Michael S Shur

List of Publications by Year in Descending Order

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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	Graphene-based plasmonic metamaterial for terahertz laser transistors. *Nanophotonics*, **2022**,	6.3	3
1080	LOW-FREQUENCY NOISE IN AlGaN/GaN HETEROSTRUCTURE FIELD EFFECT TRANSISTORS AND METAL OXIDE SEMICONDUCTOR HETEROSTRUCTURE FIELD EFFECT TRANSISTORS **2022**, 419-424		
1079	Coulomb drag and plasmonic effects in graphene field-effect transistors enable resonant terahertz detection. *Applied Physics Letters*, **2022**, 120, 111102	3.4	0
1078	Cubic boron nitride as a material for future electron device applications: A comparative analysis. *Applied Physics Letters*, **2022**, 120, 122105	3.4	2
1077	Giant inverse Faraday effect in a plasmonic crystal ring.. *Optics Express*, **2022**, 30, 13733-13744	3.3	
1076	A low-field electron mobility analysis of cubic boron nitride. *Solid State Communications*, **2022**, 114776	1.6	0
1075	Plasmonic Field-Effect Transistors (TeraFETs) for 6G Communications. *Sensors*, **2021**, 21,	3.8	6
1074	TeraFET terahertz detectors with spatially non-uniform gate capacitances. *Applied Physics Letters*, **2021**, 119, 161104	3.4	1
1073	An improved empirical model for a semiconductor’s velocity-field characteristic applied to gallium arsenide. *Solid State Communications*, **2021**, 330, 114240	1.6	
1072	Modulation characteristics of uncooled graphene photodetectors. *Journal of Applied Physics*, **2021**, 129, 214503	2.5	3
1071	Heat capacity of nonequilibrium electron-hole plasma in graphene layers and graphene bilayers. *Physical Review B*, **2021**, 103,	3.3	1
1070	Terahertz Plasmonic Technology. *IEEE Sensors Journal*, **2021**, 21, 12752-12763	4	6
1069	Pandemic Equation for Describing and Predicting COVID19 Evolution. *Journal of Healthcare Informatics Research*, **2021**, 5, 1-13	4	1
1068	Frequency to digital conversion using Si TeraFETs. *Optical Engineering*, **2021**, 60,	1.1	2
1067	Collision dominated, ballistic, and viscous regimes of terahertz plasmonic detection by graphene. *Journal of Applied Physics*, **2021**, 129, 053102	2.5	5
1066	. *IEEE Transactions on Electron Devices*, **2021**, 68, 903-910	2.9	2
1065	THz Plasma Field Effect Transistor Detectors **2021**, 285-322		1

1064	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
1063	Biomedical and Biotechnology Applications of Deep Ultraviolet Light Emitting Diodes **2021**,		1
1062	Chip-Scale Droop-Free Fin Light-Emitting Diodes Using Facet-Selective Contacts. *ACS Applied Materials & Interfaces*, **2021**, 13, 44663-44672	9.5	2
1061	AI-Powered Terahertz VLSI Testing Technology for Ensuring Hardware Security and Reliability. *IEEE Access*, **2021**, 9, 64499-64509	3.5	2
1060	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
1059	Electron transport within bulk cubic boron nitride: A Monte Carlo simulation analysis. *Journal of Applied Physics*, **2020**, 128, 185704	2.5	3
1058	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
1057	Plasmonic instabilities in two-dimensional electron channels of variable width. *Physical Review B*, **2020**, 101,	3.3	12
1056	Plasmonic FET Terahertz Spectrometer. *IEEE Access*, **2020**, 8, 56039-56044	3.5	7
1055	Soft Printable Electrode Coating for Neural Interfaces.. *ACS Applied Bio Materials*, **2020**, 3, 4388-4397	4.1	17
1054	Graphene based plasma-wave devices for terahertz applications. *Applied Physics Letters*, **2020**, 116, 140501	3.4	21
1053	Si, SiGe, InP, III-N, and p-diamond FETs and HBTs for sub-terahertz and terahertz applications **2020**,		3
1052	Far-infrared photodetectors based on graphene/black-AsP heterostructures. *Optics Express*, **2020**, 28, 2480-2498	3.3	15
1051	Far-infrared and terahertz emitting diodes based on graphene/black-P and graphene/MoS heterostructures. *Optics Express*, **2020**, 28, 24136-24151	3.3	4
1050	(Invited) Percolation Carbon Nanotube Thin Film Transistors. *ECS Transactions*, **2020**, 98, 161-171	1	
1049	Sub-terahertz FET detector with self-assembled Sn-nanothreads. *Journal Physics D: Applied Physics*, **2020**, 53, 075102	3	4
1048	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
1047	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

