Michael S Shur

List of Publications by Citations

1,081 papers	32,478 citations	86 h-index	144 g-index
1,256 ext. papers	36,625 ext. citations	2.5 avg, IF	7.13 L-index

#	Paper	IF	Citations
1081	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	7.4	735
1080	Detection, mixing, and frequency multiplication of terahertz radiation by two-dimensional electronic fluid. *IEEE Transactions on Electron Devices*, **1996**, 43, 380-387	2.9	691
1079	Transient electron transport in wurtzite GaN, InN, and AlN. *Journal of Applied Physics*, **1999**, 85, 7727-7734	2.5	452
1078	Threshold switching in chalcogenide-glass thin films. *Journal of Applied Physics*, **1980**, 51, 3289-3309	2.5	401
1077	. *IEEE Sensors Journal*, **2001**, 1, 41-51	4	395
1076	An experimental study of contact effects in organic thin film transistors. *Journal of Applied Physics*, **2006**, 100, 024509	2.5	385
1075	Solid-State Lighting: Toward Superior Illumination. *Proceedings of the IEEE*, **2005**, 93, 1691-1703	14.3	356
1074	AlGaN Deep-Ultraviolet Light-Emitting Diodes with External Quantum Efficiency above 10%. *Applied Physics Express*, **2012**, 5, 082101	2.4	339
1073	Physics of amorphous silicon based alloy field-effect transistors. *Journal of Applied Physics*, **1984**, 55, 3831-3842	2.5	337
1072	. *Proceedings of the IEEE*, **1991**, 79, 677-701	14.3	333
1071	GaAs Devices and Circuits **1987**,		322
1070	Selective gas sensing with a single pristine graphene transistor. *Nano Letters*, **2012**, 12, 2294-8	11.5	310
1069	Nonresonant detection of terahertz radiation in field effect transistors. *Journal of Applied Physics*, **2002**, 91, 9346-9353	2.5	303
1068	AlGaN/GaN metal oxide semiconductor heterostructure field effect transistor. *IEEE Electron Device Letters*, **2000**, 21, 63-65	4.4	296
1067	Microwave performance of a 0.25 μm gate AlGaN/GaN heterostructure field effect transistor. *Applied Physics Letters*, **1994**, 65, 1121-1123	3.4	290
1066	Contact resistance extraction in pentacene thin film transistors. *Solid-State Electronics*, **2003**, 47, 259-263	1.7	285
1065	Plasma wave electronics: novel terahertz devices using two dimensional electron fluid. *IEEE Transactions on Electron Devices*, **1996**, 43, 1640-1645	2.9	272

1064	Elastic strain relaxation and piezoeffect in GaN-AlN, GaN-AlGaN and GaN-InGaN superlattices. *Journal of Applied Physics*, **1997**, 81, 6332-6338	2.5	267
1063	AlGaN/GaN metal Oxide emiconductor heterostructure field-effect transistors on SiC substrates. *Applied Physics Letters*, **2000**, 77, 1339-1341	3.4	265
1062	Electron transport in wurtzite indium nitride. *Journal of Applied Physics*, **1998**, 83, 826-829	2.5	264
1061	Modeling of organic thin film transistors of different designs. *Journal of Applied Physics*, **2000**, 88, 6594-6597	2.5	259
1060	Plasma wave detection of terahertz radiation by silicon field effects transistors: Responsivity and noise equivalent power. *Applied Physics Letters*, **2006**, 89, 253511	3.4	249
1059	Temperature activated conductance in GaN/AlGaN heterostructure field effect transistors operating at temperatures up to 300 C. *Applied Physics Letters*, **1995**, 66, 1083-1085	3.4	247
1058	Monte Carlo calculation of velocity-field characteristics of wurtzite GaN. *Journal of Applied Physics*, **1997**, 82, 1649-1655	2.5	246
1057	Terahertz emission by plasma waves in 60 nm gate high electron mobility transistors. *Applied Physics Letters*, **2004**, 84, 2331-2333	3.4	233
1056	The influence of the strain-induced electric field on the charge distribution in GaN-AlN-GaN structure. *Journal of Applied Physics*, **1993**, 74, 6734-6739	2.5	233
1055	Deep-Ultraviolet Light-Emitting Diodes. *IEEE Transactions on Electron Devices*, **2010**, 57, 12-25	2.9	230
1054	Resonant detection of subterahertz and terahertz radiation by plasma waves in submicron field-effect transistors. *Applied Physics Letters*, **2002**, 81, 4637-4639	3.4	226
1053	Si3N4/AlGaN/GaN metal nsulator emiconductor heterostructure field ffect transistors. *Applied Physics Letters*, **2001**, 79, 2832-2834	3.4	223
1052	Monte Carlo simulation of electron transport in gallium nitride. *Journal of Applied Physics*, **1993**, 74, 1818-1821	2.5	220
1051	Plasma wave detection of sub-terahertz and terahertz radiation by silicon field-effect transistors. *Applied Physics Letters*, **2004**, 85, 675-677	3.4	219
1050	Self-heating in high-power AlGaN-GaN HFETs. *IEEE Electron Device Letters*, **1998**, 19, 89-91	4.4	212
1049	Physics of amorphous silicon alloy p-i-n solar cells. *Journal of Applied Physics*, **1985**, 58, 997-1020	2.5	192
1048	Low ballistic mobility in submicron HEMTs. *IEEE Electron Device Letters*, **2002**, 23, 511-513	4.4	185
1047	Piezoresistive effect in wurtzite n-type GaN. *Applied Physics Letters*, **1996**, 68, 818-819	3.4	179

1046	Electron mobility in two-dimensional electron gas in AlGaN/GaN heterostructures and in bulk GaN. *Journal of Electronic Materials*, **1996**, 25, 777-785	1.9	177
1045	High-temperature performance of AlGaN/GaN HFETs on SiC substrates. *IEEE Electron Device Letters* , **1997**, 18, 492-494	4.4	170
1044	Electron transport in AlGaN□GaN heterostructures grown on 6H□SiC substrates. *Applied Physics Letters*, **1998**, 72, 707-709	3.4	170
1043	Resonant detection of subterahertz radiation by plasma waves in a submicron field-effect transistor. *Applied Physics Letters*, **2002**, 80, 3433-3435	3.4	164
1042	Low field mobility of 2-d electron gas in modulation doped AlxGa1□As/GaAs layers. *Journal of Applied Physics*, **1983**, 54, 6432-6438	2.5	161
1041	Influence of nonuniform field distribution on frequency limits of GaAs field-effect transistors. *Electronics Letters*, **1976**, 12, 615	1.1	159
1040	A new analytic model for amorphous silicon thin-film transistors. *Journal of Applied Physics*, **1989**, 66, 3371-3380	2.5	155
1039	Comparison of high field electron transport in GaN and GaAs. *Applied Physics Letters*, **1997**, 70, 2849-2851	3.4	153
1038	Model for modulation doped field effect transistor. *IEEE Electron Device Letters*, **1982**, 3, 338-341	4.4	144
1037	High power AlGaN ultraviolet light emitters. *Semiconductor Science and Technology*, **2014**, 29, 084007	1.8	142
1036	Microwave operation of GaN/AlGaN-doped channel heterostructure field effect transistors. *IEEE Electron Device Letters*, **1996**, 17, 325-327	4.4	142
1035	Enhancement and depletion mode GaN/AlGaN heterostructure field effect transistors. *Applied Physics Letters*, **1996**, 68, 514-516	3.4	142
1034	Detection of terahertz radiation in gated two-dimensional structures governed by dc current. *Physical Review B*, **2006**, 73,	3.3	138
1033	Electron mobility in modulation-doped AlGaN□GaN heterostructures. *Applied Physics Letters*, **1999**, 74, 287-289	3.4	138
1032	Current/voltage characteristic collapse in AlGaN/GaN heterostructure insulated gate field effect transistors at high drain bias. *Electronics Letters*, **1994**, 30, 2175-2176	1.1	136
1031	GaN/AlGaN Heterostructure Devices: Photodetectors and Field-Effect Transistors. *MRS Bulletin*, **1997**, 22, 44-50	3.2	135
1030	Two mechanisms of blueshift of edge emission in InGaN-based epilayers and multiple quantum wells. *Applied Physics Letters*, **2002**, 80, 977-979	3.4	132
1029	Enhancement mode AlGaN/GaN HFET with selectively grown pn junction gate. *Electronics Letters*, **2000**, 36, 753	1.1	132

1028	Lattice and energy band engineering in AlInGaN/GaN heterostructures. *Applied Physics Letters*, **2000**, 76, 1161-1163	3.4	127
1027	SPICE Models for Amorphous Silicon and Polysilicon Thin Film Transistors. *Journal of the Electrochemical Society*, **1997**, 144, 2833-2839	3.9	122
1026	. *IEEE Transactions on Electron Devices*, **1989**, 36, 461-473	2.9	121
1025	Optimization of white polychromatic semiconductor lamps. *Applied Physics Letters*, **2002**, 80, 234-236	3.4	119
1024	Threshold voltage, field effect mobility, and gate-to-channel capacitance in polysilicon TFTs. *IEEE Transactions on Electron Devices*, **1996**, 43, 1433-1440	2.9	119
1023	Room-temperature plasma waves resonant detection of sub-terahertz radiation by nanometer field-effect transistor. *Applied Physics Letters*, **2005**, 87, 052107	3.4	116
1022	Low-frequency electronic noise in the double-gate single-layer graphene transistors. *Applied Physics Letters*, **2009**, 95, 033103	3.4	115
1021	Terahertz lasers based on optically pumped multiple graphene structures with slot-line and dielectric waveguides. *Journal of Applied Physics*, **2010**, 107, 054505	2.5	112
1020	Electron density of the two-dimensional electron gas in modulation doped layers. *Journal of Applied Physics*, **1983**, 54, 2093-2096	2.5	111
1019	Steady-State and Transient Electron Transport Within the III Nitride Semiconductors, GaN, AlN, and InN: A Review. *Journal of Materials Science: Materials in Electronics*, **2006**, 17, 87-126	2.1	108
1018	. *IEEE Transactions on Electron Devices*, **1993**, 40, 137-145	2.9	108
1017	High electron mobility in AlGaN/GaN heterostructures grown on bulk GaN substrates. *Applied Physics Letters*, **2000**, 77, 2551-2553	3.4	103
1016	Short-channel GaN/AlGaN doped channel heterostructure field effect transistors with 36.1 cutoff frequency. *Electronics Letters*, **1996**, 32, 357	1.1	103
1015	THz spectroscopic investigation of 2,4-dinitrotoluene. *Chemical Physics Letters*, **2004**, 400, 357-361	2.5	102
1014	Mechanism of the reverse gate leakage in AlGaN/GaN high electron mobility transistors. *Applied Physics Letters*, **2003**, 82, 3976-3978	3.4	100
1013	Polar optical-phonon scattering in three- and two-dimensional electron gases. *Journal of Applied Physics*, **1995**, 77, 657-660	2.5	100
1012	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	4.4	100
1011	AlGaN/InGaN/GaN Double Heterostructure Field-Effect Transistor. *Japanese Journal of Applied Physics*, **2001**, 40, L1142-L1144	1.4	99

1010	AlGaN-based 280nm light-emitting diodes with continuous-wave power exceeding 1mW at 25mA. *Applied Physics Letters*, **2004**, 85, 5532-5534	3.4	98
1009	Terahertz detection by high-electron-mobility transistor: Enhancement by drain bias. *Applied Physics Letters*, **2001**, 78, 2587-2588	3.4	98
1008	Selective chemical vapor sensing with few-layer MoS2 thin-film transistors: Comparison with graphene devices. *Applied Physics Letters*, **2015**, 106, 023115	3.4	97
1007	Flicker Noise in Bilayer Graphene Transistors. *IEEE Electron Device Letters*, **2009**, 30, 288-290	4.4	97
1006	Temperature dependence of plasmonic terahertz absorption in grating-gate gallium-nitride transistor structures. *Applied Physics Letters*, **2010**, 96, 042105	3.4	93
1005	Terahertz detector utilizing two-dimensional electronic fluid. *IEEE Electron Device Letters*, **1998**, 19, 373-375	4.4	93
1004	7.5 kW/mm2 current switch using AlGaN/GaN metal-oxide-semiconductor heterostructure field effect transistors on SiC substrates. *Electronics Letters*, **2000**, 36, 2043	1.1	91
1003	A short-channel DC SPICE model for polysilicon thin-film transistors including temperature effects. *IEEE Transactions on Electron Devices*, **1999**, 46, 1146-1158	2.9	91
1002	High transconductance heterostructure field-effect transistors based on AlGaN/GaN. *Applied Physics Letters*, **1996**, 69, 794-796	3.4	91
1001	Induced strain mechanism of current collapse in AlGaN/GaN heterostructure field-effect transistors. *Applied Physics Letters*, **2001**, 79, 2651-2653	3.4	90
1000	SiO/sub 2//AlGaN/InGaN/GaN MOSDHFETs. *IEEE Electron Device Letters*, **2002**, 23, 458-460	4.4	89
999	Low-frequency 1/f noise in MoS2 transistors: Relative contributions of the channel and contacts. *Applied Physics Letters*, **2014**, 104, 153104	3.4	87
998	Photoconductivity and recombination in amorphous silicon alloys. *Physical Review B*, **1984**, 30, 6991-6999	3.3	87
997	Current instability and plasma waves generation in ungated two-dimensional electron layers. *Applied Physics Letters*, **2005**, 87, 111501	3.4	86
996	SiO2-passivated lateral-geometry GaN transparent Schottky-barrier detectors. *Applied Physics Letters*, **2000**, 77, 863-865	3.4	86
995	AlGaN Deep-Ultraviolet Light-Emitting Diodes. *Japanese Journal of Applied Physics*, **2005**, 44, 7250-7253	1.4	85
994	Mechanism of radio-frequency current collapse in GaN/AlGaN field-effect transistors. *Applied Physics Letters*, **2001**, 78, 2169-2171	3.4	85
993	Current-voltage characteristics of strained piezoelectric structures. *Journal of Applied Physics*, **1995**, 77, 1616-1620	2.5	85

992	Efficiency droop in 245–247 nm AlGaN light-emitting diodes with continuous wave 2 mW output power. *Applied Physics Letters*, **2010**, 96, 061102	3.4	84
991	Electrical and noise characteristics of graphene field-effect transistors: ambient effects, noise sources and physical mechanisms. *Journal of Physics Condensed Matter*, **2010**, 22, 395302	1.8	83
990	Field-plate engineering for HFETs. *IEEE Transactions on Electron Devices*, **2005**, 52, 2534-2540	2.9	83
989	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	4.4	81
988	Pyroelectricity in gallium nitride thin films. *Applied Physics Letters*, **1996**, 69, 3254-3256	3.4	81
987	Origin of 1/f noise in graphene multilayers: Surface vs. volume. *Applied Physics Letters*, **2013**, 102, 093111	3.4	80
986	Potential performance of indium-nitride-based devices. *Applied Physics Letters*, **2006**, 88, 152113	3.4	80
985	Ultraviolet light-emitting diodes at 340 nm using quaternary AlInGaN multiple quantum wells. *Applied Physics Letters*, **2001**, 79, 4240-4242	3.4	80
984	Quantum shift of band-edge stimulated emission in InGaN–GaN multiple quantum well light-emitting diodes. *Applied Physics Letters*, **1997**, 70, 2978-2980	3.4	79
983	Pulsed atomic layer epitaxy of quaternary AlInGaN layers. *Applied Physics Letters*, **2001**, 79, 925-927	3.4	79
982	GaN–AlGaN heterostructure field-effect transistors over bulk GaN substrates. *Applied Physics Letters*, **2000**, 76, 3807-3809	3.4	79
981	Hall measurements and contact resistance in doped GaN/AlGaN heterostructures. *Applied Physics Letters*, **1996**, 68, 3022-3024	3.4	79
980	Indium–silicon co-doping of high-aluminum-content AlGaN for solar blind photodetectors. *Applied Physics Letters*, **2001**, 79, 1903-1905	3.4	78
979	High-power microwave 0.25-μm gate doped-channel GaN/AlGaN heterostructure field effect transistor. *IEEE Electron Device Letters*, **1998**, 19, 44-46	4.4	78
978	Terahertz detection by GaN/AlGaN transistors. *Electronics Letters*, **2006**, 42, 1342	1.1	77
977	AlGaN/GaN high electron mobility field effect transistors with low 1/f noise. *Applied Physics Letters*, **1998**, 73, 1089-1091	3.4	77
976	Migration enhanced lateral epitaxial overgrowth of AlN and AlGaN for high reliability deep ultraviolet light emitting diodes. *Applied Physics Letters*, **2008**, 93, 051113	3.4	76
975	Enhanced luminescence in InGaN multiple quantum wells with quaternary AlInGaN barriers. *Applied Physics Letters*, **2000**, 77, 2668-2670	3.4	76

974	Temperature dependence of impact ionization in AlGaN□GaN heterostructure field effect transistors. *Applied Physics Letters*, **1998**, 72, 2562-2564	3.4	76
973	Suppression of 1/f noise in near-ballistic h-BN-graphene-h-BN heterostructure field-effect transistors. *Applied Physics Letters*, **2015**, 107, 023106	3.4	74
972	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	3.4	74
971	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	3.4	74
970	The influence of the deformation on the two-dimensional electron gas density in GaN□AlGaN heterostructures. *Applied Physics Letters*, **1998**, 72, 64-66	3.4	74
969	Plasmonic terahertz lasing in an array of graphene nanocavities. *Physical Review B*, **2012**, 86,	3.3	73
968	AlGaN/GaN heterostructure field-effect transistors on single-crystal bulk AlN. *Applied Physics Letters*, **2003**, 82, 1299-1301	3.4	73
967	Terahertz Plasmonics: Good Results and Great Expectations. *IEEE Microwave Magazine*, **2014**, 15, 43-50	1.2	72
966	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	3.4	72
965	Conducting laboratory experiments over the Internet. *IEEE Transactions on Education*, **1999**, 42, 180-185	2.1	71
964	Gated photodetector based on GaN/AlGaN heterostructure field effect transistor. *Electronics Letters*, **1995**, 31, 398-400	1.1	71
963	Nanometer size field effect transistors for terahertz detectors. *Nanotechnology*, **2013**, 24, 214002	3.4	70
962	Deep-ultraviolet emission of AlGaN/AlN quantum wells on bulk AlN. *Applied Physics Letters*, **2002**, 81, 4658-4660	3.4	70
961	Two-dimensional electron gas in GaN□AlGaN heterostructures deposited using trimethylamine-alane as the aluminum source in low pressure metalorganic chemical vapor deposition. *Applied Physics Letters*, **1995**, 67, 1429-1431	3.4	70
960	Submicron gate Si3N4/AlGaN/GaN-metal-insulator-semiconductor heterostructure field-effect transistors. *IEEE Electron Device Letters*, **2003**, 24, 541-543	4.4	68
959	Transition from capacitive coupling to direct charge transfer in asymmetric terahertz plasmonic assemblies. *Optics Letters*, **2016**, 41, 5333-5336	3	68
958	Double graphene-layer plasma resonances terahertz detector. *Journal Physics D: Applied Physics*, **2012**, 45, 302001	3	66
957	GaN based heterostructure for high power devices. *Solid-State Electronics*, **1997**, 41, 1555-1559	1.7	66

