Michael S Shur

List of Publications by Year
in descending order

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1,231	39,637	2963 93	6282 158
papers	citations	h-index	g-index

1256	1256	1256	16359
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection, mixing, and frequency multiplication of terahertz radiation by two-dimensional electronic fluid. IEEE Transactions on Electron Devices, 1996, 43, 380-387.	1.6	1,007
2	Shallow water analogy for a ballistic field effect transistor: New mechanism of plasma wave generation by dc current. Physical Review Letters, 1993, 71, 2465-2468.	2.9	998
3	GaAs Devices and Circuits. , 1987, , .		513
4	Transient electron transport in wurtzite GaN, InN, and AlN. Journal of Applied Physics, 1999, 85, 7727-7734.	1.1	508
5	Threshold switching in chalcogenideâ€glass thin films. Journal of Applied Physics, 1980, 51, 3289-3309.	1.1	452
6	Sensitive skin. IEEE Sensors Journal, 2001, 1, 41-51.	2.4	444
7	An experimental study of contact effects in organic thin film transistors. Journal of Applied Physics, 2006, 100, 024509.	1.1	422
8	Nonresonant detection of terahertz radiation in field effect transistors. Journal of Applied Physics, 2002, 91, 9346-9353.	1.1	418
9	Solid-State Lighting: Toward Superior Illumination. Proceedings of the IEEE, 2005, 93, 1691-1703.	16.4	410
10	AlGaN Deep-Ultraviolet Light-Emitting Diodes with External Quantum Efficiency above 10%. Applied Physics Express, 2012, 5, 082101.	1.1	406
11	Physics of amorphous silicon based alloy fieldâ€effect transistors. Journal of Applied Physics, 1984, 55, 3831-3842.	1.1	390
12	Thin film deposition and microelectronic and optoelectronic device fabrication and characterization in monocrystalline alpha and beta silicon carbide. Proceedings of the IEEE, 1991, 79, 677-701.	16.4	386
13	Plasma wave electronics: novel terahertz devices using two dimensional electron fluid. IEEE Transactions on Electron Devices, 1996, 43, 1640-1645.	1.6	369
14	Selective Gas Sensing with a Single Pristine Graphene Transistor. Nano Letters, 2012, 12, 2294-2298.	4.5	361
15	AlGaN/GaN metal oxide semiconductor heterostructure field effect transistor. IEEE Electron Device Letters, 2000, 21, 63-65.	2.2	352
16	Plasma wave detection of terahertz radiation by silicon field effects transistors: Responsivity and noise equivalent power. Applied Physics Letters, 2006, 89, 253511.	1.5	351
17	Microwave performance of a 0.25 Î¼m gate AlGaN/GaN heterostructure field effect transistor. Applied Physics Letters, 1994, 65, 1121-1123.	1.5	345
18	Elastic strain relaxation and piezoeffect in GaN-AlN, GaN-AlGaN and GaN-InGaN superlattices. Journal of Applied Physics, 1997, 81, 6332-6338.	1.1	324