1046	(Keynote) Terahertz Nanoplasmonics Technology: Physics, Applications, and Commercialization. *ECS Transactions*, **2020**, 97, 369-381	1	3
1045	p-Diamond, Si, GaN, and InGaAs TeraFETs. *IEEE Transactions on Electron Devices*, **2020**, 67, 4858-4865	2.9	5
1044	Hydrodynamic inverse Faraday effect in a two-dimensional electron liquid. *Physical Review B*, **2020**, 102,	3.3	2
1043	Carbon Nanotube Detectors and Spectrometers for the Terahertz Range. *Crystals*, **2020**, 10, 601	2.3	3
1042	AI Powered THz VLSI Testing Technology **2020**,		2
1041	High-brightness lasing at submicrometer enabled by droop-free fin light-emitting diodes (LEDs). *Science Advances*, **2020**, 6, eaba4346	14.3	10
1040	AI Powered THz Testing Technology for Ensuring Hardware Cybersecurity **2020**,		4
1039	Plasmonic polarization-sensitive detector of terahertz radiation. *Journal of Physics: Conference Series*, **2019**, 1236, 012029	0.3	1
1038	Negative terahertz conductivity and amplification of surface plasmons in graphene-black phosphorus injection laser heterostructures. *Physical Review B*, **2019**, 100,	3.3	12
1037	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	
1036	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	
1035	Compact Terahertz SPICE/ADS Model. *IEEE Transactions on Electron Devices*, **2019**, 66, 2496-2501	2.9	6
1034	Sub-terahertz testing of millimeter wave Monolithic and very large scale integrated circuits. *Solid-State Electronics*, **2019**, 155, 44-48	1.7	8
1033	Wide band gap semiconductor technology: State-of-the-art. *Solid-State Electronics*, **2019**, 155, 65-75	1.7	16
1032	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
1031	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
1030	An Efficient TCAD Model for TeraFET Detectors **2019**,		2
1029	Empirical model for the velocity-field characteristics of semiconductors exhibiting negative differential mobility. *Solid State Communications*, **2019**, 299, 113658	1.6	2

1028	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
1027	Terahertz plasmonic field effect transistors for imaging applications **2019**,		3
1026	THz photonic and plasmonic devices for sensing and communication applications **2019**,		2
1025	Terahertz plasmonic detector controlled by phase asymmetry. *Optics Express*, **2019**, 27, 4004-4013	3.3	14
1024	Negative and positive terahertz and infrared photoconductivity in uncooled graphene. *Optical Materials Express*, **2019**, 9, 585	2.6	19
1023	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
1022	Graphene-based 2D-heterostructures for terahertz lasers and amplifiers **2019**,		1
1021	Negative Terahertz Conductivity at Vertical Carrier Injection in a Black-Arsenic-Phosphorus□Graphene Heterostructure Integrated With a Light-Emitting Diode. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-9	3.8	1
1020	Plasmons in Ballistic Nanostructures With Stubs: Transmission Line Approach. *IEEE Transactions on Electron Devices*, **2019**, 66, 126-131	2.9	7
1019	Plasmonic Helicity-Driven Detector of Terahertz Radiation. *Physica Status Solidi - Rapid Research Letters*, **2019**, 13, 1800464	2.5	3
1018	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
1017	Comparison of Intersubband Quantum-Well and Interband Graphene-Layer Infrared Photodetectors. *IEEE Journal of Quantum Electronics*, **2018**, 54, 1-8	2	8
1016	Device model for pixelless infrared image up-converters based on polycrystalline graphene heterostructures. *Journal of Applied Physics*, **2018**, 123, 014503	2.5	2
1015	Manifestation of plasmonic response in the detection of sub-terahertz radiation by graphene-based devices. *Nanotechnology*, **2018**, 29, 245204	3.4	12
1014	Interband infrared photodetectors based on HgTe□CdHgTe quantum-well heterostructures. *Optical Materials Express*, **2018**, 8, 1349	2.6	10
1013	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
1012	Subterahertz and terahertz sensing of biological objects and chemical agents **2018**,		6
1011	Plasmonic heterodimensional resonance for subwavelength imaging **2018**,		4

