Jin-Feng Zhang

List of Publications by Year
in descending order

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60	723	623734	610901
papers	citations	14 h-index	24 g-index

60	60	60	744
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Large Gain and High Resolution Diamond Radiation Detector With Au/Hydrogen Termination Ohmic Contact. IEEE Electron Device Letters, 2022, 43, 454-457.	3.9	2
2	Diamond MOSFET with MoO3/Si3N4 doubly stacked gate dielectric. Applied Physics Letters, 2022, 120, .	3.3	5
3	High Mobility Normally-OFF Hydrogenated Diamond Field Effect Transistors With BaFâ,, Gate Insulator Formed by Electron Beam Evaporator. IEEE Transactions on Electron Devices, 2022, 69, 1206-1210.	3.0	9
4	Polycrystalline diamond normally-off MESFET passivated by a MoO3 layer. Results in Physics, 2021, 20, 103760.	4.1	2
5	H-diamond MOS interface properties and FET characteristics with high-temperature ALD-grown HfO2 dielectric. AIP Advances, 2021, 11, 035041.	1.3	3
6	Demonstration of Al0.85Ga0.15N Schottky barrier diode with > 3 kV breakdown voltage and the reverse leakage currents formation mechanism analysis. Applied Physics Letters, 2021, 118, .	3.3	7
7	Model of Electron Population and Energy Band Diagram of Multiple-Channel GaN Heterostructures. IEEE Transactions on Electron Devices, 2021, 68, 1557-1562.	3.0	4
8	Normally-off polycrystalline C H diamond MISFETs with MgF2 gate insulator and passivation. Diamond and Related Materials, 2021, 119, 108547.	3.9	9
9	Lattice-matched AlInN/GaN multi-channel heterostructure and HEMTs with low on-resistance. Applied Physics Letters, 2021, 119, .	3.3	5
10	Microwave power performance analysis of hydrogen terminated diamond MOSFET. Diamond and Related Materials, 2021, 118, 108538.	3.9	6
11	Characterization and Mobility Analysis of Normally off Hydrogenâ€Terminated Diamond Metalâ€“Oxideâ€“Semiconductor Fieldâ€Effect Transistors. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900462.	1.8	12
12	A Fast Extraction Method of Energy Distribution of Border Traps in AlGaN/GaN MIS-HEMT. IEEE Journal of the Electron Devices Society, 2020, 8, 905-910.	2.1	5
13	High performance hydrogen/oxygen terminated CVD single crystal diamond radiation detector. Applied Physics Letters, 2020, 116, .	3.3	13
14	High temperature (300â€‰Â°C) ALD grown Al2O3 on hydrogen terminated diamond: Band offset and electrical properties of the MOSFETs. Applied Physics Letters, 2020, 116, .	3.3	35
15	Performance of H-diamond MOSFETs with high temperature ALD grown HfO2 dielectric. Diamond and Related Materials, 2020, 106, 107846.	3.9	12
16	Characteristics of hydrogen-terminated single crystalline diamond field effect transistors with different surface orientations. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 028101.	0.5	0
17	Simulation Investigation of Laterally Downscaled N-Polar GaN HEMTs. IEEE Transactions on Electron Devices, 2019, 66, 4673-4678.	3.0	4
18	Study of electronic transport properties in AlGaN/AlN/GaN/AlGaN double-heterojunction transistor. Journal of Applied Physics, 2019, 126, 075707.	2.5	6

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19	A > 3 kV/2.94 m $Omegacdot$ cm² and Low Leakage Current With Low Turn-On Voltage Lateral GaN Schottky Barrier Diode on Silicon Substrate With Anode Engineering Technique. IEEE Electron Device Letters, 2019, 40, 1583-1586.	3.9	50
20	High Performance Single Crystalline Diamond Normally-Off Field Effect Transistors. IEEE Journal of the Electron Devices Society, 2019, 7, 82-87.	2.1	23
21	Electronic Transport Properties in AlInGaN/AlGaN Heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700787.	1.8	4
22	GaN microrod sidewall epitaxial lateral overgrowth on a close-packed microrod template. Japanese Journal of Applied Physics, 2018, 57, 050305.	1.5	0
23	Mobility of Twoâ€Dimensional Hole Gas in Hâ€Terminated Diamond. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1700401.	2.4	30
24	An InGaN/GaN MQWs Solar Cell Improved By a Surficial GaN Nanostructure as Light Traps. IEEE Photonics Technology Letters, 2018, 30, 83-86.	2.5	9
25	Research on the hydrogen terminated single crystal diamond MOSFET with MoO3 dielectric and gold gate metal. Journal of Semiconductors, 2018, 39, 074003.	3.7	3
26	Influence of stress on the optical properties of double InGaN/GaN multiple quantum wells. Optical Materials Express, 2018, 8, 1528.	3.0	3
27	Growth and Characterization of the Laterally Enlarged Single Crystal Diamond Grown by Microwave Plasma Chemical Vapor Deposition. Chinese Physics Letters, 2018, 35, 078101.	3.3	5
28	Hydrogen-terminated polycrystalline diamond MOSFETs with Al2O3 passivation layers grown by atomic layer deposition at different temperatures. AIP Advances, 2018, 8, .	1.3	26
29	Diamond Field Effect Transistors With MoO₃Gate Dielectric. IEEE Electron Device Letters, 2017, 38, 786-789.	3.9	75
30	Improvement of reverse blocking performance in vertical power MOSFETs with Schottkyâ€“drain-connected semisuperjunctions. Chinese Physics B, 2017, 26, 047306.	1.4	0
31	Theoretical analysis of the mobility of two-dimensional electron gas in the quaternary AlxInyGa1-x-yN/GaN heterojunctions limited by the alloy composition fluctuation. AIP Advances, 2017, 7, .	1.3	4
32	Polycrystalline Diamond MOSFET With MoO₃ Gate Dielectric and Passivation Layer. IEEE Electron Device Letters, 2017, 38, 1302-1304.	3.9	15
33	Polycrystalline diamond RF MOSFET with MoO3 gate dielectric. AIP Advances, 2017, 7, .	1.3	6
34	Robust Performance of AlGaN-Channel Metal-Insulator-Semiconductor High-Electron-Mobility Transistors at High Temperatures. Chinese Physics Letters, 2017, 34, 128501.	3.3	0
35	Characterization and mobility analysis of MoO₃-gated diamond MOSFET. Japanese Journal of Applied Physics, 2017, 56, 100301.	1.5	13
36	Studies on the InAlN/InGaN/InAlN/InGaN double channel heterostructures with low sheet resistance. Applied Physics Letters, 2017, 111, 222107.	3.3	8