#	Article	IF	Citations
19	Resonant detection of subterahertz and terahertz radiation by plasma waves in submicron field-effect transistors. Applied Physics Letters, 2002, 81, 4637-4639.	1.5	319
20	Contact resistance extraction in pentacene thin film transistors. Solid-State Electronics, 2003, 47, 259-262.	0.8	312
21	AlGaN/GaN metalâ€“oxideâ€“semiconductor heterostructure field-effect transistors on SiC substrates. Applied Physics Letters, 2000, 77, 1339-1341.	1.5	311
22	Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors. Applied Physics Letters, 2004, 84, 2331-2333.	1.5	300
23	Monte Carlo calculation of velocity-field characteristics of wurtzite GaN. Journal of Applied Physics, 1997, 82, 1649-1655.	1.1	288
24	Electron transport in wurtzite indium nitride. Journal of Applied Physics, 1998, 83, 826-829.	1.1	282
25	Modeling of organic thin film transistors of different designs. Journal of Applied Physics, 2000, 88, 6594-6597.	1.1	282
26	Plasma wave detection of sub-terahertz and terahertz radiation by silicon field-effect transistors. Applied Physics Letters, 2004, 85, 675-677.	1.5	280
27	Deep-Ultraviolet Light-Emitting Diodes. IEEE Transactions on Electron Devices, 2010, 57, 12-25.	1.6	278
28	Temperature activated conductance in GaN/AlGaN heterostructure field effect transistors operating at temperatures up to 300â€‰Â°C. Applied Physics Letters, 1995, 66, 1083-1085.	1.5	276
29	The influence of the strainâ€induced electric field on the charge distribution in GaNâ€AlNâ€GaN structure. Journal of Applied Physics, 1993, 74, 6734-6739.	1.1	261
30	Monte Carlo simulation of electron transport in gallium nitride. Journal of Applied Physics, 1993, 74, 1818-1821.	1.1	257
31	Self-heating in high-power AlGaN-GaN HFETs. IEEE Electron Device Letters, 1998, 19, 89-91.	2.2	247
32	Si3N4/AlGaN/GaNâ€“metalâ€“insulatorâ€“semiconductor heterostructure fieldâ€“effect transistors. Applied Physics Letters, 2001, 79, 2832-2834.	1.5	243
33	Low ballistic mobility in submicron HEMTs. IEEE Electron Device Letters, 2002, 23, 511-513.	2.2	230
34	Physics of amorphous silicon alloypâ€iâ€nsolar cells. Journal of Applied Physics, 1985, 58, 997-1020.	1.1	221
35	Resonant detection of subterahertz radiation by plasma waves in a submicron field-effect transistor. Applied Physics Letters, 2002, 80, 3433-3435.	1.5	205
36	Electron mobility in two-dimensional electron gas in AlGaN/GaN heterostructures and in bulk GaN. Journal of Electronic Materials, 1996, 25, 777-785.	1.0	197

#	Article	IF	Citations
37	Model for modulation doped field effect transistor. IEEE Electron Device Letters, 1982, 3, 338-341.	2.2	194
38	High-temperature performance of AlGaN/GaN HFETs on SiC substrates. IEEE Electron Device Letters, 1997, 18, 492-494.	2.2	194
39	Piezoresistive effect in wurtzite nâ€type GaN. Applied Physics Letters, 1996, 68, 818-819.	1.5	193
40	Electron transport in AlGaNâ€“GaN heterostructures grown on 6Hâ€“SiC substrates. Applied Physics Letters, 1998, 72, 707-709.	1.5	193
41	Detection of terahertz radiation in gated two-dimensional structures governed by dc current. Physical Review B, 2006, 73, .	1.1	183
42	Influence of nonuniform field distribution on frequency limits of GaAs field-effect transistors. Electronics Letters, 1976, 12, 615.	0.5	181
43	A new analytic model for amorphous silicon thinâ€film transistors. Journal of Applied Physics, 1989, 66, 3371-3380.	1.1	180
44	Low field mobility of 2â€delectron gas in modulation doped AlxGa1â^'xAs/GaAs layers. Journal of Applied Physics, 1983, 54, 6432-6438.	1.1	172
45	Comparison of high field electron transport in GaN and GaAs. Applied Physics Letters, 1997, 70, 2849-2851.	1.5	170
46	Enhancement and depletion mode GaN/AlGaN heterostructure field effect transistors. Applied Physics Letters, 1996, 68, 514-516.	1.5	168
47	Microwave operation of GaN/AlGaN-doped channel heterostructure field effect transistors. IEEE Electron Device Letters, 1996, 17, 325-327.	2.2	165
48	Enhancement mode AlGaN/GaN HFET with selectively grown pn junction gate. Electronics Letters, 2000, 36, 753.	0.5	162
49	High power AlGaN ultraviolet light emitters. Semiconductor Science and Technology, 2014, 29, 084007.	1.0	160
50	Current/voltage characteristic collapse in AlGaN/GaN heterostructure insulated gate field effect transistors at high drain bias. Electronics Letters, 1994, 30, 2175-2176.	0.5	158
51	Electron mobility in modulation-doped AlGaNâ€“GaN heterostructures. Applied Physics Letters, 1999, 74, 287-289.	1.5	153
52	GaN/AlGaN Heterostructure Devices: Photodetectors and Field-Effect Transistors. MRS Bulletin, 1997, 22, 44-50.	1.7	148
53	Two mechanisms of blueshift of edge emission in InGaN-based epilayers and multiple quantum wells. Applied Physics Letters, 2002, 80, 977-979.	1.5	147
54	SPICE Models for Amorphous Silicon and Polysilicon Thin Film Transistors. Journal of the Electrochemical Society, 1997, 144, 2833-2839.	1.3	146