956	Monte Carlo simulation of electron transport in wurtzite aluminum nitride. *Solid State Communications*, **1998**, 105, 621-626	1.6	66
955	Near-band-edge photoluminescence of wurtzite-type AlN. *Applied Physics Letters*, **2002**, 81, 2755-2757	3.4	65
954	Theoretical modeling of amorphous silicon-based alloy p-i-n solar cells. *Journal of Applied Physics*, **1983**, 54, 5858-5863	2.5	65
953	Temperature dependence of the I□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		65
952	High-quality p□ junctions with quaternary AlInGaN/InGaN quantum wells. *Applied Physics Letters*, **2000**, 77, 3800-3802	3.4	64
951	. *IEEE Transactions on Electron Devices*, **1988**, 35, 570-577	2.9	64
950	Resonant excitation of plasma oscillations in a partially gated two-dimensional electron layer. *Journal of Applied Physics*, **2005**, 98, 033510	2.5	63
949	Scattering rates for holes near the valence-band edge in semiconductors. *Journal of Applied Physics*, **1990**, 67, 7373-7382	2.5	63
948	Efficiency of light emission in high aluminum content AlGaN quantum wells. *Journal of Applied Physics*, **2009**, 105, 073103	2.5	62
947	Spectral optimization of phosphor-conversion light-emitting diodes for ultimate color rendering. *Applied Physics Letters*, **2008**, 93, 051115	3.4	62
946	Simulation of hot electron and quantum effects in AlGaN/GaN heterostructure field effect transistors. *Journal of Applied Physics*, **2004**, 95, 6409-6413	2.5	62
945	AlGaN single-quantum-well light-emitting diodes with emission at 285 nm. *Applied Physics Letters*, **2002**, 81, 3666-3668	3.4	62
944	Choking of electron flow: A mechanism of current saturation in field-effect transistors. *Physical Review B*, **1995**, 51, 14341-14345	3.3	62
943	Low-frequency current fluctuations in "graphene-like" exfoliated thin-films of bismuth selenide topological insulators. *ACS Nano*, **2011**, 5, 2657-63	16.7	61
942	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	4.1	61
941	ZnO nanoparticle surface acoustic wave UV sensor. *Applied Physics Letters*, **2010**, 96, 233512	3.4	60
940	Deep ultraviolet light-emitting diodes. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 1815-1818	1.6	60
939	Effect of gate leakage current on noise properties of AlGaN/GaN field effect transistors. *Journal of Applied Physics*, **2000**, 88, 6726-6730	2.5	60

938	Elastic strain relaxation in GaN□AlN□GaN semiconductor□insulator□semiconductor structures. *Journal of Applied Physics*, **1995**, 78, 3691-3696	2.5	60
937	Strain and charge distribution in GaN-AlN-GaN semiconductor-insulator-semiconductor structure for arbitrary growth orientation. *Applied Physics Letters*, **1993**, 63, 2243-2245	3.4	60
936	. *IEEE Transactions on Electron Devices*, **1992**, 39, 1216-1222	2.9	60
935	Plasma wave resonant detection of femtosecond pulsed terahertz radiation by a nanometer field-effect transistor. *Applied Physics Letters*, **2005**, 87, 022102	3.4	59
934	Visible□blind photoresponse of GaN-based surface acoustic wave oscillator. *Applied Physics Letters*, **2002**, 80, 2020-2022	3.4	59
933	. *IEEE Electron Device Letters*, **1990**, 11, 50-53	4.4	59
932	Piezoelectric doping and elastic strain relaxation in AlGaN□GaN heterostructure field effect transistors. *Applied Physics Letters*, **1998**, 73, 3577-3579	3.4	58
931	1/f noise in pentacene organic thin film transistors. *Journal of Applied Physics*, **2000**, 88, 5395-5399	2.5	58
930	New high field-effect mobility regimes of amorphous silicon alloy thin-film transistor operation. *Journal of Applied Physics*, **1986**, 59, 2488-2497	2.5	58
929	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	2.9	57
928	Surface acoustic wave velocity in single-crystal AlN substrates. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2006**, 53, 251-4	3.2	57
927	Low-frequency noise in Al0.4Ga0.6N-based Schottky barrier photodetectors. *Applied Physics Letters*, **2001**, 79, 866-868	3.4	57
926	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	4.1	56
925	Unified MOSFET model. *Solid-State Electronics*, **1992**, 35, 1795-1802	1.7	56
924	Selective Gas Sensing With h -BN Capped MoS2 Heterostructure Thin-Film Transistors. *IEEE Electron Device Letters*, **2015**, 36, 1202-1204	4.4	55
923	Selective Sensing of Individual Gases Using Graphene Devices. *IEEE Sensors Journal*, **2013**, 13, 2818-28224		55
922	Magnetic field effect on the terahertz emission from nanometer InGaAs/AlInAs high electron mobility transistors. *Journal of Applied Physics*, **2005**, 97, 114313	2.5	55
921	Reduction of 1/f noise in graphene after electron-beam irradiation. *Applied Physics Letters*, **2013**, 102, 153512	3.4	54

920	0.12-μm gate III-V nitride HFET's with high contact resistances. *IEEE Electron Device Letters*, **1997**, 18, 141-143	4.4	54
919	Electromechanical coupling coefficient for surface acoustic waves in single-crystal bulk aluminum nitride. *Applied Physics Letters*, **2004**, 84, 4611-4613	3.4	54
918	. *IEEE Electron Device Letters*, **1992**, 13, 11-13	4.4	54
917	A unified current-voltage model for long-channel nMOSFETs. *IEEE Transactions on Electron Devices*, **1991**, 38, 399-406	2.9	53
916	Citrate-capped gold nanoparticle electrophoretic heat production in response to a time-varying radiofrequency electric-field. *Journal of Physical Chemistry C*, **2012**, 116, 24380-24389	3.8	52
915	High quality InN/GaN heterostructures grown by migration enhanced metalorganic chemical vapor deposition. *Applied Physics Letters*, **2004**, 84, 1892-1894	3.4	52
914	Millimeter wave emission from GaN high electron mobility transistor. *Applied Physics Letters*, **2004**, 84, 70-72	3.4	52
913	Low-Frequency Electronic Noise in Quasi-1D TaSe van der Waals Nanowires. *Nano Letters*, **2017**, 17, 377-383	11.5	51
912	Performance limits for field effect transistors as terahertz detectors. *Applied Physics Letters*, **2013**, 102, 223505	3.4	51
911	Piezoeffect and gate current in AlGaN/GaN high electron mobility transistors. *Applied Physics Letters*, **1997**, 71, 3673-3675	3.4	51
910	Universal compact model for long- and short-channel Thin-Film Transistors. *Solid-State Electronics*, **2008**, 52, 400-405	1.7	51
909	Accumulation hole layer in p-GaN/AlGaN heterostructures. *Applied Physics Letters*, **2000**, 76, 3061-3063	3.4	51
908	RESURF AlGaN/GaN HEMT for high voltage power switching. *IEEE Electron Device Letters*, **2001**, 22, 373-375	4.4	51
907	Handbook Series on Semiconductor Parameters **1996**,		50
906	Breakdown current density in h-BN-capped quasi-1D TaSe3 metallic nanowires: prospects of interconnect applications. *Nanoscale*, **2016**, 8, 15774-82	7.7	49
905	High current-induced degradation of AlGaN ultraviolet light emitting diodes. *Journal of Applied Physics*, **2011**, 109, 103108	2.5	49
904	Graphene thickness-graded transistors with reduced electronic noise. *Applied Physics Letters*, **2012**, 100, 033103	3.4	49
903	Plasma and transit-time mechanisms of the terahertz radiation detection in high-electron-mobility transistors. *Semiconductor Science and Technology*, **2003**, 18, 460-469	1.8	49

902	10 Milliwatt Pulse Operation of 265 nm AlGaN Light Emitting Diodes. *Japanese Journal of Applied Physics*, **2005**, 44, L98-L100	1.4	49
901	Unified model for short-channel poly-Si TFTs. *Solid-State Electronics*, **1999**, 43, 1821-1831	1.7	49
900	Internal quantum efficiency in AlGaN with strong carrier localization. *Applied Physics Letters*, **2012**, 101, 211902	3.4	48
899	Device loading effects on nonresonant detection of terahertz radiation by silicon MOSFETs. *Electronics Letters*, **2007**, 43, 422	1.1	48
898	Split-gate field-effect transistor. *Applied Physics Letters*, **1989**, 54, 162-164	3.4	48
897	Modeling Terahertz Plasmonic Si FETs With SPICE. *IEEE Transactions on Terahertz Science and Technology*, **2013**, 3, 545-549	3.4	47
896	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	2.5	47
895	Plasmonic and bolometric terahertz detection by graphene field-effect transistor. *Applied Physics Letters*, **2013**, 103, 181114	3.4	46
894	Time-resolved electroluminescence of AlGaN-based light-emitting diodes with emission at 285 nm. *Applied Physics Letters*, **2003**, 82, 167-169	3.4	46
893	Acoustic phonon scattering of two-dimensional electrons in GaN/AlGaN heterostructures. *Applied Physics Letters*, **2002**, 80, 1228-1230	3.4	46
892	Piezoelectric doping in AlInGaN/GaN heterostructures. *Applied Physics Letters*, **1999**, 75, 2806-2808	3.4	46
891	Localization potentials in AlGaN epitaxial films studied by scanning near-field optical spectroscopy. *Journal of Applied Physics*, **2011**, 109, 113516	2.5	45
890	Plasma oscillations in high-electron-mobility transistors with recessed gate. *Journal of Applied Physics*, **2006**, 99, 084507	2.5	45
889	Terahertz photomixing in quantum well structures using resonant excitation of plasma oscillations. *Journal of Applied Physics*, **2002**, 91, 1875-1881	2.5	45
888	Optical bandgap formation in AlInGaN alloys. *Applied Physics Letters*, **2000**, 77, 2136-2138	3.4	45
887	Effect of plasma resonances on dynamic characteristics of double graphene-layer optical modulator. *Journal of Applied Physics*, **2012**, 112, 104507	2.5	44
886	Low frequency noise in GaN metal semiconductor and metal oxide semiconductor field effect transistors. *Journal of Applied Physics*, **2001**, 90, 310-314	2.5	44
885	Band-edge luminescence in quaternary AlInGaN light-emitting diodes. *Applied Physics Letters*, **2001**, 78, 817-819	3.4	44

884	Two-channel AlGaN/GaN heterostructure field effect transistor for high power applications. *Journal of Applied Physics*, **1999**, 85, 3009-3011	2.5	44
883	The reaction of aminoheterocycles with reactive esters. I. Aminopyridines. *Journal of Organic Chemistry*, **1968**, 33, 3015-3020	4.2	44
882	Plasmonic terahertz detector response at high intensities. *Journal of Applied Physics*, **2012**, 112, 014508	2.5	43
881	Self-heating and kink effects in a-Si:H thin film transistors. *IEEE Transactions on Electron Devices*, **2000**, 47, 387-397	2.9	43
880	The cyclotron resonance effective mass of two-dimensional electrons confined at the GaN/AlGaN interface. *Solid State Communications*, **1996**, 99, 195-199	1.6	43
879	. *IEEE Transactions on Electron Devices*, **1991**, 38, 1976-1977	2.9	43
878	The Raman Spectrum of NaNO2 in the Ferroelectric Phase. *Physica Status Solidi (B): Basic Research*, **1966**, 17, 163-171	1.3	43
877	Solid-state lamps with optimized color saturation ability. *Optics Express*, **2010**, 18, 2287-95	3.3	40
876	Plasma Wave Electronics. *International Journal of High Speed Electronics and Systems*, **2003**, 13, 575-600	0.5	40
875	Simulation of gate lag and current collapse in gallium nitride field-effect transistors. *Applied Physics Letters*, **2004**, 85, 4780-4782	3.4	40
874	Correlation between carrier localization and efficiency droop in AlGaN epilayers. *Applied Physics Letters*, **2013**, 103, 011906	3.4	39
873	Fast-response surface acoustic wave humidity sensor based on hematoporphyrin film. *Sensors and Actuators B: Chemical*, **2009**, 137, 592-596	8.5	39
872	Piezoresistive effect in GaN/AlN/GaN structures. *Applied Physics Letters*, **1997**, 71, 3817-3819	3.4	39
871	Growth and characterization of epitaxial layers on aluminum nitride substrates prepared from bulk, single crystals. *Journal of Crystal Growth*, **2002**, 240, 508-512	1.6	39
870	Spectroscopic characterization of explosives in the far-infrared region **2004**, 5411, 1		39
869	. *IEEE Transactions on Electron Devices*, **2001**, 48, 530-534	2.9	39
868	. *IEEE Transactions on Electron Devices*, **1988**, 35, 1241-1246	2.9	39
867	Graphene Tunneling Transit-Time Terahertz Oscillator Based on Electrically Induced p-i-n Junction. *Applied Physics Express*, **2009**, 2, 034503	2.4	38

866	HIGHER-ORDER PLASMON RESONANCES IN GAN-BASED FIELD-EFFECT TRANSISTOR ARRAYS. *International Journal of High Speed Electronics and Systems*, **2007**, 17, 557-566	0.5	38
865	Very-low-specific-resistance Pd/Ag/Au/Ti/Au alloyed ohmic contact to p GaN for high-current devices. *Applied Physics Letters*, **2001**, 78, 2781-2783	3.4	38
864	Low-frequency noise in AlGaN/GaN heterojunction field effect transistors on SiC and sapphire substrates. *Journal of Applied Physics*, **2000**, 87, 1849-1854	2.5	38
863	Transformation of the plasmon spectrum in a grating-gate transistor structure with spatially modulated two-dimensional electron channel. *Semiconductors*, **2010**, 44, 1406-1413	0.7	37
862	. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 331-339	4.1	37
861	Degradation of AlGaN-based ultraviolet light emitting diodes. *Solid-State Electronics*, **2008**, 52, 968-972	1.7	37
860	Density of Deep Bandgap States in Amorphous Silicon From the Temperature Dependence of Thin Film Transistor Current. *Materials Research Society Symposia Proceedings*, **1994**, 336, 823		37
859	Helicity-Driven Ratchet Effect Enhanced by Plasmons. *Physical Review Letters*, **2015**, 114, 246601	7.4	36
858	Dynamic effects in double graphene-layer structures with inter-layer resonant-tunnelling negative conductivity. *Journal Physics D: Applied Physics*, **2013**, 46, 315107	3	36
857	Current-induced terahertz oscillations in plasmonic crystal. *Applied Physics Letters*, **2012**, 100, 232108	3.4	36
856	Terahertz photomixing using plasma resonances in double-graphene layer structures. *Journal of Applied Physics*, **2013**, 113, 174506	2.5	36
855	Amplification and lasing of terahertz radiation by plasmons in graphene with a planar distributed Bragg resonator. *Journal of Optics (United Kingdom)*, **2013**, 15, 114009	1.7	36
854	Large Chip High Power Deep Ultraviolet Light-Emitting Diodes. *Applied Physics Express*, **2010**, 3, 062101	2.4	36
853	Quaternary AlInGaN Multiple Quantum Wells for Ultraviolet Light Emitting Diodes. *Japanese Journal of Applied Physics*, **2001**, 40, L921-L924	1.4	36
852	1/ f Noise Characteristics of MoS2 Thin-Film Transistors: Comparison of Single and Multilayer Structures. *IEEE Electron Device Letters*, **2015**, 36, 517-519	4.4	35
851	Color rendition engine. *Optics Express*, **2012**, 20, 5356-67	3.3	35
850	Compact Model of Current Collapse in Heterostructure Field-Effect Transistors. *IEEE Electron Device Letters*, **2007**, 28, 332-335	4.4	35
849	Plasma mechanism of terahertz photomixing in high-electron mobility transistor under interband photoexcitation. *Journal of Applied Physics*, **2002**, 92, 5756-5760	2.5	35

848	. *IEEE Transactions on Electron Devices*, **1990**, 37, 908-919	2.9	35
847	Closing the Gap: Plasma Wave Electronic Terahertz Detectors. *Journal of Nanoelectronics and Optoelectronics*, **2007**, 2, 209-221	1.3	35
846	Statistical approach to color quality of solid-state lamps*. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 1753-1762	3.8	34
845	Channel mobility and on-resistance of vertical double implanted 4H-SiC MOSFETs at elevated temperatures. *Semiconductor Science and Technology*, **2009**, 24, 075011	1.8	34
844	Tuning of ungated plasmons by a gate in the field-effect transistor with two-dimensional electron channel. *Journal of Applied Physics*, **2008**, 104, 024508	2.5	34
843	Field effect transistor as ultrafast detector of modulated terahertz radiation. *Solid-State Electronics* , **2008**, 52, 182-185	1.7	34
842	Current and optical noise of GaN/AlGaN light emitting diodes. *Journal of Applied Physics*, **2006**, 100, 034504	2.5	34
841	Dynamic current-voltage characteristics of III-N HFETs. *IEEE Electron Device Letters*, **2003**, 24, 680-682	4.4	34
840	Effective g* factor of two-dimensional electrons in GaN/AlGaN heterojunctions. *Applied Physics Letters*, **1999**, 75, 3156-3158	3.4	34
839	A new interpretation of "End" resistance measurements. *IEEE Electron Device Letters*, **1984**, 5, 5-7	4.4	34
838	Steady-state electron transport in the III/V nitride semiconductors: A sensitivity analysis. *Journal of Electronic Materials*, **2003**, 32, 327-334	1.9	33
837	Two-dimensional hole gas induced by piezoelectric and pyroelectric charges. *Solid-State Electronics*, **2000**, 44, 205-210	1.7	33
836	GaN-based SAW delay-line oscillator. *Electronics Letters*, **2001**, 37, 545	1.1	33
835	. *IEEE Transactions on Electron Devices*, **1995**, 42, 1724-1734	2.9	33
834	. *IEEE Transactions on Electron Devices*, **1989**, 36, 2371-2379	2.9	33
833	Terahertz response of field-effect transistors in saturation regime. *Applied Physics Letters*, **2011**, 98, 243505	3.4	32
832	Colour-rendition properties of solid-state lamps. *Journal Physics D: Applied Physics*, **2010**, 43, 354006	3	32
831	Aging of AlGaN quantum well light emitting diode studied by scanning near-field optical spectroscopy. *Applied Physics Letters*, **2009**, 95, 181914	3.4	32

830	Temperature coefficient of SAW frequency in single crystal bulk AlN. *Electronics Letters*, **2003**, 39, 755	1.1	32
829	An ultra-stable non-coherent light source for optical measurements in neuroscience and cell physiology. *Journal of Neuroscience Methods*, **2005**, 141, 165-9	3	32
828	Time-resolved experimental study of carrier lifetime in GaN epilayers. *Applied Physics Letters*, **2005**, 87, 241918	3.4	32
827	Below threshold conduction in a-Si:H thin film transistors with and without a silicon nitride passivating layer. *Applied Physics Letters*, **1996**, 69, 2560-2562	3.4	32
826	. *IEEE Transactions on Electron Devices*, **1992**, 39, 738-740	2.9	32
825	DC and microwave performance of a GaN/AlGaN MOSHFET under high temperature stress. *Solid-State Electronics*, **2002**, 46, 1211-1214	1.7	31
824	Hole subbands in one-dimensional quantum well wires. *Superlattices and Microstructures*, **1988**, 4, 623-626	1.68	31
823	Graphene terahertz uncooled bolometers. *Journal Physics D: Applied Physics*, **2013**, 46, 065102	3	30
822	Enhanced electromagnetic coupling between terahertz radiation and plasmons in a grating-gate transistor structure on membrane substrate. *Optics Express*, **2010**, 18, 16771-6	3.3	30
821	SILICON FINFETS AS DETECTORS OF TERAHERTZ AND SUB-TERAHERTZ RADIATION. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 27-42	0.5	30
820	Steady-state and transient electron transport within bulk wurtzite zinc oxide. *Solid State Communications*, **2010**, 150, 2182-2185	1.6	30
819	Analytical HFET I□V Model in Presence of Current Collapse. *IEEE Transactions on Electron Devices*, **2008**, 55, 712-720	2.9	30
818	Well-width-dependent carrier lifetime in AlGaN□AlGaN quantum wells. *Applied Physics Letters*, **2007**, 90, 131907	3.4	30
817	Low-frequency noise in GaN/GaAlN heterojunctions. *Applied Physics Letters*, **1998**, 72, 3053-3055	3.4	30
816	Two dimensional electronic flute. *Applied Physics Letters*, **1995**, 67, 1137-1139	3.4	30
815	Spreading resistance of a round ohmic contact. *Solid-State Electronics*, **1993**, 36, 143-146	1.7	30
814	. *IEEE Electron Device Letters*, **1988**, 9, 355-357	4.4	30
813	Persistent photoconductivity in (Al,Ga)As/GaAs modulation doped structures: Dependence on structure and growth temperature. *Journal of Applied Physics*, **1983**, 54, 5214-5217	2.5	30