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37	Superior material qualities and transport properties of InGaN channel heterostructure grown by pulsed metal organic chemical vapor deposition. Chinese Physics B, 2016, 25, 018102.	1.4	2
38	Analysis of the modulation mechanisms of the electric field and breakdown performance in AlGaN/GaN HEMT with a T-shaped field-plate. Chinese Physics B, 2016, 25, 127305.	1.4	18
39	Two-dimensional electron gas (2DEG) mobility affected by the in mole fraction fluctuation in In x Al 1â^'x N/GaN heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 83, 207-210.	2.7	4
40	Superior transport properties of InGaN channel heterostructure with high channel electron mobility. Applied Physics Express, 2016, 9, 061003.	2.4	12
41	Energy relaxation of hot electrons in III-N bulk materials. Semiconductor Science and Technology, 2016, 31, 025016.	2.0	1
42	Reverse blocking characteristics and mechanisms in Schottky-drain AlGaN/GaN HEMT with a drain field plate and floating field plates. Chinese Physics B, 2016, 25, 017303.	1.4	14
43	Effects of growth temperature on the properties of InGaN channel heterostructures grown by pulsed metal organic chemical vapor deposition. AIP Advances, 2015, 5, .	1.3	15
44	Impact of charged basal stacking faults on the mobility of two-dimensional electron gas in nonpolara-plane AlGaN/GaN heterostructures. Semiconductor Science and Technology, 2015, 30, 085007.	2.0	0
45	Effects of interlayer growth condition on the transport properties of heterostructures with InGaN channel grown on sapphire by metal organic chemical vapor deposition. Applied Physics Letters, 2015, 106, .	3.3	11
46	Alloy disorder scattering limited mobility of two-dimensional electron gas in the quaternary AlInGaN/GaN heterojunctions. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 67, 77-83.	2.7	16
47	Depth-dependent mosaic tilt and twist in GaN epilayer: An approximate evaluation. Chinese Physics B, 2014, 23, 068102.	1.4	3
48	A two-dimensional fully analytical model with polarization effect for off-state channel potential and electric field distributions of GaN-based field-plated high electron mobility transistor. Chinese Physics B, 2014, 23, 087305.	1.4	10
49	Enhancement of band-to-band tunneling in mono-layer transition metal dichalcogenides two-dimensional materials by vacancy defects. Applied Physics Letters, 2014, 104, .	3.3	34
50	Anisotropic elastic scattering of stripe/line-shaped scatters to two-dimensional electron gas: Model and illustrations in a nonpolar AlGaN/GaN hetero-junction. Journal of Applied Physics, 2014, 116, 093705.	2.5	1
51	InAlN/AlN/GaN Field-Plated MIS-HEMTs with a Plasma-Enhanced Chemical Vapor Deposition SiN Gate Dielectric. Chinese Physics Letters, 2013, 30, 058502.	3.3	5
52	Structural and optical investigation of nonpolar a -plane GaN grown by metalâ€"organic chemical vapour deposition on r -plane sapphire by neutron irradiation. Chinese Physics B, 2012, 21, 027802.	1.4	2
53	Progress in Group III nitride semiconductor electronic devices. Journal of Semiconductors, 2012, 33, 081001.	3.7	11
54	Pulsed metal organic chemical vapor deposition of nearly latticed-matched InAlN/GaN/InAlN/GaN double-channel high electron mobility transistors. Applied Physics Letters, 2012, 100, .	3.3	35

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55	Optical and structural investigation ofa-plane GaN layers onr-plane sapphire with nucleation layer optimization. Chinese Physics B, 2011, 20, 057801.	1.4	9
56	High quality InAlN/GaN heterostructures grown on sapphire by pulsed metal organic chemical vapor deposition. Journal of Crystal Growth, 2011, 314, 359-364.	1.5	44
57	Development and characteristic analysis of a field-plated Al₂O₃/AlInN/GaN MOSâ€"HEMT. Chinese Physics B, 2011, 20, 017203.	1.4	10
58	Fabrication and Characteristics of AlInN/AlN/GaN MOS-HEMTs with Ultra-Thin Atomic Layer Deposited Al ₂ O ₃ Gate Dielectric. Chinese Physics Letters, 2010, 27, 128501.	3.3	17
59	The mobility of two-dimensional electron gas in AlGaN/GaN heterostructures with varied Al content. Science in China Series F: Information Sciences, 2008, 51, 780-789.	1.1	26
60	Efficient parametric yield optimization of VLSI circuit by uniform design sampling method. Microelectronics Reliability, 2005, 45, 155-162.	1.7	10