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55	Lattice and energy band engineering in AlInGaN/GaN heterostructures. Applied Physics Letters, 2000, 76, 1161-1163.	1.5	145
56	Room-temperature plasma waves resonant detection of sub-terahertz radiation by nanometer field-effect transistor. Applied Physics Letters, 2005, 87, 052107.	1.5	143
57	DC and microwave characteristics of sub-0.1- mu m gate-length planar-doped pseudomorphic HEMTs. IEEE Transactions on Electron Devices, 1989, 36, 461-473.	1.6	141
58	Threshold voltage, field effect mobility, and gate-to-channel capacitance in polysilicon TFTs. IEEE Transactions on Electron Devices, 1996, 43, 1433-1440.	1.6	141
59	Optimization of white polychromatic semiconductor lamps. Applied Physics Letters, 2002, 80, 234-236.	1.5	135
60	Terahertz lasers based on optically pumped multiple graphene structures with slot-line and dielectric waveguides. Journal of Applied Physics, 2010, 107, .	1.1	134
61	Threshold voltage modeling and the subthreshold regime of operation of short-channel MOSFETs. IEEE Transactions on Electron Devices, 1993, 40, 137-145.	1.6	132
62	Electron density of the twoâ€dimensional electron gas in modulation doped layers. Journal of Applied Physics, 1983, 54, 2093-2096.	1.1	131
63	Temperature dependence of plasmonic terahertz absorption in grating-gate gallium-nitride transistor structures. Applied Physics Letters, 2010, 96, 042105.	1.5	131
64	THz spectroscopic investigation of 2,4-dinitrotoluene. Chemical Physics Letters, 2004, 400, 357-361.	1.2	126
65	Steady-State and Transient Electron Transport Within the IIIâ€“V Nitride Semiconductors, GaN, AlN, and InN: A Review. Journal of Materials Science: Materials in Electronics, 2006, 17, 87-126.	1.1	124
66	Low-frequency electronic noise in the double-gate single-layer graphene transistors. Applied Physics Letters, 2009, 95, .	1.5	124
67	Pyroelectricity in gallium nitride thin films. Applied Physics Letters, 1996, 69, 3254-3256.	1.5	121
68	Terahertz detector utilizing two-dimensional electronic fluid. IEEE Electron Device Letters, 1998, 19, 373-375.	2.2	121
69	High electron mobility in AlGaN/GaN heterostructures grown on bulk GaN substrates. Applied Physics Letters, 2000, 77, 2551-2553.	1.5	119
70	Polar opticalâ€phonon scattering in threeâ€and twoâ€dimensional electron gases. Journal of Applied Physics, 1995, 77, 657-660.	1.1	118
71	Short-channel GaN/AlGaN doped channel heterostructure field effect transistors with 36.1 cutoff frequency. Electronics Letters, 1996, 32, 357.	0.5	118
72	A short-channel DC SPICE model for polysilicon thin-film transistors including temperature effects. IEEE Transactions on Electron Devices, 1999, 46, 1146-1158.	1.6	117