812	Steady-state and transient electron transport within the wide energy gap compound semiconductors gallium nitride and zinc oxide: an updated and critical review. *Journal of Materials Science: Materials in Electronics*, **2014**, 25, 4675-4713	2.1	29
811	High-temperature performance of MoS2 thin-film transistors: Direct current and pulse current-voltage characteristics. *Journal of Applied Physics*, **2015**, 117, 064301	2.5	29
810	GaN and Related Materials for High Power Applications. *Materials Research Society Symposia Proceedings*, **1997**, 483, 15		29
809	Low frequency noise and long-term stability of noncoherent light sources. *Journal of Applied Physics*, **2004**, 96, 966-969	2.5	29
808	Light-Emitting Diodes: Progress in Solid-State Lighting. *MRS Bulletin*, **2001**, 26, 764-769	3.2	29
807	Double-graphene-layer terahertz laser: concept, characteristics, and comparison. *Optics Express*, **2013**, 21, 31567-77	3.3	28
806	Cultural Preferences to Color Quality of Illumination of Different Artwork Objects Revealed by a Color Rendition Engine. *IEEE Photonics Journal*, **2013**, 5, 6801010-6801010	1.8	28
805	Carrier lifetime in conductive and vanadium-doped 6H-SiC substrates. *Applied Physics Letters*, **2004**, 84, 335-337	3.4	28
804	Transit-time mechanism of plasma instability in high electron mobility transistors. *Physica Status Solidi A*, **2005**, 202, R113-R115		28
803	Maximum current in nitride-based heterostructure field-effect transistors. *Applied Physics Letters*, **2002**, 80, 3216-3218	3.4	28
802	. *IEEE Transactions on Electron Devices*, **1988**, 35, 1564-1565	2.9	28
801	Raman Spectrum and Phase Transition in the Ferroelectric Crystal NaNO2. *Physica Status Solidi (B): Basic Research*, **1966**, 17, 173-176	1.3	28
800	Amplified-reflection plasmon instabilities in grating-gate plasmonic crystals. *Physical Review B*, **2017**, 95,	3.3	27
799	Current-driven plasmonic boom instability in three-dimensional gated periodic ballistic nanostructures. *Physical Review B*, **2016**, 93,	3.3	27
798	Optical studies of degradation of AlGaN quantum well based deep ultraviolet light emitting diodes. *Journal of Applied Physics*, **2010**, 108, 093113	2.5	27
797	Large-signal linearity in III-N MOSDHFETs. *IEEE Electron Device Letters*, **2003**, 24, 369-371	4.4	27
796	Migration enhanced MOCVD (MEMOCVDTM) buffers for increased carrier lifetime in GaN and AlGaN epilayers on sapphire and SiC substrate. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2095-2098		27
795	Nonresonant detection of terahertz radiation by silicon-on-insulator MOSFETs. *Electronics Letters*, **2005**, 41, 447	1.1	27

794	Low-frequency noise in AlGaN/GaN MOS-HFETs. *Electronics Letters*, **2000**, 36, 268	1.1	27
793	. *IEEE Transactions on Electron Devices*, **1990**, 37, 2171-2175	2.9	27
792	Trapping-enhanced temperature variation of the threshold voltage of GaAs MESFET's. *IEEE Transactions on Electron Devices*, **1986**, 33, 792-798	2.9	27
791	Flat-band voltage and surface states in amorphous silicon-based alloy field-effect transistors. *Journal of Applied Physics*, **1984**, 56, 382-386	2.5	27
790	A tunneling emitter bipolar transistor. *IEEE Electron Device Letters*, **1986**, 7, 416-418	4.4	27
789	Terahertz photoconductive emitter with dielectric-embedded high-aspect-ratio plasmonic grating for operation with low-power optical pumps. *AIP Advances*, **2019**, 9, 015112	1.5	27
788	A 2015 perspective on the nature of the steady-state and transient electron transport within the wurtzite phases of gallium nitride, aluminum nitride, indium nitride, and zinc oxide: a critical and retrospective review. *Journal of Materials Science: Materials in Electronics*, **2015**, 26, 4475-4512	2.1	26
787	High-Temperature Performance of AlGaN/GaN Metal□Oxide□Semiconductor Heterostructure Field-Effect-Transistors. *Physica Status Solidi A*, **2001**, 188, 219-222		26
786	Piezoresistive effect in metal□semiconductor□metal structures on p-type GaN. *Applied Physics Letters*, **2000**, 76, 3956-3958	3.4	26
785	. *IEEE Electron Device Letters*, **1994**, 15, 236-238	4.4	26
784	Current-voltage and capacitance-voltage characteristics of heterostructure insulated-gate field-effect transistors. *IEEE Transactions on Electron Devices*, **1987**, 34, 1650-1657	2.9	26
783	Plasma Instability and Terahertz Generation in HEMTs Due to Electron Transit-Time Effect. *IEICE Transactions on Electronics*, **2006**, E89-C, 1012-1019	0.4	26
782	Voltage-tunable terahertz and infrared photodetectors based on double-graphene-layer structures. *Applied Physics Letters*, **2014**, 104, 163505	3.4	25
781	Electrically induced n□p□n junctions in multiple graphene layer structures. *Physical Review B*, **2010**, 82,	3.3	25
780	Recent advances in application of acoustic, acousto-optic and photoacoustic methods in biology and medicine. *Physica Status Solidi (A) Applications and Materials Science*, **2007**, 204, 3209-3236	1.6	25
779	Exciton and carrier motion in quaternary AlInGaN. *Applied Physics Letters*, **2003**, 82, 4501-4503	3.4	25
778	Admittance of a slot diode with a two-dimensional electron channel. *Journal of Applied Physics*, **2003**, 93, 10041-10045	2.5	25
777	Polar optical phonon instability and intervalley transfer in III□V semiconductors. *Solid State Communications*, **2001**, 118, 79-83	1.6	25

776	Plasma Instability and Nonlinear Terahertz Oscillations in Resonant-Tunneling Structures. *Japanese Journal of Applied Physics*, **2001**, 40, 546-550	1.4	25
775	Electron mobility and velocity in compensated GaAs. *Applied Physics Letters*, **1986**, 49, 342-344	3.4	25
774	THz SPICE for Modeling Detectors and Nonquadratic Response at Large Input Signal. *IEEE Sensors Journal*, **2013**, 13, 55-62	4	24
773	Plasma wave terahertz electronics. *Electronics Letters*, **2010**, 46, S18	1.1	24
772	Plasmonic terahertz detectors for biodetection. *Electronics Letters*, **2008**, 44, 1391	1.1	24
771	Plasma wave instability and amplification of terahertz radiation in field-effect-transistor arrays. *Journal of Physics Condensed Matter*, **2008**, 20, 384208	1.8	24
770	Deep-UV LED controlled AlGaN-based SAW oscillator. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 1834-1838	1.6	24
769	Plasma oscillations in a slot diode structure with a two-dimensional electron channel. *Journal of Applied Physics*, **2004**, 96, 7625-7628	2.5	24
768	Low frequency noise in AlGaN/InGaN/GaN double heterostructure field effect transistors. *Solid-State Electronics*, **2003**, 47, 1099-1104	1.7	24
767	Exciton hopping and nonradiative decay in AlGaN epilayers. *Applied Physics Letters*, **2005**, 87, 172102	3.4	24
766	Resonant detection and frequency multiplication of terahertz radiation utilizing plasma waves in resonant-tunneling transistors. *Journal of Applied Physics*, **2000**, 88, 2868-2871	2.5	24
765	Drift mobility of electrons in AlGaN/GaN MOSHFET. *Electronics Letters*, **2001**, 37, 1479	1.1	24
764	Low-frequency noise in n-GaN with high electron mobility. *Journal of Applied Physics*, **1999**, 86, 5075-5078	2.5	24
763	Capacitance-voltage characteristics of amorphous silicon thin-film transistors. *Journal of Applied Physics*, **1989**, 66, 3381-3385	2.5	24
762	Lattice Reflection and Optical Constants of ZnSnP2 Crystals with Chalcopyrite and Sphalerite Structure. *Physica Status Solidi (B): Basic Research*, **1969**, 32, 473-479	1.3	24
761	Deep-ultraviolet tailored- and low-refractive index antireflection coatings for light-extraction enhancement of light emitting diodes. *Journal of Applied Physics*, **2013**, 113, 163105	2.5	23
760	Theory and measurement of plasmonic terahertz detector response to large signals. *Journal of Applied Physics*, **2014**, 115, 064503	2.5	23
759	Steady-state and transient electron transport within wurtzite and zinc-blende indium nitride. *Journal of Applied Physics*, **2013**, 113, 113709	2.5	23

758	Stimulated emission in AlGaN/AlGaN quantum wells with different Al content. *Applied Physics Letters*, **2012**, 100, 081902	3.4	23
757	Mechanism of self-excitation of terahertz plasma oscillations in periodically double-gated electron channels. *Journal of Physics Condensed Matter*, **2008**, 20, 384207	1.8	23
756	Low-frequency noise in GaN nanowire transistors. *Journal of Applied Physics*, **2008**, 103, 064501	2.5	23
755	Optimization of multichip white solid state lighting source with four or more LEDs **2001**, 4445, 148		23
754	Highly doped thin-channel GaN-metal semiconductor field-effect transistors. *Applied Physics Letters*, **2001**, 78, 769-771	3.4	23
753	Low-frequency noise in GaN/AlGaN heterostructure field-effect transistors at cryogenic temperatures. *Journal of Applied Physics*, **2002**, 92, 4726-4730	2.5	23
752	Plasma Wave Electronics for Terahertz Applications **2001**, 187-207		23
751	Disk and stripe capacitances. *Solid-State Electronics*, **1995**, 38, 731-734	1.7	23
750	. *IEEE Transactions on Electron Devices*, **1991**, 38, 592-602	2.9	23
749	Monte Carlo simulation of semiconductor devices. *Computer Physics Communications*, **1991**, 67, 1-61	4.2	23
748	. *IEEE Transactions on Electron Devices*, **1989**, 36, 453-456	2.9	23
747	Intensity dependence of the minority-carrier diffusion length in amorphous silicon based alloys. *Journal of Applied Physics*, **1984**, 55, 2967-2971	2.5	23
746	Schottky barrier profiles in amorphous silicon-based materials. *Journal of Non-Crystalline Solids*, **1980**, 35-36, 731-736	3.9	23
745	Modelling effect of parasitics in plasmonic FETs. *Solid-State Electronics*, **2015**, 104, 75-78	1.7	22
744	Screening dynamics of intrinsic electric field in AlGaN quantum wells. *Applied Physics Letters*, **2008**, 92, 061907	3.4	22
743	Progress in GaN Performances and Reliability. *Device Research Conference, IEEE Annual*, **2007**,		22
742	247 nm Ultra-Violet Light Emitting Diodes. *Japanese Journal of Applied Physics*, **2007**, 46, L263-L264	1.4	22
741	Carrier transport and recombination in InGaN/GaN heterostructures, studied by optical four-wave mixing technique. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 2686-2690		22

740	Concentration dependence of the 1/fnoise in AlGaN/GaN heterostructure field effect transistors. *Semiconductor Science and Technology*, **2002**, 17, 476-479	1.8	22
739	Minority-carrier diffusion lengths in amorphous silicon-based alloys. *Journal of Applied Physics*, **1982**, 53, 6270-6275	2.5	22
738	Graphene based plasma-wave devices for terahertz applications. *Applied Physics Letters*, **2020**, 116, 140501	3.4	21
737	The sensitivity of the electron transport within bulk wurtzite indium nitride to variations in the crystal temperature, the doping concentration, and the non-parabolicity coefficient: an updated Monte Carlo analysis. *Journal of Materials Science: Materials in Electronics*, **2010**, 21, 218-230	2.1	21
736	Quadrichromatic white solid state lamp with digital feedback **2004**, 5187, 185		21
735	Surface reconstruction of zinc-blende GaN. *Applied Physics Letters*, **1996**, 69, 2397-2399	3.4	21
734	. *IEEE Transactions on Electron Devices*, **1991**, 38, 840-851	2.9	21
733	. *IEEE Transactions on Microwave Theory and Techniques*, **1991**, 39, 857-863	4.1	21
732	Analysis of light-induced degradation in amorphous silicon alloy p-i-n solar cells. *Journal of Applied Physics*, **1985**, 58, 1656-1661	2.5	21
731	Resonant plasmonic terahertz detection in graphene split-gate field-effect transistors with lateral p□ junctions. *Journal Physics D: Applied Physics*, **2016**, 49, 315103	3	21
730	Imaging of field-effect transistors by focused terahertz radiation. *Solid-State Electronics*, **2009**, 53, 571-573	1.7	20
729	Plasma mechanisms of resonant terahertz detection in a two-dimensional electron channel with split gates. *Journal of Applied Physics*, **2008**, 103, 014504	2.5	20
728	Strong terahertz absorption bands in a scaled plasmonic crystal. *Applied Physics Letters*, **2007**, 90, 251910	3.4	20
727	Enhanced heterostructure field effect transistor CAD model suitable for simulation of mixed mode circuits. *IEEE Transactions on Electron Devices*, **1999**, 46, 1577-1588	2.9	20
726	Heterodimensional Schottky metal□wo-dimensional electron gas interfaces. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1993**, 11, 1670		20
725	Graphene vertical cascade interband terahertz and infrared photodetectors. *2D Materials*, **2015**, 2, 025002	3.9	19
724	The sensitivity of the steady-state and transient electron transport within bulk wurtzite zinc oxide to variations in the crystal temperature, the doping concentration, and the non-parabolicity coefficient. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 2-12	2.1	19
723	Influence of carrier localization on high-carrier-density effects in AlGaN quantum wells. *Optics Express*, **2014**, 22 Suppl 2, A491-7	3.3	19

722	Color rendition engineering of phosphor-converted light-emitting diodes. *Optics Express*, **2013**, 21, 26643-56	3.5	19
721	Rendering a color palette by light-emitting diodes. *Applied Physics Letters*, **2008**, 93, 021109	3.4	19
720	Electron transport and terahertz radiation detection in submicrometer-sized GaAs/AlGaAs field-effect transistors with two-dimensional electron gas. *Physics of the Solid State*, **2004**, 46, 146-149	0.8	19
719	Photoluminescence of AlGaN grown on bulk AlN substrates. *Applied Physics Letters*, **2004**, 85, 206-208	3.4	19
718	Electromechanical Coupling Coefficient for Surface Acoustic Waves in GaN-on-Sapphire. *Physica Status Solidi (B): Basic Research*, **2002**, 234, 897-900	1.3	19
717	SPICE modeling of neutron displacement damage and annealing effects in bipolar junction transistors. *IEEE Transactions on Nuclear Science*, **2003**, 50, 1873-1877	1.7	19
716	Spin and interaction effects in Shubnikov□de Haas oscillations and the quantum Hall effect in GaN/AlGaN heterostructures. *Journal of Physics Condensed Matter*, **2004**, 16, 3421-3432	1.8	19
715	High temperature operation of □silicon carbide buried-gate junction field-effect transistors. *Electronics Letters*, **1991**, 27, 1038	1.1	19
714	Observation of two modes of current transport through phosphorus-doped amorphous hydrogenated silicon Schottky barriers. *Applied Physics Letters*, **1982**, 40, 234-236	3.4	19
713	Negative and positive terahertz and infrared photoconductivity in uncooled graphene. *Optical Materials Express*, **2019**, 9, 585	2.6	19
712	Ultimate response time of high electron mobility transistors. *Journal of Applied Physics*, **2015**, 117, 174502	2.5	18
711	Deep Ultraviolet Light-Emitting Diodes. *Springer Series in Materials Science*, **2012**, 83-120	0.9	18
710	A transient electron transport analysis of bulk wurtzite zinc oxide. *Journal of Applied Physics*, **2012**, 112, 033720	2.5	18
709	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 1189-1198	3.8	18
708	Photoluminescence efficiency droop and stimulated recombination in GaN epilayers. *Optics Express*, **2012**, 20, 25195-200	3.3	18
707	A detailed characterization of the transient electron transport within zinc oxide, gallium nitride, and gallium arsenide. *Journal of Applied Physics*, **2012**, 112, 123722	2.5	18
706	Enhancement of Schottky barrier height in heterodimensional metal-semiconductor contacts. *Applied Physics Letters*, **1997**, 70, 441-442	3.4	18
705	GaN based transistors for high temperature applications. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1997**, 46, 69-73	3.1	18

704	High-power AlGaN□hGaN□AlGaN□GaN recessed gate heterostructure field-effect transistors. *Applied Physics Letters*, **2005**, 86, 143512	3.4	18
703	Lifetime of nonequilibrium carriers in high-Al-content AlGaN epilayers. *Physica Status Solidi A*, **2005**, 202, 126-130		18
702	Tunnelling- and barrier-injection transit-time mechanisms of terahertz plasma instability in high-electron mobility transistors. *Semiconductor Science and Technology*, **2002**, 17, 1168-1171	1.8	18
701	Dynamic behavior of hot-electron□ole plasma in highly excited GaN epilayers. *Applied Physics Letters*, **2000**, 76, 2388-2390	3.4	18
700	Monte Carlo simulation of electron transport in mercury cadmium telluride. *Journal of Applied Physics*, **1992**, 71, 4977-4982	2.5	18
699	Characteristics of modulation-doped AlxGa1□Al/GaAs field-effect transistors: Effect of donor-electron separation. *Applied Physics Letters*, **1983**, 42, 262-264	3.4	18
698	Theoretical studies of the electric field distribution and open-circuit voltage of amorphous silicon-based alloy p-i-n solar cells. *Journal of Applied Physics*, **1984**, 55, 4413-4417	2.5	18
697	New mechanism of gate current in heterostructure insulated gate field-effect transistors. *IEEE Electron Device Letters*, **1986**, 7, 519-521	4.4	18
696	Soft Printable Electrode Coating for Neural Interfaces.. *ACS Applied Bio Materials*, **2020**, 3, 4388-4397	4.1	17
695	MATERIALS PROPERTIES OF NITRIDES: SUMMARY. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 1-19	0.5	17
694	Localization of carriers and polarization effects in quaternary AlInGaN multiple quantum wells. *Applied Physics Letters*, **2001**, 79, 4375-4377	3.4	17
693	Development of Deep UV LEDs and Current Problems in Material and Device Technology. *Semiconductors and Semimetals*, **2017**, 96, 45-83	0.6	16
692	Optical polarization control of photo-pumped stimulated emissions at 238 nm from AlGaN multiple-quantum-well laser structures on AlN substrates. *Applied Physics Express*, **2017**, 10, 012702	2.4	16
691	Homodyne phase sensitive terahertz spectrometer. *Applied Physics Letters*, **2017**, 111, 121105	3.4	16
690	Wide band gap semiconductor technology: State-of-the-art. *Solid-State Electronics*, **2019**, 155, 65-75	1.7	16
689	High spectral uniformity of AlGaN with a high Al content evidenced by scanning near-field photoluminescence spectroscopy. *Applied Physics Letters*, **2014**, 105, 241108	3.4	16
688	Nonlinear response of infrared photodetectors based on van der Waals heterostructures with graphene layers. *Optics Express*, **2017**, 25, 5536-5549	3.3	16
687	Optical triggering of 12 kV, 100 A 4H-SiC thyristors. *Semiconductor Science and Technology*, **2012**, 27, 015012	1.8	16