1010	Plasmonic detectors and sources for THz communication and sensing **2018**,		5
1009	Compact Terahertz SPICE Model: Effects of Drude Inductance and Leakage. *IEEE Transactions on Electron Devices*, **2018**, 65, 5350-5356	2.9	7
1008	p-Diamond as candidate for plasmonic terahertz and far infrared applications. *Applied Physics Letters*, **2018**, 113, 253502	3.4	14
1007	Electronic Devices Based on Group III Nitrides ? **2018**,		1
1006	Current-Driven Dyakonov-Shur Instability in Ballistic Nanostructures with a Stub. *Physical Review Applied*, **2018**, 10,	4.3	8
1005	Electrical modulation of terahertz radiation using graphene-phosphorene heterostructures. *Semiconductor Science and Technology*, **2018**, 33, 124010	1.8	14
1004	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
1003	Silicon and Silicon Germanium Terahertz Electronics **2018**,		2
1002	Nanoscale silicon mosfet response to THz radiation for testing VLSI **2018**,		5
1001	Plasmonic shock waves and solitons in a nanoring. *Physical Review B*, **2017**, 95,	3.3	9
1000	Dynamic Conductivity and Two-Dimensional Plasmons in Lateral CNT Networks. *International Journal of High Speed Electronics and Systems*, **2017**, 26, 1740004	0.5	
999	Ultimate limits for highest modulation frequency and shortest response time of field effect transistor **2017**,		3
998	Development of Deep UV LEDs and Current Problems in Material and Device Technology. *Semiconductors and Semimetals*, **2017**, 96, 45-83	0.6	16
997	(Electronics and Photonics Division Award) Physics of Wide Band Gap Semiconductor Devices. *ECS Transactions*, **2017**, 75, 1-8	1	2
996	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
995	Amplified-reflection plasmon instabilities in grating-gate plasmonic crystals. *Physical Review B*, **2017**, 95,	3.3	27
994	Homodyne phase sensitive terahertz spectrometer. *Applied Physics Letters*, **2017**, 111, 121105	3.4	16
993	The electron transport that occurs within wurtzite zinc oxide and the application of stress. *MRS Advances*, **2017**, 2, 2627-2632	0.7	1

992	**2017**,		2
991	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
990	Terahertz Beam Testing of Millimeter Wave Monolithic Integrated Circuits. *IEEE Sensors Journal*, **2017**, 17, 5487-5491	4	13
989	Low-Frequency Electronic Noise in Quasi-1D TaSe van der Waals Nanowires. *Nano Letters*, **2017**, 17, 377-383	12.5	51
988	(Invited) New Approaches for Shrinking the Performance Gap for GaN Power Devices. *ECS Transactions*, **2017**, 80, 147-159	1	1
987	Nonlinear response of infrared photodetectors based on van der Waals heterostructures with graphene layers. *Optics Express*, **2017**, 25, 5536-5549	3.3	16
986	Color Rendering Metrics: Status, Methods, and Future Development **2017**, 799-827		1
985	Electron Transport Within III-V Nitride Semiconductors. *Springer Handbooks*, **2017**, 1-1	1.3	6
984	TERAHERTZ AND INFRARED PHOTODETECTORS BASED ON VERTICAL GRAPHENE VAN DER WAALS HETEROSTRUCTURES: CONCEPTS, FEATURES OF OPERATION AND CHARACTERISTICS **2017**, 159-167		
983	Acoustoelectric effects in reflection of leaky-wave-radiated bulk acoustic waves from piezoelectric crystal-conductive liquid interface. *Ultrasonics*, **2016**, 64, 196-9	3.5	
982	New optical gating technique for detection of electric field waveforms with subpicosecond resolution. *Optics Express*, **2016**, 24, 12730-9	3.3	3
981	Breakdown current density in h-BN-capped quasi-1D TaSe3 metallic nanowires: prospects of interconnect applications. *Nanoscale*, **2016**, 8, 15774-82	7.7	49
980	THz pulse detection by photoconductive plasmonic high electron mobility transistor with enhanced sensitivity **2016**,		3
979	Silicon-on-Insulator Photoimpedance Sensor Using Capacitance Dispersion. *IEEE Transactions on Electron Devices*, **2016**, 63, 3236-3240	2.9	1
978	Current-driven plasmonic boom instability in three-dimensional gated periodic ballistic nanostructures. *Physical Review B*, **2016**, 93,	3.3	27
977	(Invited) Physics of GaN High Electron Mobility Transistors. *ECS Transactions*, **2016**, 75, 69-76	1	1
976	A sensitivity analysis on the electron transport within zinc oxide and its device implications. *MRS Advances*, **2016**, 1, 2777-2782	0.7	2
975	Plasmonic properties of asymmetric dual grating gate plasmonic crystals. *Physica Status Solidi (B): Basic Research*, **2016**, 253, 671-675	1.3	7