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73	Terahertz detection by high-electron-mobility transistor: Enhancement by drain bias. Applied Physics Letters, 2001, 78, 2587-2588.	1.5	117
74	Conducting laboratory experiments over the Internet. IEEE Transactions on Education, 1999, 42, 180-185.	2.0	115
75	Mechanism of the reverse gate leakage in AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 2003, 82, 3976-3978.	1.5	113
76	AlGaN-based 280nm light-emitting diodes with continuous-wave power exceeding 1mW at 25mA. Applied Physics Letters, 2004, 85, 5532-5534.	1.5	112
77	Selective chemical vapor sensing with few-layer MoS2 thin-film transistors: Comparison with graphene devices. Applied Physics Letters, 2015, 106, .	1.5	112
78	Induced strain mechanism of current collapse in AlGaN/GaN heterostructure field-effect transistors. Applied Physics Letters, 2001, 79, 2651-2653.	1.5	111
79	AlGaN/InGaN/GaN Double Heterostructure Field-Effect Transistor. Japanese Journal of Applied Physics, 2001, 40, L1142-L1144.	0.8	111
80	CW operation of short-channel GaN/AlGaN doped channel heterostructure field effect transistors at 10 GHz and 15 GHz. IEEE Electron Device Letters, 1996, 17, 584-585.	2.2	110
81	Current instability and plasma waves generation in ungated two-dimensional electron layers. Applied Physics Letters, 2005, 87, 111501.	1.5	108
82	SiO/sub 2//AlGaN/InGaN/GaN MOSDHFETs. IEEE Electron Device Letters, 2002, 23, 458-460.	2.2	106
83	Electrical and noise characteristics of graphene field-effect transistors: ambient effects, noise sources and physical mechanisms. Journal of Physics Condensed Matter, 2010, 22, 395302.	0.7	106
84	High transconductance heterostructure fieldâ€effect transistors based on AlGaN/GaN. Applied Physics Letters, 1996, 69, 794-796.	1.5	105
85	Flicker Noise in Bilayer Graphene Transistors. IEEE Electron Device Letters, 2009, 30, 288-290.	2.2	105
86	Field-Plate Engineering for HFETs. IEEE Transactions on Electron Devices, 2005, 52, 2534-2540.	1.6	104
87	Low-frequency 1/f noise in MoS2 transistors: Relative contributions of the channel and contacts. Applied Physics Letters, 2014, 104, .	1.5	104
88	AlGaN Deep-Ultraviolet Light-Emitting Diodes. Japanese Journal of Applied Physics, 2005, 44, 7250-7253.	0.8	101
89	Plasmonic terahertz lasing in an array of graphene nanocavities. Physical Review B, 2012, 86, .	1.1	101
90	SiO2-passivated lateral-geometry GaN transparent Schottky-barrier detectors. Applied Physics Letters, 2000, 77, 863-865.	1.5	100

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91	Origin of 1/f noise in graphene multilayers: Surface vs. volume. Applied Physics Letters, 2013, 102, 093111.	1.5	100
92	Efficiency droop in 245â€“247 nm AlGaN light-emitting diodes with continuous wave 2 mW output power. Applied Physics Letters, 2010, 96, .	1.5	99
93	AlGaN/GaN high electron mobility field effect transistors with low 1/f noise. Applied Physics Letters, 1998, 73, 1089-1091.	1.5	97
94	7.5 kW/mm2 current switch using AlGaN/GaN metal-oxide-semiconductor heterostructure field effect transistors on SiC substrates. Electronics Letters, 2000, 36, 2043.	0.5	97
95	Terahertz detection by GaN/AlGaN transistors. Electronics Letters, 2006, 42, 1342.	0.5	96
96	Terahertz Plasmonics: Good Results and Great Expectations. IEEE Microwave Magazine, 2014, 15, 43-50.	0.7	96
97	Performance limits for field effect transistors as terahertz detectors. Applied Physics Letters, 2013, 102, .	1.5	95
98	Currentâ€voltage characteristics of strained piezoelectric structures. Journal of Applied Physics, 1995, 77, 1616-1620.	1.1	94
99	Photoconductivity and recombination in amorphous silicon alloys. Physical Review B, 1984, 30, 6991-6999.	1.1	92
100	High-power microwave 0.25-Î¼m gate doped-channel GaN/AlGaN heterostructure field effect transistor. IEEE Electron Device Letters, 1998, 19, 44-46.	2.2	92
101	Mechanism of radio-frequency current collapse in GaNâ€“AlGaN field-effect transistors. Applied Physics Letters, 2001, 78, 2169-2171.	1.5	92
102	Ultraviolet light-emitting diodes at 340 nm using quaternary AlInGaN multiple quantum wells. Applied Physics Letters, 2001, 79, 4240-4242.	1.5	92
103	GaNâ€“AlGaN heterostructure field-effect transistors over bulk GaN substrates. Applied Physics Letters, 2000, 76, 3807-3809.	1.5	90
104	Temperature dependence of impact ionization in AlGaNâ€“GaN heterostructure field effect transistors. Applied Physics Letters, 1998, 72, 2562-2564.	1.5	89
105	Migration enhanced lateral epitaxial overgrowth of AlN and AlGaN for high reliability deep ultraviolet light emitting diodes. Applied Physics Letters, 2008, 93, .	1.5	88
106	Gated photodetector based on GaN/AlGaN heterostructure field effect transistor. Electronics Letters, 1995, 31, 398-400.	0.5	87
107	Enhanced luminescence in InGaN multiple quantum wells with quaternary AlInGaN barriers. Applied Physics Letters, 2000, 77, 2668-2670.	1.5	87
108	Hall measurements and contact resistance in doped GaN/AlGaN heterostructures. Applied Physics Letters, 1996, 68, 3022-3024.	1.5	86