686	PERFORMANCE AND APPLICATIONS OF DEEP UV LED. *International Journal of High Speed Electronics and Systems*, **2012**, 21, 1250011	0.5	16
685	Resonant Terahertz Detector Utilizing Plasma Oscillations in Two-Dimensional Electron System with Lateral Schottky Junction. *Japanese Journal of Applied Physics*, **2006**, 45, L1118-L1120	1.4	16
684	Low frequency and 1/f noise in wide-gap semiconductors: silicon carbide and gallium nitride. *IET Circuits, Devices and Systems*, **2002**, 149, 32-39		16
683	Milliwatt power AlGaN quantum well deep ultraviolet light emitting diodes. *Physica Status Solidi A*, **2003**, 200, 99-101		16
682	Plasma wave instability in gated collisionless two-dimensional electron gas. *Applied Physics Letters*, **2001**, 79, 922-924	3.4	16
681	Acousto-optic diffraction of blue and red light in GaN. *Applied Physics Letters*, **2002**, 80, 1701-1703	3.4	16
680	AlGaN□GaN□AlInGaN induced base transistor. *Applied Physics Letters*, **2000**, 76, 3298-3300	3.4	16
679	Two-dimensional metal-semiconductor field effect transistor for ultra low power circuit applications. *IEEE Electron Device Letters*, **1994**, 15, 245-247	4.4	16
678	Above threshold characteristics of amorphous silicon alloy thin-film transistors. *Applied Physics Letters*, **1984**, 45, 1202-1203	3.4	16
677	Determination of the density of localized states in fluorinated a-Si using deep level transient spectroscopy. *Applied Physics Letters*, **1982**, 41, 178-180	3.4	16
676	Two-dimensional plasmons in lateral carbon nanotube network structures and their effect on the terahertz radiation detection. *Journal of Applied Physics*, **2016**, 120, 044501	2.5	16
675	Dependence of radiative and nonradiative recombination on carrier density and Al content in thick AlGaN epilayers. *Journal Physics D: Applied Physics*, **2016**, 49, 145110	3	16
674	Artwork visualization using a solid-state lighting engine with controlled photochemical safety. *Optics Express*, **2014**, 22, 16802-18	3.3	15
673	The effect of a transverse magnetic field on 1/f noise in graphene. *Applied Physics Letters*, **2013**, 103, 173114	3.4	15
672	1/f noise in conducting channels of topological insulator materials. *Physica Status Solidi (A) Applications and Materials Science*, **2011**, 208, 144-146	1.6	15
671	Understanding noise measurements in MOSFETs: the role of traps structural relaxation **2010**,		15
670	Stimulated emission due to localized and delocalized carriers in Al0.35Ga0.65N/Al0.49Ga0.51N quantum wells. *Applied Physics Letters*, **2012**, 101, 041912	3.4	15
669	Modeling and Scaling of a-Si:H and Poly-Si Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **1997**, 467, 831		15

668	Correlation between yellow luminescence intensity and carrier lifetimes in GaN epilayers. *Applied Physics Letters*, **2005**, 86, 041910	3.4	15
667	Cooperative absorption of terahertz radiation by plasmon modes in an array of field-effect transistors with two-dimensional electron channel. *Applied Physics Letters*, **2006**, 89, 123504	3.4	15
666	Effect of ambient pressure on resistance and resistance fluctuations in single-wall carbon nanotube devices. *Journal of Applied Physics*, **2006**, 100, 024315	2.5	15
665	Low-frequency noise of GaN-based ultraviolet light-emitting diodes. *Journal of Applied Physics*, **2005**, 97, 123107	2.5	15
664	Pulsed Atomic Layer Epitaxy of Quaternary AlInGaN Layers for Ultraviolet Light Emitters. *Physica Status Solidi A*, **2001**, 188, 95-99		15
663	Electron runaway and negative differential mobility in two-dimensional electron gas in elementary semiconductors. *Solid State Communications*, **2000**, 113, 565-568	1.6	15
662	High transconductance AlGaN/GaN optoelectronic heterostructure field effect transistor. *Electronics Letters*, **1995**, 31, 2130-2131	1.1	15
661	Theory of impact ionization and Auger recombination in Hg1-xCdxTe. *Physical Review Letters*, **1992**, 69, 1280-1282	7.4	15
660	S-type current-voltage characteristic in Gunn diodes. *Journal Physics D: Applied Physics*, **1973**, 6, 842-850	3	15
659	Far-infrared photodetectors based on graphene/black-AsP heterostructures. *Optics Express*, **2020**, 28, 2480-2498	3.3	15
658	Novel AlInN/GaN integrated circuits operating up to 500 °C. *Solid-State Electronics*, **2015**, 113, 22-27	1.7	14
657	Surface-plasmons lasing in double-graphene-layer structures. *Journal of Applied Physics*, **2014**, 115, 044511	2.5	14
656	The sensitivity of the steady-state electron transport within bulk wurtzite zinc oxide to variations in the non-parabolicity coefficient. *Solid State Communications*, **2011**, 151, 874-878	1.6	14
655	Observation of the memory steps in graphene at elevated temperatures. *Applied Physics Letters*, **2011**, 98, 222107	3.4	14
654	THz diffuse reflectance spectra of selected explosives and related compounds **2005**, 5790, 19		14
653	Tunneling mechanism of the 1/f noise in GaN/AlGaN heterojunction field-effect transistors. *Journal of Applied Physics*, **2005**, 97, 123706	2.5	14
652	Diffraction of guided optical waves by surface acoustic waves in GaN. *Applied Physics Letters*, **2000**, 77, 480-482	3.4	14
651	High magnetic field studies of two-dimensional electron gas in a GaN/GaAlN heterostructure: Mechanisms of parallel conduction. *Journal of Applied Physics*, **2001**, 89, 1251-1255	2.5	14

650	Novel heterodimensional diodes and transistors. *Solid-State Electronics*, **1995**, 38, 1727-1730	1.7	14
649	. *IEEE Transactions on Electron Devices*, **1995**, 42, 1569-1573	2.9	14
648	. *IEEE Transactions on Electron Devices*, **1993**, 40, 131-136	2.9	14
647	Double-injection field-effect transistor: A new type of solid-state device. *Applied Physics Letters*, **1986**, 48, 1386-1388	3.4	14
646	. *IEEE Electron Device Letters*, **1988**, 9, 128-129	4.4	14
645	Terahertz plasmonic detector controlled by phase asymmetry. *Optics Express*, **2019**, 27, 4004-4013	3.3	14
644	p-Diamond as candidate for plasmonic terahertz and far infrared applications. *Applied Physics Letters*, **2018**, 113, 253502	3.4	14
643	Electrical modulation of terahertz radiation using graphene-phosphorene heterostructures. *Semiconductor Science and Technology*, **2018**, 33, 124010	1.8	14
642	Terahertz Beam Testing of Millimeter Wave Monolithic Integrated Circuits. *IEEE Sensors Journal*, **2017**, 17, 5487-5491	4	13
641	Controlled Synthesis of Single-Crystalline ZnO Nanoflakes on Arbitrary Substrates at Ambient Conditions. *Particle and Particle Systems Characterization*, **2014**, 31, 190-194	3.1	13
640	Carrier lifetimes in AlGaN quantum wells: electric field and excitonic effects. *Journal Physics D: Applied Physics*, **2008**, 41, 155116	3	13
639	III-nitride based deep ultraviolet light sources **2008**,		13
638	Carrier diffusion and recombination in highly excited InGaN/GaN heterostructures. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 820-823	1.6	13
637	Progress in the Preparation of Aluminum Nitride Substrates from Bulk Crystals. *Materials Research Society Symposia Proceedings*, **2002**, 722, 111		13
636	Low 1/f Noise in AlGaN/GaN HFETs on SiC Substrates. *Physica Status Solidi A*, **1999**, 176, 201-204		13
635	Energy Band/Lattice Mismatch Engineering in Quaternary AlInGaN/GaN Heterostructure. *Physica Status Solidi A*, **1999**, 176, 227-230		13
634	Monte Carlo studies of electronic transport in compensated InP. *Journal of Applied Physics*, **1989**, 66, 674-679	2.5	13
633	Computer simulation of amorphous silicon based alloy p-i-n solar cells. *IEEE Electron Device Letters*, **1983**, 4, 140-143	4.4	13

632	Impedance of thin semiconductor films in low electric field. *Journal of Applied Physics*, **1983**, 54, 4028-4034	2.5	13
631	Effect of image charges on impurity scattering of two-dimensional electron gas in AlGaAs/GaAs. *Journal of Applied Physics*, **1985**, 58, 382-386	2.5	13
630	Determination of depletion width in amorphous materials using a simple analytical model. *Solar Energy Materials and Solar Cells*, **1980**, 2, 349-361		13
629	Some electrical and optical properties of a-Si:F:H alloys. *Journal of Electronic Materials*, **1980**, 9, 385-409	1.9	13
628	Negative terahertz conductivity and amplification of surface plasmons in graphene-Black phosphorus injection laser heterostructures. *Physical Review B*, **2019**, 100,	3.3	12
627	Plasmonic instabilities in two-dimensional electron channels of variable width. *Physical Review B*, **2020**, 101,	3.3	12
626	Manifestation of plasmonic response in the detection of sub-terahertz radiation by graphene-based devices. *Nanotechnology*, **2018**, 29, 245204	3.4	12
625	Low RC-Constant Perforated-Channel HFET. *IEEE Electron Device Letters*, **2014**, 35, 449-451	4.4	12
624	. *IEEE Sensors Journal*, **2013**, 13, 80-88	4	12
623	Electron transport and electron energy distributions within the wurtzite and zinc-blende phases of indium nitride: Response to the application of a constant and uniform electric field. *Journal of Applied Physics*, **2015**, 117, 125705	2.5	12
622	CdS based novel photo-impedance light sensor. *Semiconductor Science and Technology*, **2014**, 29, 025002	1.8	12
621	Photoexcited carrier dynamics in AlInN/GaN heterostructures. *Applied Physics Letters*, **2012**, 100, 242104	3.4	12
620	Localized and collective magnetoplasmon excitations in AlGaN/GaN-based grating-gate terahertz modulators. *Applied Physics Letters*, **2011**, 99, 213501	3.4	12
619	AlGaN based highly sensitive radio-frequency UV sensor. *Applied Physics Letters*, **2010**, 96, 163504	3.4	12
618	Dynamics of carrier recombination and localization in AlGaN quantum wells studied by time-resolved transmission spectroscopy. *Applied Physics Letters*, **2009**, 95, 091910	3.4	12
617	Low frequency noise in 4H-SiC metal oxide semiconductor field effect transistors. *Journal of Applied Physics*, **2008**, 104, 094505	2.5	12
616	HfO2/AlGaN/GaN structures with HfO2 deposited at ultra low pressure using an e-beam. *Physica Status Solidi - Rapid Research Letters*, **2007**, 1, 199-201	2.5	12
615	Generation-recombination noise in forward biased 4H-SiC p-n diodes. *Journal of Applied Physics*, **2006**, 100, 064505	2.5	12

614	Intrinsic electric fields in AlGaN quantum wells. *Applied Physics Letters*, **2007**, 90, 081914	3.4	12
613	Resonant detection of modulated terahertz radiation in micromachined high-electron-mobility transistor. *Applied Physics Letters*, **2007**, 90, 203503	3.4	12
612	Guided-wave acousto-optic diffraction in AlxGa1−xN epitaxial layers. *Applied Physics Letters*, **2004**, 85, 2157-2159	3.4	12
611	Electron mobility and terahertz detection using silicon MOSFETs. *Solid-State Electronics*, **2003**, 47, 1559-1563	1.7	12
610	Nonlinear screening of pyroelectric films and grains in semiconductor matrix. *Journal of Applied Physics*, **2003**, 94, 566-572	2.5	12
609	LOW-FREQUENCY NOISE IN AlGaN/GaN HETEROSTRUCTURE FIELD EFFECT TRANSISTORS AND METAL OXIDE SEMICONDUCTOR HETEROSTRUCTURE FIELD EFFECT TRANSISTORS. *Fluctuation and Noise Letters*, **2001**, 01, L221-L226	1.2	12
608	III-Nitride Power Devices - Good Results and Great Expectations. *Materials Science Forum*, **2001**, 353-356, 807-814	0.4	12
607	Consequences of space dependence of effective mass in heterostructures. *Journal of Applied Physics*, **1998**, 84, 3726-3730	2.5	12
606	Heating of photogenerated electrons and holes in highly excited GaN epilayers. *Applied Physics Letters*, **1999**, 75, 2277-2279	3.4	12
605	Ion-implanted GaAs-InGaAs lateral current injection laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **1999**, 5, 664-672	3.8	12
604	Hall factor for ionized impurity scattering. *Journal of Applied Physics*, **1995**, 78, 2846-2847	2.5	12
603	. *IEEE Transactions on Electron Devices*, **1991**, 38, 2632-2646	2.9	12
602	Amorphous silicon photoconductive diode. *Applied Physics Letters*, **1989**, 54, 96-98	3.4	12
601	Velocity-field dependence in GaAs. *IEEE Transactions on Electron Devices*, **1987**, 34, 1831-1832	2.9	12
600	Gate current of modulation-doped field-effect transistors. *Journal of Applied Physics*, **1988**, 64, 1541-1546	2.5	12
599	Magnetic Field Influence on the Gunn Effect. *Physica Status Solidi (B): Basic Research*, **1969**, 33, 897-903	1.3	12
598	GaN-Based Pyroelectronics and Piezoelectronics **2000**, 299-339		12
597	Negative terahertz conductivity in disordered graphene bilayers with population inversion. *Applied Physics Letters*, **2015**, 106, 113501	3.4	11

596	Resonant plasmonic terahertz detection in vertical graphene-base hot-electron transistors. *Journal of Applied Physics*, **2015**, 118, 204501	2.5	11
595	Graphene vertical hot-electron terahertz detectors. *Journal of Applied Physics*, **2014**, 116, 114504	2.5	11
594	Holding current and switch-on mechanisms in 12 kV, 100 A 4H-SiC optically triggered thyristors. *Semiconductor Science and Technology*, **2013**, 28, 015008	1.8	11
593	Impact of Photocapacitance on Phase Response of GaN/Sapphire SAW UV Sensor. *IEEE Sensors Journal*, **2010**, 10, 883-887	4	11
592	Maximum powers of low-loss series–shunt FET RF switches. *Solid-State Electronics*, **2009**, 53, 117-119	1.7	11
591	GaN-BASED POWER HIGH ELECTRON MOBILITY TRANSISTORS **2003**, 173-216		11
590	Transient response of highly doped thin channel GaN metal–semiconductor and metal-oxide–semiconductor field effect transistors. *Solid-State Electronics*, **2002**, 46, 711-714	1.7	11
589	Structural and transport properties of CdS films deposited on flexible substrates. *Solid-State Electronics*, **2002**, 46, 1417-1420	1.7	11
588	Strain-engineered novel III–N electronic devices with high quality dielectric/semiconductor interfaces. *Physica Status Solidi A*, **2003**, 200, 155-160		11
587	Propagation of guided optical waves in thick GaN layers grown on (0001) sapphire. *Applied Physics Letters*, **2000**, 76, 2232-2234	3.4	11
586	Piezoresistive effect in AlN/GaN short range superlattice structures. *Journal of Applied Physics*, **1999**, 85, 6932-6934	2.5	11
585	. *IEEE Electron Device Letters*, **1991**, 12, 571-573	4.4	11
584	Reply to "Comment on "Threshold switching in chalcogenide-glass thin films"" *Journal of Applied Physics*, **1984**, 56, 579-580	2.5	11
583	Magnetic field influence on the gunn effect (II). *Physica Status Solidi A*, **1970**, 1, 177-187		11
582	Interband infrared photodetectors based on HgTe/CdHgTe quantum-well heterostructures. *Optical Materials Express*, **2018**, 8, 1349	2.6	10
581	Transient electron transport in the III–V compound semiconductors gallium arsenide and gallium nitride. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 807-813	2.1	10
580	Effect of doping on the characteristics of infrared photodetectors based on van der Waals heterostructures with multiple graphene layers. *Journal of Applied Physics*, **2017**, 122, 054505	2.5	10
579	**2014**,		10

578	Surface acoustic wave response to optical absorption by graphene composite film. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2012**, 59, 265-70	3.2	10
577	5-TERMINAL THzGaN BASED TRANSISTOR WITH FIELD- AND SPACE-CHARGE CONTROL ELECTRODES. *International Journal of High Speed Electronics and Systems*, **2009**, 19, 7-14	0.5	10
576	Analysis of resonant detection of terahertz radiation in high-electron mobility transistor with a nanostring/carbon nanotube as the mechanically floating gate. *Journal of Applied Physics*, **2008**, 104, 024514	2.5	10
575	Subsecond-response SAW humidity sensor with porphyrin nanostructure deposited on bare and metallised piezoelectric substrate. *Electronics Letters*, **2007**, 43, 1055	1.1	10
574	Detection and Homodyne Mixing of Terahertz Gas Laser Radiation by Submicron GaAs/AlGaAs FETs **2007**,		10
573	Large Area Flexible Electronics Fabricated Using Self-Aligned Imprint Lithography. *ECS Transactions* , **2007**, 8, 199-204	1	10
572	Plasma effects in lateral Schottky junction tunneling transit-time terahertz oscillator. *Journal of Physics: Conference Series*, **2006**, 38, 228-233	0.3	10
571	Polarization-induced electron island in semiconductor grain placed into pyroelectric matrix. *Applied Physics Letters*, **2004**, 84, 2340-2342	3.4	10
570	Dipole screening regime for pyroelectric and ferroelectric films and grains in semiconductor matrix. *Solid-State Electronics*, **2004**, 48, 487-490	1.7	10
569	Thin n-GaN films with low level of 1/f noise. *Electronics Letters*, **2001**, 37, 720	1.1	10
568	Analysis of Tunneling-Injection Transit-Time Effects and Self-Excitation of Terahertz Plasma Oscillations in High-Electron-Mobility Transistors. *Japanese Journal of Applied Physics*, **2002**, 41, L922-L924	1.4	10
567	Low frequency noise in degenerate semiconductors. *Journal of Applied Physics*, **2001**, 90, 301-305	2.5	10
566	Chapter 4 SiC Transistors. *Semiconductors and Semimetals*, **1998**, 52, 161-193	0.6	10
565	Optoelectronic devices based on GaN, AlGaN, InGaN homo-heterojunctions and superlattices **1995**,		10
564	. *IEEE Journal of Solid-State Circuits*, **1994**, 29, 71-76	5.5	10
563	. *IEEE Electron Device Letters*, **1990**, 11, 332-333	4.4	10
562	Charge Collection by Drift during Single Particle Upset. *IEEE Transactions on Nuclear Science*, **1986**, 33, 1140-1146	1.7	10
561			10

