

Sergey Rumyantsev

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

211 papers	5,783 citations	40 h-index	68 g-index
247 ext. papers	6,832 ext. citations	2.9 avg, IF	5.38 L-index

#	Paper	IF	Citations
211	Selective gas sensing with a single pristine graphene transistor. <i>Nano Letters</i> , 2012 , 12, 2294-8	11.5	310
210	Nonresonant detection of terahertz radiation in field effect transistors. <i>Journal of Applied Physics</i> , 2002 , 91, 9346-9353	2.5	303
209	Plasma wave detection of terahertz radiation by silicon field effects transistors: Responsivity and noise equivalent power. <i>Applied Physics Letters</i> , 2006 , 89, 253511	3.4	249
208	Resonant detection of subterahertz and terahertz radiation by plasma waves in submicron field-effect transistors. <i>Applied Physics Letters</i> , 2002 , 81, 4637-4639	3.4	226
207	Plasma wave detection of sub-terahertz and terahertz radiation by silicon field-effect transistors. <i>Applied Physics Letters</i> , 2004 , 85, 675-677	3.4	219
206	Resonant detection of subterahertz radiation by plasma waves in a submicron field-effect transistor. <i>Applied Physics Letters</i> , 2002 , 80, 3433-3435	3.4	164
205	Resonant and voltage-tunable terahertz detection in InGaAs/InP nanometer transistors. <i>Applied Physics Letters</i> , 2006 , 89, 131926	3.4	155
204	Room-temperature plasma waves resonant detection of sub-terahertz radiation by nanometer field-effect transistor. <i>Applied Physics Letters</i> , 2005 , 87, 052107	3.4	116
203	Low-frequency electronic noise in the double-gate single-layer graphene transistors. <i>Applied Physics Letters</i> , 2009 , 95, 033103	3.4	115
202	Selective chemical vapor sensing with few-layer MoS ₂ thin-film transistors: Comparison with graphene devices. <i>Applied Physics Letters</i> , 2015 , 106, 023115	3.4	97
201	Flicker Noise in Bilayer Graphene Transistors. <i>IEEE Electron Device Letters</i> , 2009 , 30, 288-290	4.4	97
200	Low-frequency 1/f noise in MoS ₂ transistors: Relative contributions of the channel and contacts. <i>Applied Physics Letters</i> , 2014 , 104, 153104	3.4	87
199	Electrical and noise characteristics of graphene field-effect transistors: ambient effects, noise sources and physical mechanisms. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 395302	1.8	83
198	Origin of 1/f noise in graphene multilayers: Surface vs. volume. <i>Applied Physics Letters</i> , 2013 , 102, 093111	3.4	80
197	Terahertz detection by GaN/AlGaIn transistors. <i>Electronics Letters</i> , 2006 , 42, 1342	1.1	77
196	AlGaIn/GaN high electron mobility field effect transistors with low 1/f noise. <i>Applied Physics Letters</i> , 1998 , 73, 1089-1091	3.4	77
195	Suppression of 1/f noise in near-ballistic h-BN-graphene-h-BN heterostructure field-effect transistors. <i>Applied Physics Letters</i> , 2015 , 107, 023106	3.4	74