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109	Resonant excitation of plasma oscillations in a partially gated two-dimensional electron layer. Journal of Applied Physics, 2005, 98, 033510.	1.1	86
110	Potential performance of indium-nitride-based devices. Applied Physics Letters, 2006, 88, 152113.	1.5	86
111	Modeling Terahertz Plasmonic Si FETs With SPICE. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 545-549.	2.0	86
112	Quantum shift of band-edge stimulated emission in InGaNâ€“GaN multiple quantum well light-emitting diodes. Applied Physics Letters, 1997, 70, 2978-2980.	1.5	85
113	Large periphery high-power AlGaN/GaN metal-oxide-semiconductor heterostructure field effect transistors on SiC with oxide-bridging. IEEE Electron Device Letters, 2001, 22, 53-55.	2.2	85
114	Indiumâ€“silicon co-doping of high-aluminum-content AlGaN for solar blind photodetectors. Applied Physics Letters, 2001, 79, 1903-1905.	1.5	85
115	Suppression of 1/f noise in near-ballistic h-BN-graphene-h-BN heterostructure field-effect transistors. Applied Physics Letters, 2015, 107, .	1.5	85
116	Temperature dependence of the Iâ€“V characteristics of modulation-doped FETs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1983, 1, 190.	1.6	82
117	Unified MOSFET model. Solid-State Electronics, 1992, 35, 1795-1802.	0.8	82
118	Twoâ€dimensional electron gas in GaNâ€“AlGaN heterostructures deposited using trimethylamineâ€alane as the aluminum source in low pressure metalorganic chemical vapor deposition. Applied Physics Letters, 1995, 67, 1429-1431.	1.5	82
119	Pulsed atomic layer epitaxy of quaternary AlInGaN layers. Applied Physics Letters, 2001, 79, 925-927.	1.5	82
120	Double-scaled potential profile in a group-III nitride alloy revealed by Monte Carlo simulation of exciton hopping. Applied Physics Letters, 2003, 83, 3722-3724.	1.5	82
121	The influence of the deformation on the two-dimensional electron gas density in GaNâ€“AlGaN heterostructures. Applied Physics Letters, 1998, 72, 64-66.	1.5	81
122	AlGaN/GaN heterostructure field-effect transistors on single-crystal bulk AlN. Applied Physics Letters, 2003, 82, 1299-1301.	1.5	81
123	Cyclotron resonance and quantum Hall effect studies of the two-dimensional electron gas confined at the GaN/AlGaN interface. Applied Physics Letters, 1997, 70, 2123-2125.	1.5	80
124	Nanometer size field effect transistors for terahertz detectors. Nanotechnology, 2013, 24, 214002.	1.3	80
125	Deep-ultraviolet emission of AlGaN/AlN quantum wells on bulk AlN. Applied Physics Letters, 2002, 81, 4658-4660.	1.5	79
126	Submicron gate Si3N4/AlGaN/GaN-metal-insulator-semiconductor heterostructure field-effect transistors. IEEE Electron Device Letters, 2003, 24, 541-543.	2.2	79