560	Novel Amorphous Silicon Thin-Film Transistors for use in Large-Area Microelectronics. *Materials Research Society Symposia Proceedings*, **1988**, 118, 207		10
559	High-brightness lasing at submicrometer enabled by droop-free fin light-emitting diodes (LEDs). *Science Advances*, **2020**, 6, eaba4346	14.3	10
558	Real-space-transfer mechanism of negative differential conductivity in gated graphene-phosphorene hybrid structures: Phenomenological heating model. *Journal of Applied Physics*, **2018**, 124, 114501	2.5	10
557	Plasmonic shock waves and solitons in a nanoring. *Physical Review B*, **2017**, 95,	3.3	9
556	Negative photoconductivity and hot-carrier bolometric detection of terahertz radiation in graphene-phosphorene hybrid structures. *Journal of Applied Physics*, **2019**, 125, 151608	2.5	9
555	Low-temperature redistribution of non-thermalized carriers and its effect on efficiency droop in AlGaN epilayers. *Journal Physics D: Applied Physics*, **2015**, 48, 275105	3	9
554	Tunable, Room Temperature CMOS-Compatible THz Emitters Based on Nonlinear Mixing in Microdisk Resonators. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2016**, 37, 230-242	2.2	9
553	Optical triggering of high-voltage (18 kV-class) 4H-SiC thyristors. *Semiconductor Science and Technology*, **2013**, 28, 125017	1.8	9
552	Evaluation of AlGaN-based deep ultraviolet emitter active regions by temperature dependent time-resolved photoluminescence. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2390-2393		9
551	Analysis of bias stress on unpassivated hydrogenated amorphous silicon thin-film transistors. *IEEE Transactions on Electron Devices*, **1998**, 45, 1548-1553	2.9	9
550	Current Crowding in High Performance Low-Loss HFET RF Switches. *IEEE Electron Device Letters*, **2008**, 29, 15-17	4.4	9
549	Anisotropic acousto-optic diffraction by leaky wave radiation in ZX-LiNbO3. *Applied Physics Letters*, **2007**, 90, 181935	3.4	9
548	Localization and Hopping of Excitons in Quaternary AlInGaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 512-515		9
547	Spectrum of Plasma Oscillations in Slot Diode with Two-Dimensional Electron Channel. *Japanese Journal of Applied Physics*, **2005**, 44, 2592-2595	1.4	9
546	Real-space electron transfer in III-nitride metal-oxide-semiconductor-heterojunction structures. *Applied Physics Letters*, **2005**, 87, 043505	3.4	9
545	OPTIMIZATION OF WHITE ALL-SEMICONDUCTOR LAMP FOR SOLID-STATE LIGHTING APPLICATIONS. *International Journal of High Speed Electronics and Systems*, **2002**, 12, 429-437	0.5	9
544	Radio frequency response of GaN-based SAW oscillator to UV illumination by the Sun and man-made source. *Electronics Letters*, **2002**, 38, 134	1.1	9
543	Modulated-impurity-concentration transferred-electron devices exhibiting large harmonic frequency content. *Microwave and Optical Technology Letters*, **1992**, 5, 354-359	1.2	9

542	Implications of light-induced defects on the performance of amorphous silicon alloy p-i-n solar cells. *Journal of Applied Physics*, **1986**, 59, 2222-2228	2.5	9
541	Limitations to the open circuit voltage of amorphous silicon solar cells. *Applied Physics Letters*, **1986**, 49, 1432-1434	3.4	9
540	Mobility enhancement in highly doped GaAs quantum wells. *Journal of Applied Physics*, **1987**, 61, 1643-1645	2.5	9
539	Modeling and characterization of ion-implanted GaAs MESFET's. *IEEE Transactions on Electron Devices*, **1987**, 34, 726-732	2.9	9
538	Parallel Conduction Correction to Measured Room Temperature Mobility in (Al, Ga)As-GaAs Modulation Doped Layers. *Japanese Journal of Applied Physics*, **1984**, 23, L230-L231	1.4	9
537	Sensitive Skin. *Selected Topics in Electornics and Systems*, **2000**,	0	9
536	HEMT Modelling **1993**, 56-73		9
535	Sub-terahertz testing of millimeter wave Monolithic and very large scale integrated circuits. *Solid-State Electronics*, **2019**, 155, 44-48	1.7	8
534	Response of plasmonic terahertz detectors to amplitude modulated signals. *Solid-State Electronics*, **2015**, 111, 76-79	1.7	8
533	Comparison of Intersubband Quantum-Well and Interband Graphene-Layer Infrared Photodetectors. *IEEE Journal of Quantum Electronics*, **2018**, 54, 1-8	2	8
532	Photoluminescence efficiency in AlGaN quantum wells. *Physica B: Condensed Matter*, **2014**, 453, 40-42	2.8	8
531	AlGaN/GaN plasmonic terahertz electronic devices. *Journal of Physics: Conference Series*, **2014**, 486, 012025	2.5	8
530	InP Double Heterojunction Bipolar Transistor for broadband terahertz detection and imaging systems. *Journal of Physics: Conference Series*, **2015**, 647, 012036	0.3	8
529	Carrier dynamics and efficiency droop in AlGaN epilayers with different Al content. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1677-1679		8
528	Efficiency droop in high-Al-content AlGaN/AlGaN quantum wells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2011**, 8, 2130-2132		8
527	Confocal spectroscopy of InGaN LED structures. *Journal Physics D: Applied Physics*, **2011**, 44, 135104	3	8
526	Strained-Si modulation doped field effect transistors as detectors of terahertz and sub-terahertz radiation. *Semiconductor Science and Technology*, **2008**, 23, 105001	1.8	8
525	Influence of the Ge concentration in the virtual substrate on the low frequency noise in strained-Si surface n-channel metal-oxide-semiconductor field-effect transistors. *Journal of Applied Physics*, **2008**, 103, 044501	2.5	8

524	Low frequency noise in InAlAs/InGaAs modulation doped field effect transistors with 50-nm gate length. *Journal of Applied Physics*, **2007**, 102, 064506	2.5	8
523	Drain-to-gate field engineering for improved frequency response of GaN-based HEMTs. *Solid-State Electronics*, **2008**, 52, 1217-1220	1.7	8
522	Ballistic admittance: Periodic variation with frequency. *Applied Physics Letters*, **2006**, 89, 142102	3.4	8
521	Wavelength-resolved low-frequency noise of GaInN□GaN green light emitting diodes. *Journal of Applied Physics*, **2006**, 100, 084506	2.5	8
520	Plasma wave FET for sub-wavelength THz imaging **2007**,		8
519	Leaky surface acoustic waves in Z-LiNbO3 substrates with epitaxial AlN overlays. *Applied Physics Letters*, **2004**, 85, 3313-3315	3.4	8
518	The resonant terahertz response of a slot diode with a two-dimensional electron channel. *Semiconductors*, **2005**, 39, 142	0.7	8
517	Electron and hole moveable islands in pyroelectric/semiconductor granular systems. *Applied Physics Letters*, **2005**, 86, 012101	3.4	8
516	TWO-DIMENSIONAL ELECTRONS IN FIELD EFFECT TRANSISTORS. *International Journal of High Speed Electronics and Systems*, **1998**, 09, 65-99	0.5	8
515	Low frequency noise in two-dimensional metal-semiconductor field effect transistor. *Applied Physics Letters*, **1996**, 68, 3138-3140	3.4	8
514	□SiC buried-gate junction field effect transistors. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1992**, 11, 121-124	3.1	8
513	. *IEEE Transactions on Microwave Theory and Techniques*, **1992**, 40, 880-885	4.1	8
512	Monte Carlo studies of steady-state electronic transport in compensated In0.53Ga0.47As. *Journal of Applied Physics*, **1989**, 65, 5205-5206	2.5	8
511	A new analytical model for heterostructure field-effect transistors. *Journal of Applied Physics*, **1989**, 65, 2116-2120	2.5	8
510	Determination of density of localized states in amorphous silicon alloys from the low field conductance of thin n-i-n diodes. *Journal of Applied Physics*, **1986**, 59, 803-807	2.5	8
509	Dependence of photoconductivity on the dark Fermi level position in amorphous silicon alloys. *Applied Physics Letters*, **1984**, 45, 467-469	3.4	8
508	Spill-over effects in planar doped barrier devices. *Applied Physics Letters*, **1985**, 47, 869-871	3.4	8
507	Stimulated Emission at 258 nm in AlN/AlGaN Quantum Wells Grown on Bulk AlN Substrates. *Materials Research Society Symposia Proceedings*, **2003**, 764, 1		8

506	Selective Gas Sensor Using Porous Silicon. *Sensor Letters*, **2016**, 14, 588-591	0.9	8
505	Temperature-dependent efficiency droop in AlGaN epitaxial layers and quantum wells. *AIP Advances*, **2016**, 6, 045212	1.5	8
504	High-Speed Room Temperature Terahertz Detectors Based on InP Double Heterojunction Bipolar Transistors. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640011	0.5	8
503	Current-Driven Dyakonov-Shur Instability in Ballistic Nanostructures with a Stub. *Physical Review Applied*, **2018**, 10,	4.3	8
502	Vertical electron transport in van der Waals heterostructures with graphene layers. *Journal of Applied Physics*, **2015**, 117, 154504	2.5	7
501	Plasmonic FET Terahertz Spectrometer. *IEEE Access*, **2020**, 8, 56039-56044	3.5	7
500	Plasmonic properties of asymmetric dual grating gate plasmonic crystals. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 671-675	1.3	7
499	On the applicability of a semi-analytical approach to determining the transient electron transport response of gallium arsenide, gallium nitride, and zinc oxide. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 1624-1634	2.1	7
498	Deep UV LEDs for Public Health Applications. *International Journal of High Speed Electronics and Systems*, **2014**, 23, 1450018	0.5	7
497	Graphene nanoelectromechanical resonators for the detection of modulated terahertz radiation. *Journal Physics D: Applied Physics*, **2014**, 47, 505105	3	7
496	Si-like low-frequency noise characteristics of 4H-SiC MOSFETs. *Semiconductor Science and Technology*, **2011**, 26, 085015	1.8	7
495	Wireless UV sensor based on photocapacitive effect in GaN. *Electronics Letters*, **2009**, 45, 653	1.1	7
494	Photosensitive Inverter and Ring Oscillator With Pseudodepletion Mode Load for LCD Applications. *IEEE Electron Device Letters*, **2009**, 30, 943-945	4.4	7
493	Resonant terahertz absorption by plasmons in grating-gate GaN HEMT structures **2009**,		7
492	Negative terahertz dynamic conductivity in electrically induced lateral p□n junction in graphene. *Physica E: Low-Dimensional Systems and Nanostructures*, **2010**, 42, 719-721	3	7
491	The Velocity-Field Characteristic Of Indium Nitride. *Materials Research Society Symposia Proceedings* , **1997**, 482, 851		7
490	AlGaN/GaN doped channel heterostructure field effect transistors. *Physica Scripta*, **1997**, T69, 103-107	2.6	7
489	INSULATED GATE III-N HETEROSTRUCTURE FIELD-EFFECT TRANSISTORS. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 197-224	0.5	7

488	Raman measurements in water using a high-power light-emitting diode. *Journal of Raman Spectroscopy*, **2003**, 34, 471-473	2.3	7
487	Analysis of the anomalous drain current characteristics of halo MOSFETs. *Solid-State Electronics*, **2003**, 47, 99-106	1.7	7
486	Photoluminescence of GaN deposited on single-crystal bulk AlN with different polarities. *Applied Physics Letters*, **2003**, 83, 3507-3509	3.4	7
485	Polarization Effects and UV Emission in Highly Excited Quaternary AlInGaN Quantum Wells. *Physica Status Solidi (B): Basic Research*, **2001**, 228, 559-562	1.3	7
484	THIN-FILM TRANSISTOR MODELING. *International Journal of High Speed Electronics and Systems*, **1998**, 09, 703-723	0.5	7
483	Pyroelectric and Piezoelectric Properties of Gan-Based Materials. *Materials Research Society Symposia Proceedings*, **1998**, 537, 1		7
482	Enhanced CAD model for gate leakage current in heterostructure field effect transistors. *IEEE Transactions on Electron Devices*, **1996**, 43, 845-851	2.9	7
481	Development of Spice Models for Amorphous Silicon Thin-Film Transistors. *Materials Research Society Symposia Proceedings*, **1989**, 149, 233		7
480	. *IEEE Transactions on Electron Devices*, **1990**, 37, 1917-1921	2.9	7
479	. *IEEE Transactions on Electron Devices*, **1990**, 37, 530-535	2.9	7
478	Physics of Novel Amorphous Silicon High-Voltage Transistor. *Materials Research Society Symposia Proceedings*, **1987**, 95, 457		7
477	Temperature dependence of electron mobility and peak velocity in compensated GaAs. *Applied Physics Letters*, **1988**, 52, 922-923	3.4	7
476	Charge control model of inverted GaAs□AlGaAs modulation doped FET□ (IMODFET□). *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1984**, 2, 113		7
475	Optical pumping through a black-As absorbing-cooling layer in graphene-based heterostructure: thermo-diffusion model. *Optical Materials Express*, **2019**, 9, 4061	2.6	7
474	Transient processes in AlGaN/GaN heterostructure field effect transistors. *Electronics Letters*, **2000**, 36, 757	1.1	7
473	Plasmons in Ballistic Nanostructures With Stubs: Transmission Line Approach. *IEEE Transactions on Electron Devices*, **2019**, 66, 126-131	2.9	7
472	Compact Terahertz SPICE Model: Effects of Drude Inductance and Leakage. *IEEE Transactions on Electron Devices*, **2018**, 65, 5350-5356	2.9	7
471	Compact Terahertz SPICE/ADS Model. *IEEE Transactions on Electron Devices*, **2019**, 66, 2496-2501	2.9	6

470	Spectral dependence of carrier lifetime in high aluminum content AlGaN epitaxial layers. *Journal of Applied Physics*, **2015**, 118, 085705	2.5	6
469	Optical triggering of 4H-SiC thyristors (18 kV class) to high currents in purely inductive load circuit. *Semiconductor Science and Technology*, **2014**, 29, 115003	1.8	6
468	Large signal analytical and SPICE model of THz plasmonic FET **2012**,		6
467	RF power limiter using capacitively-coupled contacts III-nitride varactor. *Electronics Letters*, **2012**, 48, 1480	1.1	6
466	Guest Editorial THz Sensing: Materials, Devices, and Systems. *IEEE Sensors Journal*, **2013**, 13, 7-7	4	6
465	Electron transport within the two-dimensional electron gas formed at a ZnO/ZnMgO heterojunction: Recent progress. *Materials Research Society Symposia Proceedings*, **2013**, 1577, 1		6
464	III-Nitride Materials and Devices for Power Electronics. *ECS Transactions*, **2013**, 58, 129-143	1	6
463	$hbox{HfO}_{2}$‐III-Nitride RF Switch With Capacitively Coupled Contacts. *IEEE Electron Device Letters*, **2009**, 30, 478-480	4.4	6
462	LIGHT EMITTING DIODES: TOWARD SMART LIGHTING. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 229-245	0.5	6
461	NOVEL APPROACHES TO MICROWAVE SWITCHING DEVICES USING NITRIDE TECHNOLOGY. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 219-227	0.5	6
460	Color-dulling solid-state sources of light. *Optics Express*, **2012**, 20, 9755-62	3.3	6
459	Transient photoreflectance of AlInN/GaN heterostructures. *AIP Advances*, **2012**, 2, 042148	1.5	6
458	Photoluminescence dynamics of AlGaN quantum wells with built-in electric fields and localized states. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 423-427	1.6	6
457	Velocity Overshoot and Ballistic Electron Transport in Wurtzite Indium Nitride. *Materials Research Society Symposia Proceedings*, **1997**, 482, 834		6
456	Current collapse and reliability of III-N heterostructure field effect transistors. *Physica Status Solidi - Rapid Research Letters*, **2007**, 1, 116-118	2.5	6
455	Granular semiconductor/pyroelectric media as a tunable plasmonic crystal. *Solid-State Electronics*, **2007**, 51, 812-815	1.7	6
454	Effects of growth temperature on exciton lifetime and structural properties of ZnO films on sapphire substrate. *Physica Status Solidi (A) Applications and Materials Science*, **2006**, 203, 3699-3704	1.6	6
453	Spectrum Determination of Terahertz Sources Using Fabry-Perot Interferometer and Bolometer Detector. *Journal of Infrared, Millimeter and Terahertz Waves*, **2004**, 25, 215-228		6

452	Determination of deep trap concentration at channel substrate interface in GaAs MESFET using sidegating measurements. *Solid-State Electronics*, **2002**, 46, 1463-1466	1.7	6
451	Migration enhanced metal organic chemical vapor deposition of AlN/GaN/InN-based heterostructures		6
450	Turn-off Performance of a 2.6 kV 4H-SiC Asymmetrical GTO Thyristor. *Materials Science Forum*, **2001**, 353-356, 743-746	0.4	6
449	Consequences of space dependence of effective mass in quantum dots. *Solid-State Electronics*, **2000**, 44, 1609-1612	1.7	6
448	Substrate Bias Effects in AlGaN/GaN Doped Channel Heterostructure Field Effect Transistors Grown on Doped SiC Substrates. *Materials Science Forum*, **1998**, 264-268, 1445-1448	0.4	6
447	A Semi-Analytical Interpretation of Transient Electron Transport in Gallium Nitride, Indium Nitride, and Aluminum Nitride. *Materials Research Society Symposia Proceedings*, **1998**, 512, 555		6
446	Temperature Dependence of Breakdown Field in p-n GaN Diodes. *Materials Research Society Symposia Proceedings*, **1998**, 512, 15		6
445	GaN and AlGaN Ultraviolet Detectors. *Semiconductors and Semimetals*, **1999**, 57, 407-439	0.6	6
444	Sub-half-micrometer width 2-D MESFET. *IEEE Electron Device Letters*, **1996**, 17, 40-42	4.4	6
443	. *IEEE Transactions on Electron Devices*, **1994**, 41, 854-856	2.9	6
442	Sub-0.1 μm MOSFET modelling and circuit simulation. *Electronics Letters*, **1994**, 30, 1545-1546	1.1	6
441	Superlattice conduction in superlattice modulation-doped field-effect transistors. *Journal of Applied Physics*, **1987**, 61, 1503-1509	2.5	6
440	Capacitance studies of thermal equilibrium changes in n-type amorphous silicon. *Journal of Non-Crystalline Solids*, **1987**, 97-98, 803-806	3.9	6
439	Orientation and ion-implanted transverse effects in self-aligned GaAs MESFET's. *IEEE Transactions on Electron Devices*, **1987**, 34, 1470-1481	2.9	6
438	Density of two-dimensional electron gas in modulation-doped structure with graded interface. *Applied Physics Letters*, **1984**, 45, 573-574	3.4	6
437	Determination of Density of Localized States in Amorphous Silicon Alloys from the Low Field Conductance of Thin N-I-N Diodes. *Materials Research Society Symposia Proceedings*, **1985**, 49, 69		6
436	Subterahertz and terahertz sensing of biological objects and chemical agents **2018**,		6
435	Plasmonic Field-Effect Transistors (TeraFETs) for 6G Communications. *Sensors*, **2021**, 21,	3.8	6