194	Measurements and comparison of low frequency noise in npn and pnp polysilicon emitter bipolar junction transistors. <i>Journal of Applied Physics</i> , 1998 , 84, 625-633	2.5	73
193	Nanometer size field effect transistors for terahertz detectors. <i>Nanotechnology</i> , 2013 , 24, 214002	3.4	70
192	"Paradoxes" of carrier lifetime measurements in high-voltage SiC diodes. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 1703-1710	2.9	65
191	Low-frequency current fluctuations in "graphene-like" exfoliated thin-films of bismuth selenide topological insulators. <i>ACS Nano</i> , 2011 , 5, 2657-63	16.7	61
190	Effect of gate leakage current on noise properties of AlGaN/GaN field effect transistors. <i>Journal of Applied Physics</i> , 2000 , 88, 6726-6730	2.5	60
189	Steady-state and transient forward current-voltage characteristics of 4H-silicon carbide 5.5 kV diodes at high and superhigh current densities. <i>IEEE Transactions on Electron Devices</i> , 1999 , 46, 2188-2194	2.9	60
188	Plasma wave resonant detection of femtosecond pulsed terahertz radiation by a nanometer field-effect transistor. <i>Applied Physics Letters</i> , 2005 , 87, 022102	3.4	59
187	VisibleBlind photoresponse of GaN-based surface acoustic wave oscillator. <i>Applied Physics Letters</i> , 2002 , 80, 2020-2022	3.4	59
186	Noise spectroscopy of local levels in semiconductors. <i>Semiconductor Science and Technology</i> , 1994 , 9, 1183-1189	1.8	59
185	1/f noise in pentacene organic thin film transistors. <i>Journal of Applied Physics</i> , 2000 , 88, 5395-5399	2.5	58
184	Low-frequency noise in Al _{0.4} Ga _{0.6} N-based Schottky barrier photodetectors. <i>Applied Physics Letters</i> , 2001 , 79, 866-868	3.4	57
183	Selective Gas Sensing With h^s -BN Capped MoS ₂ Heterostructure Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , 2015 , 36, 1202-1204	4.4	55
182	Selective Sensing of Individual Gases Using Graphene Devices. <i>IEEE Sensors Journal</i> , 2013 , 13, 2818-2822	4	55
181	Reduction of 1/f noise in graphene after electron-beam irradiation. <i>Applied Physics Letters</i> , 2013 , 102, 153512	3.4	54
180	Low-Frequency Electronic Noise in Quasi-1D TaSe van der Waals Nanowires. <i>Nano Letters</i> , 2017 , 17, 377-383	3.3	51
179	Performance limits for field effect transistors as terahertz detectors. <i>Applied Physics Letters</i> , 2013 , 102, 223505	3.4	51
178	Breakdown current density in h-BN-capped quasi-1D TaSe ₃ metallic nanowires: prospects of interconnect applications. <i>Nanoscale</i> , 2016 , 8, 15774-82	7.7	49
177	Graphene thickness-graded transistors with reduced electronic noise. <i>Applied Physics Letters</i> , 2012 , 100, 033103	3.4	49