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127	Steady-state and transient electron transport within bulk wurtzite indium nitride: An updated semiclassical three-valley Monte Carlo simulation analysis. Applied Physics Letters, 2005, 87, 222103.	1.5	79
128	Breakdown current density in h-BN-capped quasi-1D TaSe₃metallic nanowires: prospects of interconnect applications. Nanoscale, 2016, 8, 15774-15782.	2.8	79
129	Scattering rates for holes near the valenceâ€band edge in semiconductors. Journal of Applied Physics, 1990, 67, 7373-7382.	1.1	78
130	A unified current-voltage model for long-channel nMOSFETs. IEEE Transactions on Electron Devices, 1991, 38, 399-406.	1.6	78
131	Plasma wave resonant detection of femtosecond pulsed terahertz radiation by a nanometer field-effect transistor. Applied Physics Letters, 2005, 87, 022102.	1.5	78
132	Surface acoustic wave velocity in single-crystal AlN substrates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 251-254.	1.7	77
133	Transition from capacitive coupling to direct charge transfer in asymmetric terahertz plasmonic assemblies. Optics Letters, 2016, 41, 5333.	1.7	77
134	Double graphene-layer plasma resonances terahertz detector. Journal Physics D: Applied Physics, 2012, 45, 302001.	1.3	76
135	Choking of electron flow: A mechanism of current saturation in field-effect transistors. Physical Review B, 1995, 51, 14341-14345.	1.1	75
136	GaN based heterostructure for high power devices. Solid-State Electronics, 1997, 41, 1555-1559.	0.8	75
137	Low-Temperature Bonded GaN-on-Diamond HEMTs With 11 W/mm Output Power at 10 GHz. IEEE Transactions on Electron Devices, 2015, 62, 3658-3664.	1.6	75
138	Terahertz sources and detectors using two-dimensional electronic fluid in high electron-mobility transistors. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 750-756.	2.9	74
139	High-quality pâ€“n junctions with quaternary AlInGaN/InGaN quantum wells. Applied Physics Letters, 2000, 77, 3800-3802.	1.5	74
140	Near-band-edge photoluminescence of wurtzite-type AlN. Applied Physics Letters, 2002, 81, 2755-2757.	1.5	74
141	Unified charge control model and subthreshold current in heterostructure field-effect transistors. IEEE Electron Device Letters, 1990, 11, 50-53.	2.2	73
142	Effect of gate leakage current on noise properties of AlGaN/GaN field effect transistors. Journal of Applied Physics, 2000, 88, 6726-6730.	1.1	73
143	AlGaN single-quantum-well light-emitting diodes with emission at 285 nm. Applied Physics Letters, 2002, 81, 3666-3668.	1.5	73
144	Insulating gate III-N heterostructure field-effect transistors for high-power microwave and switching applications. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 624-633.	2.9	73

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145	Magnetic field effect on the terahertz emission from nanometer InGaAs/AlInAs high electron mobility transistors. Journal of Applied Physics, 2005, 97, 114313.	1.1	73
146	Low-Frequency Electronic Noise in Quasi-1D TaSe₃ van der Waals Nanowires. Nano Letters, 2017, 17, 377-383.	4.5	73
147	A novel Schottky/2-DEG diode for millimeter- and submillimeter-wave multiplier applications. IEEE Electron Device Letters, 1992, 13, 11-13.	2.2	72
148	Simulation of hot electron and quantum effects in AlGaN/GaN heterostructure field effect transistors. Journal of Applied Physics, 2004, 95, 6409-6413.	1.1	72
149	Theory of junction between two-dimensional electron gas and p-type semiconductor. IEEE Transactions on Electron Devices, 1992, 39, 1216-1222.	1.6	71
150	Efficiency of light emission in high aluminum content AlGaN quantum wells. Journal of Applied Physics, 2009, 105, .	1.1	71
151	ZnO nanoparticle surface acoustic wave UV sensor. Applied Physics Letters, 2010, 96, .	1.5	71
152	Selective Sensing of Individual Gases Using Graphene Devices. IEEE Sensors Journal, 2013, 13, 2818-2822.	2.4	71
153	A new and simple model for GaAs heterojunction FET gate characteristics. IEEE Transactions on Electron Devices, 1988, 35, 570-577.	1.6	70
154	Visibleâ€“blind photoresponse of GaN-based surface acoustic wave oscillator. Applied Physics Letters, 2002, 80, 2020-2022.	1.5	70
155	Theoretical modeling of amorphous siliconâ€based alloypâ€iâ€nsolar cells. Journal of Applied Physics, 1983, 54, 5858-5863.	1.1	69
156	Monte Carlo simulation of electron transport in wurtzite aluminum nitride. Solid State Communications, 1998, 105, 621-626.	0.9	69
157	1/f noise in pentacene organic thin film transistors. Journal of Applied Physics, 2000, 88, 5395-5399.	1.1	67
158	Millimeter wave emission from GaN high electron mobility transistor. Applied Physics Letters, 2004, 84, 70-72.	1.5	67
159	Deep ultraviolet light-emitting diodes. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1815-1818.	0.8	67
160	Spectral optimization of phosphor-conversion light-emitting diodes for ultimate color rendering. Applied Physics Letters, 2008, 93, .	1.5	67
161	Low-Frequency Current Fluctuations in â€œGraphene-likeâ€•Exfoliated Thin-Films of Bismuth Selenide Topological Insulators. ACS Nano, 2011, 5, 2657-2663.	7.3	67
162	Strain and charge distribution in GaNâ€AlNâ€GaN semiconductorâ€insulatorâ€semiconductor structure for arbitrary growth orientation. Applied Physics Letters, 1993, 63, 2243-2245.	1.5	66