434	Electron Transport Within III-V Nitride Semiconductors. *Springer Handbooks*, **2017**, 1-1	1.3	6
433	Dependence of AlGaN-based SAW oscillator frequency on temperature. *Electronics Letters*, **2004**, 40, 637	1.1	6
432	Terahertz Plasmonic Technology. *IEEE Sensors Journal*, **2021**, 21, 12752-12763	4	6
431	Coulomb electron drag mechanism of terahertz plasma instability in n+-i-n-n+ graphene FETs with ballistic injection. *Applied Physics Letters*, **2021**, 119, 093501	3.4	6
430	Red-blue-green solid state light sources using a narrow line-width green phosphor. *Optics Express*, **2015**, 23, A309-15	3.3	5
429	Dynamics of nonequilibrium carrier decay in AlGaN epitaxial layers with high aluminum content. *Optics Express*, **2015**, 23, 19646-55	3.3	5
428	Terahertz detection using on chip patch and dipole antenna-coupled GaAs High Electron Mobility Transistors **2014**,		5
427	The dynamic range of THz broadband FET detectors **2013**,		5
426	. *IEEE Electron Device Letters*, **2013**, 34, 208-210	4.4	5
425	Low-loss AlInN/GaN microwave switch. *Electronics Letters*, **2011**, 47, 863	1.1	5
424	AlGaN/GaN Microwave Switch With Hybrid Slow and Fast Gate Design. *IEEE Electron Device Letters*, **2010**, 31, 1389-1391	4.4	5
423	Subwavelength detection of terahertz radiation using GaAs HEMTs **2009**,		5
422	Grating-gate tunable plasmon absorption in InP and GaN based HEMTs **2009**,		5
421	Spatially-resolved photoluminescence study of high indium content InGaN LED structures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 1869-1871		5
420	RTD/2-D MESFET logic element for compact, ultra-low-power electronics. *IEEE Transactions on Electron Devices*, **1997**, 44, 1033-1039	2.9	5
419	NON-IDEAL CURRENT TRANSPORT IN HETEROSTRUCTURE FIELD EFFECT TRANSISTORS. *International Journal of High Speed Electronics and Systems*, **2008**, 18, 935-947	0.5	5
418	AlGaN/AlN multiple quantum wells grown by MOVPE on AlN templates using nitrogen as a carrier gas. *Journal of Crystal Growth*, **2008**, 310, 4927-4931	1.6	5
417	Resonant Terahertz Photomixing in Integrated High-Electron-Mobility Transistor and Quantum-Well Infrared Photodetector Device. *Japanese Journal of Applied Physics*, **2006**, 45, 3648-3651	1.4	5

416	PLASMA WAVES IN TWO-DIMENSIONAL ELECTRON SYSTEMS AND THEIR APPLICATIONS. *International Journal of High Speed Electronics and Systems*, **2007**, 17, 521-538	0.5	5
415	Terahertz technology: devices and applications		5
414	Saturated gain in GaN epilayers studied by variable stripe length technique. *Journal of Applied Physics*, **2006**, 99, 103513	2.5	5
413	GaN Heterodimensional Schottky Diode for THz Detection **2006**,		5
412	Carrier lifetime and diffusion in GaN epilayers grown by MEMOCVDTM. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 1923-1926		5
411	1/f noise in GaN/AlGaN heterostructure field-effect transistors in high magnetic fields at 300K. *Journal of Applied Physics*, **2004**, 96, 3845-3847	2.5	5
410	Monte Carlo simulation of the exciton hopping in quaternary AlInGaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 2737-2740		5
409	MIT Microelectronics WebLab **2005**, 49-87		5
408	Photovoltaic effect in threads covered with CdS. *Electronics Letters*, **2001**, 37, 1036	1.1	5
407	SEMICONDUCTOR THIN FILMS AND THIN FILM DEVICES FOR ELECTROTEXTILES. *International Journal of High Speed Electronics and Systems*, **2002**, 12, 371-390	0.5	5
406	Electrical Instabilities and 1/f Noise in Organic Pentacene Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **2000**, 660,		5
405	Pyroelectric and Piezoelectric Properties of GaN-Based Materials. *MRS Internet Journal of Nitride Semiconductor Research*, **1999**, 4, 57-68		5
404	Electron Transport in the III/V Nitride Alloys. *Materials Research Society Symposia Proceedings*, **1999**, 572, 445		5
403	Physics of Below Threshold Current Distribution in a-Si:H TFTs. *Materials Research Society Symposia Proceedings*, **1996**, 420, 257		5
402	Optoelectronic GaN-based field effect transistors **1995**,		5
401	Studies of the Stability of Amorphous Silicon Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **1992**, 258, 1013		5
400	New analytical polycrystalline-silicon thin-film transistor model for computer aided design and parameter extraction. *Solid-State Electronics*, **1992**, 35, 655-663	1.7	5
399	. *IEEE Transactions on Electron Devices*, **1993**, 40, 1711-1713	2.9	5

398			5
397	Velocity-field characteristics with two maxima in compensated GaAs. *Physical Review B*, **1987**, 36, 1352-1354	3.3	5
396	Ballistic transport in hot-electron transistors. *Journal of Applied Physics*, **1987**, 62, 3816-3820	2.5	5
395	Double Ridley-Watkins-Hilsum-Gunn effect in compensated GaAs. *Solid-State Electronics*, **1988**, 31, 607-610	1.7	5
394	Amorphous silicon based alloy solar cell modeling with new diffusion length interpretation. *Journal of Non-Crystalline Solids*, **1983**, 59-60, 1115-1118	3.9	5
393	Transient processes in gunn diodes. *Solid-State Electronics*, **1975**, 18, 983-990	1.7	5
392	Maximum electric field in high-field domain. *Electronics Letters*, **1978**, 14, 521	1.1	5
391	Optical pumping in graphene-based terahertz/far-infrared superluminescent and laser heterostructures with graded-gap black-PxAs1□ absorbing-cooling layers. *Optical Engineering*, **2019**, 59, 1	1.1	5
390	Sic Materials and Devices. *Selected Topics in Electornics and Systems*, **2007**,	0	5
389	Plasmonic detectors and sources for THz communication and sensing **2018**,		5
388	Subthreshold and above threshold gate current in heterostructure insulated gate field-effect transistors. *Electronics Letters*, **1992**, 28, 1024-1026	1.1	5
387	p-Diamond, Si, GaN, and InGaAs TeraFETs. *IEEE Transactions on Electron Devices*, **2020**, 67, 4858-4865	2.9	5
386	Plasma Instability of 2D Electrons in a Field Effect Transistor with a Partly Gated Channel. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640015	0.5	5
385	Collision dominated, ballistic, and viscous regimes of terahertz plasmonic detection by graphene. *Journal of Applied Physics*, **2021**, 129, 053102	2.5	5
384	Nanoscale silicon mosfet response to THz radiation for testing VLSI **2018**,		5
383	Low threshold for optical damage in AlGaN epilayers and heterostructures. *Journal of Applied Physics*, **2013**, 114, 203103	2.5	4
382	III-nitride microwave control devices and ICs. *Semiconductor Science and Technology*, **2013**, 28, 074008	1.8	4
381	Terahertz electronics for sensing and imaging applications **2015**,		4

380	Detection of Terahertz Radiation by Dense Arrays of InGaAs Transistors. *International Journal of High Speed Electronics and Systems*, **2015**, 24, 1550002	0.5	4
379	Bandgap engineering in MBE grown Al1−xGaxN epitaxial columnar nanostructures. *Journal Physics D: Applied Physics*, **2012**, 45, 015104	3	4
378	The electron transport within bulk wurtzite zinc oxide in response to strong applied electric field pulses. *Materials Research Society Symposia Proceedings*, **2013**, 1577, 1		4
377	Low-frequency noise in graphene field-effect transistors **2011**,		4
376	Small- and Large-Signal Performance of III-Nitride RF Switches With Hybrid Fast/Slow Gate Design. *IEEE Microwave and Wireless Components Letters*, **2011**, 21, 305-307	2.6	4
375	Ballistic transport and terahertz electronics **2010**,		4
374	Gate current model for the hot-electron regime of operation in heterostructure field effect transistors. *IEEE Transactions on Electron Devices*, **1998**, 45, 2108-2115	2.9	4
373	SIMULATIONS OF FIELD-PLATED AND RECESSED GATE GALLIUM NITRIDE-BASED HETEROJUNCTION FIELD-EFFECT TRANSISTORS. *International Journal of High Speed Electronics and Systems*, **2007**, 17, 19-23	0.5	4
372	Combined resonance and resonant detection of modulated terahertz radiation in a micromachined high-electron mobility transistor. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2008**, 5, 277-281		4
371	HIGH-POWER SWITCHING USING III-NITRIDE METAL-OXIDE-SEMICONDUCTOR HETEROSTRUCTURES. *International Journal of High Speed Electronics and Systems*, **2006**, 16, 455-468	0.5	4
370	Guided-wave acousto-optic diffraction in Zn:LiNbO3. *Electronics Letters*, **2006**, 42, 1294	1.1	4
369	Resonant Detection and Modulation of Terahertz Radiation by 2DEG Plasmons in GaN Grating-Gate Structures **2007**,		4
368	Photoluminescence dynamics in highly nonhomogeneously excited GaN. *Applied Physics Letters*, **2007**, 90, 161920	3.4	4
367	Study of exciton hopping in AlGaN epilayers by photoluminescence spectroscopy and Monte Carlo simulation. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2006**, 3, 2099-2102		4
366	MATERIALS PROPERTIES OF NITRIDES: SUMMARY. *Selected Topics in Electornics and Systems*, **2004**, 1-190		4
365	Color perception under illumination by quadrichromatic solid-state lamp **2004**, 5530, 347		4
364	LEAKY SURFACE ACOUSTIC WAVES IN SINGLE-CRYSTAL AlN SUBSTRATE. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 837-846	0.5	4
363	Strong ultraviolet emission from non-polar AlGaN/GaN quantum wells grown over r-plane sapphire substrates. *Physica Status Solidi A*, **2003**, 200, 48-51		4

362	High-power LEDs for plant cultivation **2004**,		4
361	Terahertz generation by plasma waves in nanometer gate high electron mobility transistors. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 656-659	1.6	4
360	White Complementary Solid-State Lamp. *LEUKOS - Journal of Illuminating Engineering Society of North America*, **2005**, 1, 59-66	3.5	4
359	Polychromatic solid-state lamps versus tungsten radiator: hue changes of Munsell samples. *Journal Physics D: Applied Physics*, **2005**, 38, 3202-3207	3	4
358	Photovoltaic effect in CdS on flexible substrate. *Electronics Letters*, **2001**, 37, 518	1.1	4
357	On theory of 1/f noise in semiconductors. *Solid-State Electronics*, **2001**, 45, 1067-1069	1.7	4
356	Progress in III-nitride based white light sources **2002**,		4
355	Lab-on-Web: performing device characterization via Internet using modern Web technology		4
354	Double Channel AlGaN/GaN Heterostructure Field Effect Transistor. *Materials Research Society Symposia Proceedings*, **1998**, 512, 9		4
353	The optoelectronic response of a laterally contacted 2-D MESFET. *IEEE Transactions on Electron Devices*, **1996**, 43, 2300-2301	2.9	4
352	. *IEEE Electron Device Letters*, **1992**, 13, 108-110	4.4	4
351	. *IEEE Transactions on Electron Devices*, **1992**, 39, 250-256	2.9	4
350	. *IEEE Transactions on Electron Devices*, **1992**, 39, 1268-1269	2.9	4
349	Simulations and physics of amorphous silicon thin-film transistors. *Journal of Non-Crystalline Solids*, **1989**, 115, 150-155	3.9	4
348	Amplification of bipolar current flow by charge induced from an insulated gate electrode. *Journal of Applied Physics*, **1987**, 62, 1108-1111	2.5	4
347	Current-voltage and capacitance-voltage characteristics of a metal/Al0.5Ga0.5As/GaAs capacitor. *Applied Physics Letters*, **1984**, 44, 214-216	3.4	4
346	Behaviour of the High-Field Domains below the Voltage of the Nucleation Threshold. *Physica Status Solidi (B): Basic Research*, **1968**, 28, 827-834	1.3	4
345	Plasmonic heterodimensional resonance for subwavelength imaging **2018**,		4

344	Handbook Series on Semiconductor Parameters		4
343	Room Temperature Terahertz Plasmonic Detection by Antenna Arrays of Field-Effect Transistors. *Nanoscience and Nanotechnology Letters*, **2012**, 4, 1015-1022	0.8	4
342	Far-infrared and terahertz emitting diodes based on graphene/black-P and graphene/MoS heterostructures. *Optics Express*, **2020**, 28, 24136-24151	3.3	4
341	Recent Results on Broadband Nanotransistor Based THz Detectors. *NATO Science for Peace and Security Series B: Physics and Biophysics*, **2014**, 189-209	0.2	4
340	Sub-terahertz FET detector with self-assembled Sn-nanothreads. *Journal Physics D: Applied Physics*, **2020**, 53, 075102	3	4
339	TCAD Model for TeraFET Detectors Operating in a Large Dynamic Range. *IEEE Transactions on Terahertz Science and Technology*, **2020**, 10, 15-20	3.4	4
338	AI Powered THz Testing Technology for Ensuring Hardware Cybersecurity **2020**,		4
337	Theoretical analysis of injection driven thermal light emitters based on graphene encapsulated by hexagonal boron nitride. *Optical Materials Express*, **2021**, 11, 468	2.6	4
336	Insulated Gate Nitride-Based Field Effect Transistors **2010**, 379-422		4
335	Ultimate limits for highest modulation frequency and shortest response time of field effect transistor **2017**,		3
334	Electron transport within bulk cubic boron nitride: A Monte Carlo simulation analysis. *Journal of Applied Physics*, **2020**, 128, 185704	2.5	3
333	New optical gating technique for detection of electric field waveforms with subpicosecond resolution. *Optics Express*, **2016**, 24, 12730-9	3.3	3
332	THz pulse detection by photoconductive plasmonic high electron mobility transistor with enhanced sensitivity **2016**,		3
331	Hot-electron micro & nanobolometers based on low-mobility 2DEG for high resolution THz spectroscopy. *Journal of Physics: Conference Series*, **2014**, 486, 012028	0.3	3
330	Is zinc oxide a potential material for future high-power and high-frequency electron device applications?. *Materials Research Society Symposia Proceedings*, **2015**, 1805, 1		3
329	High current (1300 A) optical triggering of a 12 kV 4H-SiC thyristor. *Semiconductor Science and Technology*, **2013**, 28, 045016	1.8	3
328	Negative terahertz conductivity in remotely doped graphene bilayer heterostructures. *Journal of Applied Physics*, **2015**, 118, 183105	2.5	3
327	Nonradiative Recombination, Carrier Localization, and Emission Efficiency of AlGaN Epilayers with Different Al Content. *Journal of Electronic Materials*, **2015**, 44, 4706-4709	1.9	3

326	(Invited) Deep Ultraviolet Light Emitting Diodes: Physics, Performance, and Applications. *ECS Transactions*, **2014**, 61, 53-63	1	3
325	Selective gas sensing with MoS2 thin film transistors **2014**,		3
324	Optical Triggering of High Current (1300 A), High-Voltage (12 kV) 4H-SiC Thyristor. *Materials Science Forum*, **2014**, 778-780, 1021-1024	0.4	3
323	Electron transport within a zinc-oxide-based two-dimensional electron gas: The impact of variations in the electron effective mass. *Materials Research Society Symposia Proceedings*, **2014**, 1674, 1		3
322	278 nm deep ultraviolet LEDs with 11% external quantum efficiency **2012**,		3
321	Steady-state and transient electron transport within bulk wurtzite zinc oxide and the resultant electron device performance. *Materials Research Society Symposia Proceedings*, **2013**, 1577, 1		3
320	Electrical and noise characteristics of graphene field-effect transistors **2011**,		3
319	2DEG GaN hot electron microbolometers and quantum cascade lasers for THz heterodyne sensing **2011**,		3
318	Surface acoustic waves in graphene structures: Response to ambient humidity **2010**,		3
317	Effect of substrate piezoelectricity on surface acoustic wave propagation in humidity-sensitive structures with porphyrin layers. *Applied Physics Letters*, **2009**, 95, 171903	3.4	3
316	Multigate GaN RF Switches With Capacitively Coupled Contacts. *IEEE Electron Device Letters*, **2009**, 30, 895-897	4.4	3
315	Sub-millimeter wave signal generation and detection in CMOS **2009**,		3
314	Migration-enhanced metal□rganic chemical vapor deposition of AlxIn1□xN/GaN heterostructures (x>0.75) on c-plane sapphire. *Journal of Crystal Growth*, **2011**, 327, 98-101	1.6	3
313	Steady-State and Transient Electron Transport in ZnO: Recent Progress. *Materials Research Society Symposia Proceedings*, **2011**, 1327, 32001		3
312	LOW-FREQUENCY ELECTRONIC NOISE IN GRAPHENE TRANSISTORS: COMPARISON WITH CARBON NANOTUBES. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 161-170	0.5	3
311	Insertion loss and linearity of III-nitride microwave switches. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2423-2425		3
310	Ion-implanted 0.4 [micro sign]m wide 2-D MESFET for low power electronics. *Electronics Letters*, **1996**, 32, 772	1.1	3
309	Recent progress in AlGaN/GaN-based optoelectronic devices **1997**,		3

308	Analytical gate current model for n-channel heterostructure field effect transistors. *IEEE Transactions on Electron Devices*, **1998**, 45, 2116-2121	2.9	3
307	Capacitance controlled n-GaN SAW UV sensor **2008**,		3
306	Plasma wave terahertz electronics **2008**,		3
305	One dimensional plasmons in pyroelectric-semiconductor composites. *Journal of Applied Physics*, **2008**, 103, 084511	2.5	3
304	High-power III-Nitride Integrated Microwave Switch with capacitively-coupled contacts. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		3
303	Terahertz excitation of the higher-order plasmon modes in field-effect transistor arrays with common and separate two-dimensional electron channels. *Bulletin of the Russian Academy of Sciences: Physics*, **2007**, 71, 89-92	0.4	3
302	UV-LED controlled GaN-based SAW phase shifter. *Electronics Letters*, **2006**, 42, 1254	1.1	3
301	Low Frequency Noise in Insulated-Gate Strained-Si n-Channel Modulation Doped Field Effect Transistors. *Japanese Journal of Applied Physics*, **2007**, 46, 4011-4015	1.4	3
300	Low-loss high-power AlInGaN RF switches **2007**,		3
299	Plasma oscillations of two-dimensional electron stripe. *Applied Physics Letters*, **2005**, 87, 243514	3.4	3
298	Effect of near-ballistic photoelectron transport on resonant plasma-assisted photomixing in high-electron mobility transistors. *Semiconductor Science and Technology*, **2004**, 19, S74-S76	1.8	3
297	CuS thin films on flexible substrates. *Electronics Letters*, **2004**, 40, 273	1.1	3
296	GENERATION-RECOMBINATION NOISE IN GaN-BASED DEVICES. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 175-195	0.5	3
295	Non-destructive deep trap diagnostics of epitaxial structures. *Solid-State Electronics*, **2003**, 47, 1569-1575	1.7	3
294	Generation-recombination noise in GaN and GaN-based devices **2003**,		3
293	Low frequency noise in GaN/AlGaN heterostructure field effect transistors in non-ohmic region. *Journal of Applied Physics*, **2003**, 93, 10030-10034	2.5	3
292	Low frequency noise of light emitting diodes (Invited Paper) **2005**,		3
291	Photocapacitance of GaAs thin-film epitaxial structures. *Solid-State Electronics*, **2005**, 49, 343-349	1.7	3