974	Recent developments in terahertz sensing technology **2016**,		1
973	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
972	Color Rendering Metrics: Status, Methods, and Future Development **2016**, 1-29		1
971	Selective Gas Sensor Using Porous Silicon. *Sensor Letters*, **2016**, 14, 588-591	0.9	8
970	Transition from capacitive coupling to direct charge transfer in asymmetric terahertz plasmonic assemblies. *Optics Letters*, **2016**, 41, 5333-5336	3	68
969	Plasmonic Enhancement of Terahertz Devices Efficiency. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640019	0.5	
968	Temperature-dependent efficiency droop in AlGaN epitaxial layers and quantum wells. *AIP Advances*, **2016**, 6, 045212	1.5	8
967	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
966	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
965	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
964	Subpicosecond Nonlinear Plasmonic Response Probed by Femtosecond Optical Pulses. *International Journal of High Speed Electronics and Systems*, **2016**, 25, 1640003	0.5	2
963	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
962	Photomodification of carrier lifetime and diffusivity in AlGaN epitaxial layers. *Current Applied Physics*, **2016**, 16, 633-637	2.6	1
961	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
960	Graphene-based van der Waals heterostructures for emission and detection of terahertz radiation **2016**,		2
959	(Invited) The Compact Models and Parameter Extraction for Thin Film Transistors. *ECS Transactions*, **2016**, 75, 171-178	1	1
958	Terahertz compact SPICE model **2016**,		1
957	Graphene Active Plasmonics for New Types of Terahertz Lasers **2015**,		1

956	Selective chemical vapor sensing with few-layer MoS2 thin-film transistors: Comparison with graphene devices. *Applied Physics Letters*, **2015**, 106, 023115	3.4	97
955	Helicity-Driven Ratchet Effect Enhanced by Plasmons. *Physical Review Letters*, **2015**, 114, 246601	7.4	36
954	Ultimate response time of high electron mobility transistors. *Journal of Applied Physics*, **2015**, 117, 174502	2.5	18
953	Novel AlInN/GaN integrated circuits operating up to 500 °C. *Solid-State Electronics*, **2015**, 113, 22-27	1.7	14
952	Response of plasmonic terahertz detectors to amplitude modulated signals. *Solid-State Electronics*, **2015**, 111, 76-79	1.7	8
951	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
950	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
949	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
948	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
947	Graphene vertical cascade interband terahertz and infrared photodetectors. *2D Materials*, **2015**, 2, 025002	5.9	19
946	Vertical electron transport in van der Waals heterostructures with graphene layers. *Journal of Applied Physics*, **2015**, 117, 154504	2.5	7
945	Recent advances in the research toward graphene-based terahertz lasers **2015**,		1
944	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
943	High-efficiency UV LEDs on sapphire **2015**,		2
942	Red-blue-green solid state light sources using a narrow line-width green phosphor. *Optics Express*, **2015**, 23, A309-15	3.3	5
941	Dynamics of nonequilibrium carrier decay in AlGaN epitaxial layers with high aluminum content. *Optics Express*, **2015**, 23, 19646-55	3.3	5
940	Terahertz Wave Generation Using Graphene and Compound Semiconductor Nano-Heterostructures. *Nanostructure Science and Technology*, **2015**, 237-261	0.9	
939	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