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163	Low-frequency noise in Al0.4Ga0.6N-based Schottky barrier photodetectors. Applied Physics Letters, 2001, 79, 866-868.	1.5	66
164	Plasmonic and bolometric terahertz detection by graphene field-effect transistor. Applied Physics Letters, 2013, 103, 181114.	1.5	66
165	Plasma and transit-time mechanisms of the terahertz radiation detection in high-electron-mobility transistors. Semiconductor Science and Technology, 2003, 18, 460-469.	1.0	65
166	Characteristics of a terahertz photomixer based on a high-electron mobility transistor structure with optical input through the ungated regions. Journal of Applied Physics, 2004, 95, 2084-2089.	1.1	65
167	Reduction of 1/f noise in graphene after electron-beam irradiation. Applied Physics Letters, 2013, 102, .	1.5	65
168	Elastic strain relaxation in GaNâ€“AlNâ€“GaN semiconductorâ€“insulatorâ€“semiconductor structures. Journal of Applied Physics, 1995, 78, 3691-3696.	1.1	64
169	0.12-Î¼m gate III-V nitride HFET's with high contact resistances. IEEE Electron Device Letters, 1997, 18, 141-143.	2.2	63
170	Terahertz photomixing in quantum well structures using resonant excitation of plasma oscillations. Journal of Applied Physics, 2002, 91, 1875-1881.	1.1	63
171	New high fieldâ€effect mobility regimes of amorphous silicon alloy thinâ€film transistor operation. Journal of Applied Physics, 1986, 59, 2488-2497.	1.1	62
172	RESURF AlGaN/GaN HEMT for high voltage power switching. IEEE Electron Device Letters, 2001, 22, 373-375.	2.2	62
173	Selective Gas Sensing With h -BN Capped MoS2 Heterostructure Thin-Film Transistors. IEEE Electron Device Letters, 2015, 36, 1202-1204.	2.2	62
174	Piezoelectric doping and elastic strain relaxation in AlGaNâ€“GaN heterostructure field effect transistors. Applied Physics Letters, 1998, 73, 3577-3579.	1.5	61
175	Universal compact model for long- and short-channel Thin-Film Transistors. Solid-State Electronics, 2008, 52, 400-405.	0.8	61
176	Plasma mechanism of terahertz photomixing in high-electron mobility transistor under interband photoexcitation. Journal of Applied Physics, 2002, 92, 5756-5760.	1.1	60
177	Citrate-Capped Gold Nanoparticle Electrophoretic Heat Production in Response to a Time-Varying Radio-Frequency Electric Field. Journal of Physical Chemistry C, 2012, 116, 24380-24389.	1.5	60
178	Unified model for short-channel poly-Si TFTs. Solid-State Electronics, 1999, 43, 1821-1831.	0.8	59
179	High quality InN/GaN heterostructures grown by migration enhanced metalorganic chemical vapor deposition. Applied Physics Letters, 2004, 84, 1892-1894.	1.5	59
180	Electromechanical coupling coefficient for surface acoustic waves in single-crystal bulk aluminum nitride. Applied Physics Letters, 2004, 84, 4611-4613.	1.5	59

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181	Splitâ€gate fieldâ€effect transistor. Applied Physics Letters, 1989, 54, 162-164.	1.5	57
182	Piezoeffect and gate current in AlGaN/GaN high electron mobility transistors. Applied Physics Letters, 1997, 71, 3673-3675.	1.5	57
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