290	GaN-based acousto-optic devices for blue optoelectronics **2001**,		3
289	High-field transport in a dense two-dimensional electron gas in elementary semiconductors. *Journal of Applied Physics*, **2001**, 89, 3793-3797	2.5	3
288	Next Generation Lab-a solution for remote characterization of analog integrated circuits		3
287	GENERATION-RECOMBINATION AND 1/f NOISE IN Al0.4Ga0.6N THIN FILMS. *Fluctuation and Noise Letters*, **2002**, 02, L349-L355	1.2	3
286	Nanostructures on flexible substrates **2002**,		3
285	Effect of metallisation on surface acoustic wave velocity in GaN-on-sapphire structures. *Electronics Letters*, **2000**, 36, 591	1.1	3
284	Polar Optical Phonon Instability and Intervalley Transfer in Gallium Nitride. *Materials Research Society Symposia Proceedings*, **1998**, 512, 549		3
283	High-temperature characteristics of 2-D MESFETs. *IEEE Electron Device Letters*, **1996**, 17, 214-216	4.4	3
282	Pyroelectric Effect in Wurtzite Gallium Nitride. *Materials Research Society Symposia Proceedings*, **1996**, 423, 75		3
281	AC and DC Characterization and Spice Modeling of Short Channel Polysilicon TFTs. *Materials Research Society Symposia Proceedings*, **1996**, 424, 213		3
280	Gate currents in heterostructure field-effect transistors: contribution by warm electrons. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1994**, 28, 264-267	3.1	3
279	Temperature and Frequency Dependent Characteristics of Amorphous Silicon thin film Transistors. *Materials Research Society Symposia Proceedings*, **1995**, 377, 725		3
278	. *IEEE Transactions on Electron Devices*, **1991**, 38, 672-674	2.9	3
277	. *IEEE Journal of Solid-State Circuits*, **1988**, 23, 224-238	5.5	3
276	Localized states distribution and the characteristics of amorphous silicon alloy field defect transistors. *Journal of Non-Crystalline Solids*, **1985**, 77-78, 1401-1404	3.9	3
275	Graphene-based plasmonic metamaterial for terahertz laser transistors. *Nanophotonics*, **2022**,	6.3	3
274	Terahertz plasmonic field effect transistors for imaging applications **2019**,		3
273	Si, SiGe, InP, III-N, and p-diamond FETs and HBTs for sub-terahertz and terahertz applications **2020**,		3

272	White complementary solid-state lamp. *LEUKOS - Journal of Illuminating Engineering Society of North America*, **2004**, 01, 59-66	3.5	3
271	Ballistic Injection Terahertz Plasma Instability in Graphene n + - i □h □h + Field-Effect Transistors and Lateral Diodes. *Physica Status Solidi (A) Applications and Materials Science*,	1.6	3
270	GaAs FETs: Device Physics and Modeling **1987**, 301-390		3
269	Emerging Solid State Terahertz Electronics **2001**, 169-185		3
268	Microwave operation of multi-channel 2D MESFET. *Electronics Letters*, **1998**, 34, 1029	1.1	3
267	(Keynote) Terahertz Nanoplasmonics Technology: Physics, Applications, and Commercialization. *ECS Transactions*, **2020**, 97, 369-381	1	3
266	Carbon Nanotube Detectors and Spectrometers for the Terahertz Range. *Crystals*, **2020**, 10, 601	2.3	3
265	Modulation characteristics of uncooled graphene photodetectors. *Journal of Applied Physics*, **2021**, 129, 214503	2.5	3
264	Plasmonic Helicity-Driven Detector of Terahertz Radiation. *Physica Status Solidi - Rapid Research Letters*, **2019**, 13, 1800464	2.5	3
263	Coulomb Drag by Injected Ballistic Carriers in Graphene n+□□+ Structures: Doping and Temperature Effects. *Physica Status Solidi (A) Applications and Materials Science*,2100535	1.6	3
262	Electrical Behavior of Organic Transistors and Circuits **2004**, 347-524		3
261	(Electronics and Photonics Division Award) Physics of Wide Band Gap Semiconductor Devices. *ECS Transactions*, **2017**, 75, 1-8	1	2
260	High-efficiency UV LEDs on sapphire **2015**,		2
259	High Current (1225A) Optical Triggering of 18-kV 4H-SiC Thyristor in Purely Inductive Load Circuit. *Materials Science Forum*, **2015**, 821-823, 893-896	0.4	2
258	Multiple graphene-layer-based heterostructures with van der Waals barrier layers for terahertz superluminescent and laser diodes with lateral/vertical current injection. *Semiconductor Science and Technology*, **2020**, 35, 085023	1.8	2
257	Device model for pixelless infrared image up-converters based on polycrystalline graphene heterostructures. *Journal of Applied Physics*, **2018**, 123, 014503	2.5	2
256	A sensitivity analysis on the electron transport within zinc oxide and its device implications. *MRS Advances*, **2016**, 1, 2777-2782	0.7	2
255	An Efficient TCAD Model for TeraFET Detectors **2019**,		2

254	Empirical model for the velocity-field characteristics of semiconductors exhibiting negative differential mobility. *Solid State Communications*, **2019**, 299, 113658	1.6	2
253	Plasmonic and bolometric terahertz graphene sensors **2013**,		2
252	**2017**,		2
251	Efficiency droop and carrier transport in AlGaN epilayers and heterostructures. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 961-964	1.3	2
250	The correct account of nonzero differential conductance in the saturation regime in the MOSFET compact model. *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, **2014**, 27, 863-874	1	2
249	Dispersion studies in THz plasmonic devices with cavities **2014**,		2
248	Scanning near-field optical spectroscopy of AlGaN epitaxial layers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2012**, 9, 1617-1620		2
247	Influence of ambient on conductivity and 1/f noise in Si nanowire arrays **2013**,		2
246	High Power III-Nitride UV Emitters **2011**,		2
245	Silicon and nitride FETs for THz sensing **2011**,		2
244	Statistical approach to color rendition properties of solid state light sources **2011**,		2
243	Letter to Editors ABOUT THE "FORCE-VELOCITY" RELATION IN MUSCLE AND MANY OTHER ISSUES. *Journal of Mechanics in Medicine and Biology*, **2010**, 10, 1-3	0.7	2
242	Detection of CO2 absorption in graphene using surface acoustic waves **2010**,		2
241	Terahertz electronics for sensing applications **2011**,		2
240	Surface acoustic wave interdigital transducer response to Deep UV illumination in AlGaN/sapphire **2009**,		2
239	Low frequency noise in amorphous silicon thin film transistors with SiNx gate dielectric. *Journal of Applied Physics*, **2009**, 105, 124504	2.5	2
238	Cryogenic RF switch using III-nitride MOSHFETs. *Electronics Letters*, **2009**, 45, 207	1.1	2
237	Low Frequency Noise in 4H-SiC MOSFETs. *Materials Science Forum*, **2009**, 615-617, 817-820	0.4	2

236	1/f Noise and trap density in n-channel strained-Si/SiGe modulation doped field effect transistors. *Solid-State Electronics*, **2009**, 53, 626-629	1.7	2
235	LOW FREQUENCY NOISE AND INTERFACE DENSITY OF TRAPS IN InGaAs MOSFETs WITH GdScO3 HIGH-K DIELECTRIC. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 105-113	0.5	2
234	HOW DO WE LOSE EXCITATION IN THE GREEN?. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 13-25	0.5	2
233	Enhanced terahertz detection using multiple GaAs HEMTs connected in series **2009**,		2
232	Graphene-Based Terahertz Devices: Concepts and Characteristics **2010**, 293-306		2
231	Characterization and Modeling of Frequency Dispersion in Amorphous Silicon Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **1997**, 467, 881		2
230	Optical and electrical properties of 2-dimensional electron gas in GaN/AlGaN heterostructures. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1997**, 46, 79-83	3.1	2
229	SPICE MODELING OF COMPOUND SEMICONDUCTOR DEVICES. *International Journal of High Speed Electronics and Systems*, **1998**, 09, 725-781	0.5	2
228	Ultra low-loss high power AlGaN/GaN HFET switches. *Power Electronics Specialist Conference (PESC), IEEE*, **2008**,		2
227	Carrier dynamics in GaN at extremely low excited carrier densities. *Solid State Communications*, **2008**, 145, 312-315	1.6	2
226	CURRENT INSTABILITY AND PLASMA WAVE GENERATION IN UNGATED TWO DIMENSIONAL ELECTRON LAYERS. *International Journal of High Speed Electronics and Systems*, **2006**, 16, 443-451	0.5	2
225	Physics and Applications of Deep UV LEDs **2006**,		2
224	PHOTOCAPACITANCE OF SELECTIVELY DOPED AlGaAs/GaAs HETEROSTRUCTURES CONTAINING DEEP TRAPS. *International Journal of High Speed Electronics and Systems*, **2007**, 17, 189-192	0.5	2
223	RESONANT TERAHERTZ DETECTION ANTENNA UTILIZING PLASMA OSCILLATIONS IN LATERAL SCHOTTKY DIODE. *International Journal of High Speed Electronics and Systems*, **2007**, 17, 539-546	0.5	2
222	Modeling Of Thin Film Transistors with Non-Ideal Contacts. *ECS Transactions*, **2007**, 8, 165-170	1	2
221	Excitation of gated and ungated plasmons and generation of terahertz radiation in nanometer-gate field-effect transistor		2
220	Terahertz photomixing using plasma oscillations in a two-dimensional heterostructure **2003**,		2
219	1/f noise and ballistic mobility in GaN/AlGaN heterostructure field effect transistors in high magnetic fields **2004**, 5470, 277		2

218	Simulation of gate lag and current collapse in GaN heterojunction field effect transistors		2
217	Remote Laboratory for Electrical Experiments **2005**, 175-219		2
216	TeraHertz detectors based on plasma oscillations in nanometric Silicon Field Effect Transistors. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 1413-1417		2
215	Physics of GaN devices (Keynote Address) **2005**,		2
214	STRAIN ENERGY BAND ENGINEERING APPROACH TO AlN/GaN/InN HETEROJUNCTION DEVICES. *International Journal of High Speed Electronics and Systems*, **2002**, 12, 401-419	0.5	2
213	LOW-DIMENSIONAL SYSTEMS. *International Journal of High Speed Electronics and Systems*, **2002**, 12, 1-14	0.5	2
212	LOW FREQUENCY NOISE IN GALLIUM NITRIDE FIELD EFFECT TRANSISTORS. *International Journal of High Speed Electronics and Systems*, **2002**, 12, 449-458	0.5	2
211	The Influence of Substrate Surface Polarity on Optical Properties of GaN Grown on Single Crystal Bulk AlN. *Materials Research Society Symposia Proceedings*, **2002**, 743, L3.34.1		2
210	Gate Current Modeling for Insulating Gate III-N Heterostructure Field-Effect Transistors. *Materials Research Society Symposia Proceedings*, **2002**, 743, L9.10.1		2
209	Wide band gap electronic devices		2
208	High Magnetic Field Studies of AlGaN/GaN Heterostructures Grown on Bulk GaN, SiC, and Sapphire Substrates. *Materials Research Society Symposia Proceedings*, **2000**, 639, 731		2
207	Two-dimensional electron gas scattering mechanisms in AlGaN/GaN heterostructures. *Materials Research Society Symposia Proceedings*, **2000**, 639, 751		2
206	Consequences of space dependence of effective mass in quantum wires. *Solid-State Electronics*, **2000**, 44, 1293-1296	1.7	2
205	Electrical Instabilities and 1/f Noise in Organic Pentacene Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **2000**, 660, 1		2
204	CAD TOOLS AND OPTICAL DEVICE MODELS FOR MIXED ELECTRONIC/PHOTONIC VLSI. *International Journal of High Speed Electronics and Systems*, **2000**, 10, 299-308	0.5	2
203	SIMULATION AND MODELING OF COMPOUND SEMICONDUCTOR DEVICES. *International Journal of High Speed Electronics and Systems*, **1995**, 06, 237-284	0.5	2
202	Analytical Theory of Electron Mobility and Drift Velocity in GaN. *Materials Research Society Symposia Proceedings*, **1996**, 449, 609		2
201	Quasi-three-dimensional modeling of a novel 2-D MESFET. *IEEE Transactions on Electron Devices*, **1996**, 43, 358-359	2.9	2

200	. *Computer*, **1993**, 26, 103-104	1.6	2
199	. *IEEE Transactions on Electron Devices*, **1990**, 37, 1810-1820	2.9	2
198	Analysis of amorphous silicon thin-film transistors. *Journal of Non-Crystalline Solids*, **1987**, 97-98, 1291-1294	3.4	2
197	Analysis of stability of amorphous silicon solar cells. *AIP Conference Proceedings*, **1987**,	0	2
196	Double base hot electron transistor. *Superlattices and Microstructures*, **1988**, 4, 329-332	2.8	2
195			2
194	Modulation-doped structures with graded heterointerfaces. *Journal of Applied Physics*, **1985**, 57, 1242-1246	2.5	2
193	WA-B6 ballistic electron transport in thin layers of GaAs. *IEEE Transactions on Electron Devices*, **1980**, 27, 2197-2197	2.9	2
192	Transverse magnetoresistance in GaAs two terminal submicron devices: A characterization of electron transport in the near ballistic regime **1980**,		2
191	Geometrical magnetoresistance and negative differential mobility in semiconductor devices. *Solid-State Electronics*, **1977**, 20, 389-401	1.7	2
190	THz photonic and plasmonic devices for sensing and communication applications **2019**,		2
189	Novel GaAs Devices **1987**, 611-651		2
188	A High Transconductance SiC Buried-Gate Junction Field Effect Transistor. *Springer Proceedings in Physics*, **1989**, 184-190	0.2	2
187	Hydrodynamic inverse Faraday effect in a two-dimensional electron liquid. *Physical Review B*, **2020**, 102,	3.3	2
186	AI Powered THz VLSI Testing Technology **2020**,		2
185	Subpicosecond Nonlinear Plasmonic Response Probed by Femtosecond Optical Pulses. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640003	0.5	2
184	Graphene-based van der Waals heterostructures for emission and detection of terahertz radiation **2016**,		2
183	Frequency to digital conversion using Si TeraFETs. *Optical Engineering*, **2021**, 60,	1.1	2

182	. *IEEE Transactions on Electron Devices*, **2021**, 68, 903-910	2.9	2
181	Silicon and Silicon Germanium Terahertz Electronics **2018**,		2
180	Chip-Scale Droop-Free Fin Light-Emitting Diodes Using Facet-Selective Contacts. *ACS Applied Materials & Interfaces*, **2021**, 13, 44663-44672	9.5	2
179	AI-Powered Terahertz VLSI Testing Technology for Ensuring Hardware Security and Reliability. *IEEE Access*, **2021**, 9, 64499-64509	3.5	2
178	Basic Device Issues in UV Solid-State Emitters and Detectors **2004**, 1-13		2
177	Optical Measurements Using Light-Emitting Diodes **2004**, 127-142		2
176	Cubic boron nitride as a material for future electron device applications: A comparative analysis. *Applied Physics Letters*, **2022**, 120, 122105	3.4	2
175	The electron transport that occurs within wurtzite zinc oxide and the application of stress. *MRS Advances*, **2017**, 2, 2627-2632	0.7	1
174	Plasmonic polarization-sensitive detector of terahertz radiation. *Journal of Physics: Conference Series*, **2019**, 1236, 012029	0.3	1
173	Graphene Active Plasmonics for New Types of Terahertz Lasers **2015**,		1
172	Acoustoelectric investigation of V 2 O 5 □n H 2 O thin film transition from wet gel to xerogel. *Journal of Non-Crystalline Solids*, **2015**, 425, 24-27	3.9	1
171	Acousto-Optic Diffraction by Shear Horizontal Surface Acoustic Waves in 36□Rotated Y-Cut X-Propagation Lithium Tantalate. *Acta Physica Polonica A*, **2015**, 127, 52-54	0.6	1
170	Recent advances in the research toward graphene-based terahertz lasers **2015**,		1
169	Silicon-on-Insulator Photoimpedance Sensor Using Capacitance Dispersion. *IEEE Transactions on Electron Devices*, **2016**, 63, 3236-3240	2.9	1
168	(Invited) Physics of GaN High Electron Mobility Transistors. *ECS Transactions*, **2016**, 75, 69-76	1	1
167	Recent developments in terahertz sensing technology **2016**,		1
166	A steady-state and transient analysis of the electron transport that occurs within bulk wurtzite zinc-magnesium-oxide alloys subjected to high-fields. *MRS Advances*, **2018**, 3, 3439-3444	0.7	1
165	Concepts of infrared and terahertz photodetectors based on vertical graphene van der Waals and HgTe-CdHgTe heterostructures. *Opto-electronics Review*, **2019**, 27, 219-223	2.4	1

164	GaN microwave varactors with insulated electrodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 853-856		1
163	Terahertz emission and detection in double-graphene-layer structures **2014**,		1
162	Plasma resonant terahertz photomixers based on double graphene layer structures. *Journal of Physics: Conference Series*, **2014**, 486, 012032	0.3	1
161	(Invited) New Approaches for Shrinking the Performance Gap for GaN Power Devices. *ECS Transactions*, **2017**, 80, 147-159	1	1
160	Graphene Active Plasmonics for New Types of Terahertz Lasers. *International Journal of High Speed Electronics and Systems*, **2014**, 23, 1450016	0.5	1
159	Microdisk resonators for difference frequency generation in THz range **2014**,		1
158	Resonant properties of the planar plasmonic crystal on a membrane substrate. *Bulletin of the Russian Academy of Sciences: Physics*, **2012**, 76, 229-232	0.4	1
157	Graphene-based electro-optical modulator: Concept and analysis **2012**,		1
156	Surface Acoustic Wave Propagation in Lanthanum Strontium Manganese Oxide - Lithium Niobate Structures. *Acta Acustica United With Acustica*, **2013**, 99, 493-497	1.5	1
155	Optical Triggering of 12 kV 1 cm2 4H-SiC Thyristors. *Materials Science Forum*, **2013**, 740-742, 990-993	0.4	1
154	Amplification of terahertz radiation by stimulated emission of plasmons in graphene **2013**,		1
153	Surface and volume 1/f noise in multi-layer graphene **2013**,		1
152	Carrier dynamics and localization in AlInN/GaN heterostructures. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 853-856		1
151	Effect of forward current stress on low frequency noise in 4H SiC p-n junctions. *Journal of Applied Physics*, **2010**, 108, 024508	2.5	1
150	Enhanced Power and Breakdown in III-N RF Switches With a Slow Gate. *IEEE Electron Device Letters*, **2011**, 32, 749-751	4.4	1
149	Reliability of Deep UV LEDs **2009**,		1
148	Humidity sensor using leaky surface acoustic waves in YX-LiTaO3 with nanostructured porphyrin film **2009**,		1
147	Correction to Statistical Approach to Color Quality of Solid-State Lamps *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 1542-1542	3.8	1