938	Negative terahertz conductivity in disordered graphene bilayers with population inversion. *Applied Physics Letters*, **2015**, 106, 113501	3.4	11
937	Selective Gas Sensing With h -BN Capped MoS2 Heterostructure Thin-Film Transistors. *IEEE Electron Device Letters*, **2015**, 36, 1202-1204	4.4	55
936	Terahertz Sensing Technology. *International Journal of High Speed Electronics and Systems*, **2015**, 24, 1550001	0.5	
935	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
934	Modelling effect of parasitics in plasmonic FETs. *Solid-State Electronics*, **2015**, 104, 75-78	1.7	22
933	Contactless Monitoring of Conductivity Changes in Vanadium Pentoxide Xerogel Layers Using Surface Acoustic Waves. *Physics Procedia*, **2015**, 70, 135-138		
932	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
931	Terahertz Sensing Technology. *Selected Topics in Electornics and Systems*, **2015**, 1-29	0	
930	Detection of Terahertz Radiation by Dense Arrays of InGaAs Transistors. *Selected Topics in Electornics and Systems*, **2015**, 31-53	0	0
929	Resonant plasmonic terahertz detection in vertical graphene-base hot-electron transistors. *Journal of Applied Physics*, **2015**, 118, 204501	2.5	11
928	Spectral dependence of carrier lifetime in high aluminum content AlGaN epitaxial layers. *Journal of Applied Physics*, **2015**, 118, 085705	2.5	6
927	Negative terahertz conductivity in remotely doped graphene bilayer heterostructures. *Journal of Applied Physics*, **2015**, 118, 183105	2.5	3
926	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
925	InP Double Heterojunction Bipolar Transistor for broadband terahertz detection and imaging systems. *Journal of Physics: Conference Series*, **2015**, 647, 012036	0.3	8
924	Efficiency droop and carrier transport in AlGaN epilayers and heterostructures. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 961-964	1.3	2
923	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
922	(Invited) Plasmonic Terahertz Detectors. *ECS Transactions*, **2015**, 66, 139-144	1	
921	Terahertz electronics for sensing and imaging applications **2015**,		4

920	Detection of Terahertz Radiation by Dense Arrays of InGaAs Transistors. *International Journal of High Speed Electronics and Systems*, **2015**, 24, 1550002	0.5	4
919	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
918	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
917	Photoluminescence efficiency in AlGaN quantum wells. *Physica B: Condensed Matter*, **2014**, 453, 40-42	2.8	8
916	GaN microwave varactors with insulated electrodes. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2014**, 11, 853-856		1
915	Voltage-tunable terahertz and infrared photodetectors based on double-graphene-layer structures. *Applied Physics Letters*, **2014**, 104, 163505	3.4	25
914	Surface-plasmons lasing in double-graphene-layer structures. *Journal of Applied Physics*, **2014**, 115, 044511	1.5	14
913	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
912	New Approaches to Realizing High Power Nitride Based Field Effect Transistors. *ECS Transactions*, **2014**, 64, 29-34	1	
911	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		
910	Terahertz detection using on chip patch and dipole antenna-coupled GaAs High Electron Mobility Transistors **2014**,		5
909	Terahertz emission and detection in double-graphene-layer structures **2014**,		1
908	Low RC-Constant Perforated-Channel HFET. *IEEE Electron Device Letters*, **2014**, 35, 449-451	4.4	12
907	AlGaN/GaN plasmonic terahertz electronic devices. *Journal of Physics: Conference Series*, **2014**, 486, 012025	0.3	8
906	Low-frequency 1/f noise in MoS2 transistors: Relative contributions of the channel and contacts. *Applied Physics Letters*, **2014**, 104, 153104	3.4	87
905	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
904	Plasma resonant terahertz photomixers based on double graphene layer structures. *Journal of Physics: Conference Series*, **2014**, 486, 012032	0.3	1
903	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

902	Investigation of wide-aperture plasmonic detectors by a tightly focused terahertz beam. *Journal of Physics: Conference Series*, **2014**, 486, 012013	0.3	
901	Deep UV LEDs for Public Health Applications. *International Journal of High Speed Electronics and Systems*, **2014**, 23, 1450018	0.5	7
900	Graphene Active Plasmonics for New Types of Terahertz Lasers. *International Journal of High Speed Electronics and Systems*, **2014**, 23, 1450016	0.5	1
899	Graphene nanoelectromechanical resonators for the detection of modulated terahertz radiation. *Journal Physics D: Applied Physics*, **2014**, 47, 505105	3	7
898	(Invited) Deep Ultraviolet Light Emitting Diodes: Physics, Performance, and Applications. *ECS Transactions*, **2014**, 61, 53-63	1	3
897	Influence of carrier localization on high-carrier-density effects in AlGaN quantum wells. *Optics Express*, **2014**, 22 Suppl 2, A491-7	3.3	19
896	Artwork visualization using a solid-state lighting engine with controlled photochemical safety. *Optics Express*, **2014**, 22, 16802-18	3.3	15
895	Selective gas sensing with MoS2 thin film transistors **2014**,		3
894	Terahertz Plasmonics: Good Results and Great Expectations. *IEEE Microwave Magazine*, **2014**, 15, 43-50	1.2	72
893	Graphene vertical hot-electron terahertz detectors. *Journal of Applied Physics*, **2014**, 116, 114504	2.5	11
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