37	Dual-Terminal Stimulated Heterosynaptic Plasticity of IGZO Memtransistor with Al₂O₃/TiO₂ Double-Oxide Structure. ACS Applied Electronic Materials, 2022, 4, 2923-2932.	2.0	10
38	Characteristics of light-induced electron transport from P3HT to ZnO-nanowire field-effect transistors. Applied Physics Letters, 2013, 103, 223305.	1.5	9
39	One-step H₂S reactive sputtering for 2D MoS₂/Si heterojunction photodetector. Nanotechnology, 2020, 31, 225205.	1.3	9
40	Contact resistance reduction of ZnO thin film transistors (TFTs) with saw-shaped electrode. Nanotechnology, 2018, 29, 325202.	1.3	7
41	UV photoconductivity characteristics of ZnO nanowire field effect transistor treated by proton irradiation. Thin Solid Films, 2012, 520, 3624-3628.	0.8	4
42	Unveiling the Role of Al₂O₃ Interlayer in Indiumâ€“Galliumâ€“Zincâ€“Oxide Transistors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000621.	0.8	4
43	Characterization on Improved Effective Mobility of Pentacene Organic Field-Effect Transistors Using Graphene Electrodes. Japanese Journal of Applied Physics, 2012, 51, 02BK09.	0.8	3
44	Proton Irradiation-Induced Electrostatic Modulation in ZnO Nanowire Field-Effect Transistors With Bilayer Gate Dielectric. IEEE Nanotechnology Magazine, 2012, 11, 918-923.	1.1	3
45	Characterization of ZnO Nanowire Field Effect Transistors by Fast Hydrogen Peroxide Solution Treatment. Japanese Journal of Applied Physics, 2012, 51, 035001.	0.8	2
46	Photonics: Enhanced Performance of MoS₂ Photodetectors by Inserting an ALDâ€Processed TiO₂ Interlayer (Small 5/2018). Small, 2018, 14, 1870022.	5.2	2
47	Facile fabrication of ZnO nanowire memory device based on chemically-treated surface defects. Nanotechnology, 2019, 30, 155201.	1.3	2
48	Characterization on Improved Effective Mobility of Pentacene Organic Field-Effect Transistors Using Graphene Electrodes. Japanese Journal of Applied Physics, 2012, 51, 02BK09.	0.8	2
49	Large-Area, Transparent And Conductive Graphene Electrode For Bulk-Heterojunction Photovoltaic Devices. , 2011, , .		0
50	Characterization of ZnO Nanowire Field Effect Transistors by Fast Hydrogen Peroxide Solution Treatment. Japanese Journal of Applied Physics, 2012, 51, 035001.	0.8	0