146	RF Transmission Line Method for Wide-Bandgap Heterostructures. *IEEE Electron Device Letters*, **2009**, 30, 433-435	4.4	1
145	SIMULATION AND MODELING OF COMPOUND SEMICONDUCTOR DEVICES. *Selected Topics in Electornics and Systems*, **1996**, 317-364	0	1
144	Ion implanted GaAs/InGaAs lateral injection ridge QW laser for OEICs: study of operation mechanisms **1997**,		1
143	Breakdown behavior of low-power pseudomorphic AlGaAs/InGaAs 2-D MESFET's. *IEEE Transactions on Electron Devices*, **1998**, 45, 1843-1845	2.9	1
142	Current and optical low-frequency noise of GaInN/GaN green light emitting diodes **2007**, 6600, 174		1
141	Terahertz technology for space exploration and data communications **2007**,		1
140			1
139	Physics of GaN-based heterostructure field effect transistors **2005**,		1
138	Spectra of standing and traveling plasma waves in two-dimensional electron channels. *Physica E: Low-Dimensional Systems and Nanostructures*, **2006**, 34, 417-420	3	1
137	Time- and frequency-domain measurements of carrier lifetimes in GaN epilayers. *Superlattices and Microstructures*, **2006**, 40, 274-278	2.8	1
136	Low-frequency noise in monodisperse platinum nanostructures near the percolation threshold. *Physics of the Solid State*, **2006**, 48, 2194-2198	0.8	1
135	Modeling of the excitation of terahertz plasma oscillations in a HEMT by ultrashort optical pulses		1
134	STRAIN ENERGY BAND ENGINEERING APPROACH TO AlN/GaN/InN HETEROJUNCTION DEVICES **2003**,		1
133	Inspection of space shuttle insulation foam defects using a 0.2 THz Gunn diode oscillator		1
132	LIFETIME OF NONEQUILIBRIUM CARRIERS IN AlGaN EPILAYERS WITH HIGH Al MOLAR FRACTION. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 696-701	0.5	1
131	Quantum well and quantum dot infrared photodetectors: physics of operation and modeling **2003**,		1
130	High-power K-band submicron insulating gate heterostructure field-effect transistors		1
129	Growth of high resistance thick GaN templates by HVPE. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2091-2094		1

128	High magnetic field studies of 1/f noise in GaN/AlGaN heterostructure field effect transistors. *Physica Status Solidi (A) Applications and Materials Science*, **2005**, 202, 677-679	1.6	1
127	THIN-FILM TRANSISTOR MODELING. *Selected Topics in Electornics and Systems*, **2000**, 33-53	0	1
126	Low Frequency Noise in n-GaN with High Electron Mobility. *Materials Science Forum*, **2000**, 338-342, 1603-1608	0.1	1
125	Transistor modeling for the VDSM era		1
124	Shaping of the band gap in AlInGaN alloys **2001**,		1
123	Microwave Simulation on the Performance of High Power GaN/AlGaN Heterostructure Field Effect Transistors. *Physica Status Solidi A*, **1999**, 176, 205-208		1
122	High temperature performance of ion implanted hetero-dimensional JFETs. *Electronics Letters*, **1999**, 35, 845	1.1	1
121	Low-Frequency Noise in SiO2/AlGaN/GaN Heterostructures on SiC and Sapphire Substrates. *Materials Research Society Symposia Proceedings*, **1999**, 595, 1		1
120	Physics of Below Threshold Current Distribution in a-Si:H TFTs. *Materials Research Society Symposia Proceedings*, **1996**, 424, 91		1
119	Laser beam interference effects on the photovoltage of a p-n junction diode. *Journal of Applied Physics*, **1996**, 80, 5459-5463	2.5	1
118	Electronic and Optoelectronic Devices Based on GaN-AlGaN Heterostructures. *Materials Research Society Symposia Proceedings*, **1994**, 339, 163		1
117	Recent Progress in GaN Based Field Effect Transistors. *Materials Research Society Symposia Proceedings*, **1995**, 410, 17		1
116	. *IEEE Transactions on Electron Devices*, **1992**, 39, 226-233	2.9	1
115	Gate current in complementary HFETs. *IEEE Transactions on Electron Devices*, **1992**, 39, 2647-2648	2.9	1
114	Effect of a magnetic field on the gate current in heterostructure field-effect transistors. *Applied Physics Letters*, **1990**, 56, 2028-2030	3.4	1
113			1
112	Double Injection Field Effect Transistor a New Type of Solid State Device. *Materials Research Society Symposia Proceedings*, **1986**, 70, 643		1
111	. *IEEE Transactions on Electron Devices*, **1988**, 35, 2440	2.9	1

110	. *IEEE Transactions on Electron Devices*, **1988**, 35, 1162-1163	2.9	1
109	A new analytical approach to amorphous silicon thin film transistors. *Journal of Non-Crystalline Solids*, **1983**, 59-60, 1171-1174	3.9	1
108	Characteristics of Amorphous Silicon Based Alloy Field Effect Transistors. *Materials Research Society Symposia Proceedings*, **1984**, 33, 307		1
107	Experimental and Theoretical Analysis of the above Threshold Characteristics of Amorphous Silicon Alloy Field Effect Transistors. *Materials Research Society Symposia Proceedings*, **1985**, 49, 373		1
106	Slow Gunn domains in compensated semiconductors. *Journal Physics D: Applied Physics*, **1975**, 8, 530-5343		1
105	Critical exponents describing divergence of the correlation radius in percolation problems. *Journal of Physics C: Solid State Physics*, **1976**, 9, L229-L230		1
104	LOW-DIMENSIONAL SYSTEMS. *Selected Topics in Electornics and Systems*, **2002**, 1-14	0	1
103	Surface Acoustic Waves And Guided Optical Waves In AlGaN Films. *Materials Research Society Symposia Proceedings*, **2003**, 764, 1		1
102	Negative Differential Conductivity in AlGaN/GaN HEMTs: Real Space Charge Transfer from 2D to 3D GaN States?. *MRS Internet Journal of Nitride Semiconductor Research*, **2000**, 5, 355-361		1
101	TeraFET terahertz detectors with spatially non-uniform gate capacitances. *Applied Physics Letters*, **2021**, 119, 161104	3.4	1
100	GENERATION-RECOMBINATION NOISE IN GaN-BASED DEVICES. *Selected Topics in Electornics and Systems*, **2004**, 175-195	0	1
99	Graphene-based 2D-heterostructures for terahertz lasers and amplifiers **2019**,		1
98	Color Rendering Metrics: Status, Methods, and Future Development **2017**, 799-827		1
97	Color Rendering Metrics: Status, Methods, and Future Development **2016**, 1-29		1
96	Heterodimensional Technology for Ultra Low Power Electronics **1996**, 263-268		1
95	Ridley-Watkins-Hilsum-Gunn Effect **1987**, 173-250		1
94	Dependence on Gate Length of Electrical Properties of Self-aligned AlGaAs/GaAs HEMTs Studied by Monte Carlo Technique **1989**, 615-618		1
93	Field Effect Transistor as Electronic Flute **1996**, 251-261		1

92	Wide Band GAP Semiconductors. Good Results and Great Expectations **1996**, 279-290		1
91	Heat capacity of nonequilibrium electron-hole plasma in graphene layers and graphene bilayers. *Physical Review B*, **2021**, 103,	3.3	1
90	Photomodification of carrier lifetime and diffusivity in AlGaN epitaxial layers. *Current Applied Physics*, **2016**, 16, 633-637	2.6	1
89	(Invited) The Compact Models and Parameter Extraction for Thin Film Transistors. *ECS Transactions*, **2016**, 75, 171-178	1	1
88	Terahertz compact SPICE model **2016**,		1
87	Negative Terahertz Conductivity at Vertical Carrier Injection in a Black-Arsenic-Phosphorus□raphene Heterostructure Integrated With a Light-Emitting Diode. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-9	3.8	1
86	Pandemic Equation for Describing and Predicting COVID19 Evolution. *Journal of Healthcare Informatics Research*, **2021**, 5, 1-13	4	1
85	Electronic Devices Based on Group III Nitrides ? **2018**,		1
84	THz Plasma Field Effect Transistor Detectors **2021**, 285-322		1
83	Biomedical and Biotechnology Applications of Deep Ultraviolet Light Emitting Diodes **2021**,		1
82	III-Nitride Based UV Light Emiting Diodes **2004**, 59-75		1
81	GaN-based field effect transistors **1997**, 297-320		1
80	Detection of Terahertz Radiation by Dense Arrays of InGaAs Transistors. *Selected Topics in Electornics and Systems*, **2015**, 31-53	0	0
79	Low-frequency noise in gallium nitride epitaxial layers with different degrees of order of mosaic structure. *Semiconductors*, **2004**, 38, 998-1000	0.7	0
78	Low frequency noise in GaAs heterodimensional junction field effect transistors. *Electronics Letters*, **2000**, 36, 675	1.1	0
77	TWO-DIMENSIONAL ELECTRONS IN FIELD EFFECT TRANSISTORS. *Selected Topics in Electornics and Systems*, **1998**, 65-99	0	0
76	DOUBLE RIDLEY-WATKINS-HILSUM-GUNN EFFECT IN COMPENSATED GaAs **1988**, 607-610		0
75	Sensitivity analysis for an electron transport system: application to the case of wurtzite gallium nitride. *Journal of Computational Electronics*, **2020**, 19, 103-110	1.8	0

74	Coulomb drag and plasmonic effects in graphene field-effect transistors enable resonant terahertz detection. *Applied Physics Letters*, **2022**, 120, 111102	3.4	0
73	A low-field electron mobility analysis of cubic boron nitride. *Solid State Communications*, **2022**, 114776	1.6	0
72	Acoustoelectric effects in reflection of leaky-wave-radiated bulk acoustic waves from piezoelectric crystal-conductive liquid interface. *Ultrasonics*, **2016**, 64, 196-9	3.5	
71	Dynamic Conductivity and Two-Dimensional Plasmons in Lateral CNT Networks. *International Journal of High Speed Electronics and Systems*, **2017**, 26, 1740004	0.5	
70	Modelling of saturation current of an organic field-effect transistor with accounting for contact resistances. *IOP Conference Series: Materials Science and Engineering*, **2019**, 498, 012038	0.4	
69	How changes in the crystal temperature and the doping concentration impact upon bulk wurtzite zinc oxide's electron transport response. *MRS Advances*, **2019**, 4, 2673-2678	0.7	
68	Terahertz Wave Generation Using Graphene and Compound Semiconductor Nano-Heterostructures. *Nanostructure Science and Technology*, **2015**, 237-261	0.9	
67	Terahertz Sensing Technology. *International Journal of High Speed Electronics and Systems*, **2015**, 24, 1550001	0.5	
66	New Approaches to Realizing High Power Nitride Based Field Effect Transistors. *ECS Transactions*, **2014**, 64, 29-34	1	
65	Static and transient characteristics of GaN power HFETs with low-conducting coating. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 866-870		
64	Contactless Monitoring of Conductivity Changes in Vanadium Pentoxide Xerogel Layers Using Surface Acoustic Waves. *Physics Procedia*, **2015**, 70, 135-138		
63	Terahertz Sensing Technology. *Selected Topics in Electornics and Systems*, **2015**, 1-29	0	
62	(Invited) Plasmonic Terahertz Detectors. *ECS Transactions*, **2015**, 66, 139-144	1	
61	Investigation of wide-aperture plasmonic detectors by a tightly focused terahertz beam. *Journal of Physics: Conference Series*, **2014**, 486, 012013	0.3	
60	Tunable and Wireless Photoimpedance Light Sensor. *Materials Research Society Symposia Proceedings*, **2014**, 1666, 103		
59	Physics of GaN-based Power Field Effect Transistors. *ECS Transactions*, **2013**, 50, 129-138	1	
58	Lateral modulation doping of two-dimensional electron or hole gas. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 318-323	1.3	
57	SURFACE ACOUSTIC WAVE PROPAGATION IN GaN-ON-SAPPHIRE UNDER PULSED SUB-BAND ULTRAVIOLET ILLUMINATION. *International Journal of High Speed Electronics and Systems*, **2009**, 19, 77-83	0.5	

56	Evaluation of the N- and La-induced defects in the high-□gate stack using low frequency noise characterization. *Microelectronic Engineering*, **2011**, 88, 1255-1258	2.5
55	COMPACT CAPACITANCE MODEL FOR PRINTED THIN FILM TRANSISTORS WITH NON-IDEAL CONTACTS. *International Journal of High Speed Electronics and Systems*, **2011**, 20, 801-813	0.5
54	Acoustic plate mode propagation and interaction with ultraviolet light in periodic AlN-on-sapphire structure. *Applied Physics Letters*, **2011**, 98, 093504	3.4
53	Low-Frequency Noise in □raphene-Like□Exfoliated Thin Films of Topological Insulators. *Materials Research Society Symposia Proceedings*, **2011**, 1344, 1	
52	1/f Noise in Graphene Field-Effect Transistors: Dependence on the Device Channel Area. *Materials Research Society Symposia Proceedings*, **2011**, 1344, 1	
51	4H-SiC MOSFETs with Si-Like Low-Frequency Noise Characteristics. *Materials Science Forum*, **2012**, 717-720, 1105-1108	0.4
50	NON-IDEAL CURRENT TRANSPORT IN HETEROSTRUCTURE FIELD EFFECT TRANSISTORS. *Selected Topics in Electornics and Systems*, **2009**, 177-189	0
49	Field effect transistor modeling issues. *Physica Scripta*, **1997**, T69, 30-39	2.6
48	Carrier dynamics in wide-band-gap AlGaN/AlGaN quantum wells. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2008**, 5, 2096-2098	
47	PHOTOCAPACITANCE OF GaAs THIN-FILM STRUCTURES FABRICATED ON A SEMI-INSULATING COMPENSATED SUBSTRATE. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 775-784	0.5
46	NOISE CHARACTERISTICS OF 340 nm AND 280 nmGaN-BASED LIGHT EMITTING DIODES. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 702-707	0.5
45	NUMERICAL INVESTIGATION OF THE EFFECT OF DOPING PROFILES ON THE HIGH FREQUENCY PERFORMANCE OF InP/InGaAs SUPER SCALED HBTs. *International Journal of High Speed Electronics and Systems*, **2004**, 14, 632-639	0.5
44	Nonequilibrium Carrier Lifetime and Diffusion Coefficients in 6H-SiC. *Materials Science Forum*, **2004**, 457-460, 665-668	0.4
43	Magnetotransport characterization of THz detectors based on plasma oscillations in submicron field-effect transistors. *Physics of the Solid State*, **2004**, 46, 138-145	0.8
42	Modeling of plasma oscillations and terahertz photomixing in HEMT-like heterostructure with lateral Schottky junction **2005**, 6039, 176	
41	Luminescence of highly excited nonpolar a-plane GaN epilayers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2005**, 2, 2770-2773	
40	Remote Laboratory: Bringing Students up Close to Semiconductor Devices **2005**, 221-234	
39	Next-Generation Laboratory: Solution for Remote Characterization of Analog Integrated Circuits **2005**, 145-174	

38	Instrumentation on the Web **2005**, 89-143	
37	Study of Optical Gain in Thick GaN Epilayers by Variable Stripe Length Technique. *Materials Research Society Symposia Proceedings*, **2005**, 866, 120	
36	Stripe Geometry Light Emitting Diodes over Pulsed Lateral Epitaxial Overgrown GaN for Solid State White Lighting. *Physica Status Solidi A*, **2001**, 188, 147-150	
35	Stimulated Emission in InGaN/GaN Quantum Wells. *Materials Science Forum*, **2002**, 384-385, 265-268	0.4
34	Properties of Surface Acoustic Waves in AlN And GaN. *Materials Research Society Symposia Proceedings*, **2002**, 743, L6.36.1	
33	Growth and Characterization of Deep UV Emitter Structures Grown on Single Crystal Bulk AlN Substrates. *Materials Research Society Symposia Proceedings*, **2002**, 743, L6.30.1	
32	Attenuation of Surface Acoustic Waves by Carbon Nanotubes. *Materials Research Society Symposia Proceedings*, **2002**, 750, 1	
31	Characterization of Thick GaN Layers Using Guided Optical Waves. *Materials Science Forum*, **2000**, 338-342, 1583-1586	0.4
30	Electronic Devices based on Group III Nitrides **2001**, 2616-2630	
29	Quaternary AlInGaN MQWs for Ultraviolet LEDs. *Materials Research Society Symposia Proceedings*, **2001**, 693, 549	
28	Negative Differential Conductivity in AlGaN/GaN HEMTs: Real Space Charge Transfer from 2D to 3D GaN States?. *Materials Research Society Symposia Proceedings*, **1999**, 595, 1	
27	1/f Noise Behavior in Pentacene Organic Thin Film Transistors. *Materials Research Society Symposia Proceedings*, **1999**, 598, 81	
26	Recent Progress in AlGaN/GaN Based Optoelectronic Devices. *Materials Research Society Symposia Proceedings*, **1995**, 395, 913	
25	Folded gate□A novel logic gate structure. *IEEE Electron Device Letters*, **1984**, 5, 454-455	4.4
24	Analysis of light-induced degradation in amorphous silicon alloy p-i-n solar cells. *Journal of Non-Crystalline Solids*, **1985**, 77-78, 1481-1484	3.9
23	Amorphous Silicon Alloy Thin Film Transistor Operation With High Field Effect Mobility **1986**, 0617, 33	
22	Slow high-field domains in Gunn diodes with two kinds of carriers. *Journal Physics D: Applied Physics*, **1974**, 7, 1279-1286	3
21	LOW-FREQUENCY NOISE IN AlGaN/GaN HETEROSTRUCTURE FIELD EFFECT TRANSISTORS AND METAL OXIDE SEMICONDUCTOR HETEROSTRUCTURE FIELD EFFECT TRANSISTORS **2022**, 419-424	

20	Web-Based Experimentation for Students with Learning Disabilities1156-1172	
19	Tunneling Effects and Low Frequency Noise of GaN/GaAlN HFETs **2004**, 161-168	
18	Low-Frequency Noise in SiO2/AlGaN/GaN Heterostructures on SiC and Sapphire Substrates. *MRS Internet Journal of Nitride Semiconductor Research*, **2000**, 5, 612-618	
17	Physics and Modeling of Poly-, Micro-, and Nano-Si TFTs **2004**, 620-669	
16	III-Nitride Based Ultraviolet Surface Acoustic Wave Sensors **2004**, 239-246	
15	Electron Transport Within the III Nitride Semiconductors, GaN, AIN, and InA: A Monte Carlo Analysis **2006**, 805-828	
14	Metal Semiconductor Field Effect Transistors. *The Electrical Engineering Handbook*, **2007**, 20-1-20-27	
13	RESONANT TERAHERTZ DETECTION ANTENNA UTILIZING PLASMA OSCILLATIONS IN LATERAL SCHOTTKY DIODE. *Selected Topics in Electornics and Systems*, **2008**, 95-102	0
12	(Invited) Percolation Carbon Nanotube Thin Film Transistors. *ECS Transactions*, **2020**, 98, 161-171	1
11	Transferred Electron Amplifiers and Logic and Functional Devices **1987**, 277-300	
10	Physical Models for Compound Semiconductor Devices **1989**, 89-108	
9	Variable Threshold Heterostructure FET Studied by Monte Carlo Simulation **1991**, 123-126	
8	Gunn Diode and IMPATT Diode Modelling **1993**, 89-103	
7	TERAHERTZ AND INFRARED PHOTODETECTORS BASED ON VERTICAL GRAPHENE VAN DER WAALS HETEROSTRUCTURES: CONCEPTS, FEATURES OF OPERATION AND CHARACTERISTICS **2017** , 159-167	
6	Web-Based Experimentation for Students with Learning Disabilities **2012**, 216-232	
5	Modulation Doped Field Effect Transistors **1987**, 513-610	
4	Band Structure and Transport Properties **1987**, 11-103	
3	An improved empirical model for a semiconductor velocity-field characteristic applied to gallium arsenide. *Solid State Communications*, **2021**, 330, 114240	1.6

2	Plasmonic Enhancement of Terahertz Devices Efficiency. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640019	0.5
1	Giant inverse Faraday effect in a plasmonic crystal ring.. *Optics Express*, **2022**, 30, 13733-13744	3.3