176	Device loading effects on nonresonant detection of terahertz radiation by silicon MOSFETs. <i>Electronics Letters</i> , 2007 , 43, 422	1.1	48
175	Plasmonic and bolometric terahertz detection by graphene field-effect transistor. <i>Applied Physics Letters</i> , 2013 , 103, 181114	3.4	46
174	On the origin of 1/f noise in polysilicon emitter bipolar transistors. <i>Journal of Applied Physics</i> , 1999 , 85, 1192-1195	2.5	45
173	Low frequency noise in GaN metal semiconductor and metal oxide semiconductor field effect transistors. <i>Journal of Applied Physics</i> , 2001 , 90, 310-314	2.5	44
172	Current Carrying Capacity of Quasi-1D ZrTe ₃ Van Der Waals Nanoribbons. <i>IEEE Electron Device Letters</i> , 2018 , 39, 735-738	4.4	40
171	Low frequency noise in 4H silicon carbide. <i>Journal of Applied Physics</i> , 1997 , 81, 1758-1762	2.5	40
170	. <i>IEEE Transactions on Electron Devices</i> , 2001 , 48, 530-534	2.9	39
169	Bias-Voltage Driven Switching of the Charge-Density-Wave and Normal Metallic Phases in 1T-TaS ₂ Thin-Film Devices. <i>ACS Nano</i> , 2019 , 13, 7231-7240	16.7	38
168	Low-frequency noise in AlGaIn/GaN heterojunction field effect transistors on SiC and sapphire substrates. <i>Journal of Applied Physics</i> , 2000 , 87, 1849-1854	2.5	38
167	Degradation of AlGaIn-based ultraviolet light emitting diodes. <i>Solid-State Electronics</i> , 2008 , 52, 968-972	1.7	37
166	High hole lifetime (3.8 [micro sign]s) in 4H-SiC diodes with 5.5 kV blocking voltage. <i>Electronics Letters</i> , 1999 , 35, 1382	1.1	37
165	Low-Frequency Current Fluctuations and Sliding of the Charge Density Waves in Two-Dimensional Materials. <i>Nano Letters</i> , 2018 , 18, 3630-3636	11.5	36
164	1/ f^2 Noise Characteristics of MoS ₂ Thin-Film Transistors: Comparison of Single and Multilayer Structures. <i>IEEE Electron Device Letters</i> , 2015 , 36, 517-519	4.4	35
163	Channel mobility and on-resistance of vertical double implanted 4H-SiC MOSFETs at elevated temperatures. <i>Semiconductor Science and Technology</i> , 2009 , 24, 075011	1.8	34
162	Current and optical noise of GaN/AlGaIn light emitting diodes. <i>Journal of Applied Physics</i> , 2006 , 100, 034504	1.5	34
161	Low Resistivity and High Breakdown Current Density of 10 nm Diameter van der Waals TaSe Nanowires by Chemical Vapor Deposition. <i>Nano Letters</i> , 2019 , 19, 4355-4361	11.5	32
160	Terahertz response of field-effect transistors in saturation regime. <i>Applied Physics Letters</i> , 2011 , 98, 243505	3.4	32
159	Factors limiting the current gain in high-voltage 4H-SiC npn-BJT. <i>Solid-State Electronics</i> , 2002 , 46, 567-577	1.7	32

158	An ultra-stable non-coherent light source for optical measurements in neuroscience and cell physiology. <i>Journal of Neuroscience Methods</i> , 2005 , 141, 165-9	3	32
157	'Classical' current-voltage characteristics of 4H-SiC p+-n junction diodes. <i>Semiconductor Science and Technology</i> , 2000 , 15, 908-910	1.8	31
156	SILICON FINFETS AS DETECTORS OF TERAHERTZ AND SUB-TERAHERTZ RADIATION. <i>International Journal of High Speed Electronics and Systems</i> , 2011 , 20, 27-42	0.5	30
155	Low-frequency noise in GaN/GaAlN heterojunctions. <i>Applied Physics Letters</i> , 1998 , 72, 3053-3055	3.4	30
154	High-temperature performance of MoS ₂ thin-film transistors: Direct current and pulse current-voltage characteristics. <i>Journal of Applied Physics</i> , 2015 , 117, 064301	2.5	29
153	Low frequency noise and long-term stability of noncoherent light sources. <i>Journal of Applied Physics</i> , 2004 , 96, 966-969	2.5	29
152	Graphene Epoxy-Based Composites as Efficient Electromagnetic Absorbers in the Extremely High-Frequency Band. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 28635-28644	9.5	27
151	Low-frequency noise in AlGaIn/GaN MOS-HFETs. <i>Electronics Letters</i> , 2000 , 36, 268	1.1	27
150	High voltage SiC diodes with small recovery time. <i>Electronics Letters</i> , 2000 , 36, 1241	1.1	25
149	Low frequency noise in AlGaIn/InGaIn/GaN double heterostructure field effect transistors. <i>Solid-State Electronics</i> , 2003 , 47, 1099-1104	1.7	24
148	Drift mobility of electrons in AlGaIn/GaN MOSHFET. <i>Electronics Letters</i> , 2001 , 37, 1479	1.1	24
147	Low-frequency noise in n-GaN with high electron mobility. <i>Journal of Applied Physics</i> , 1999 , 86, 5075-5078	8.5	24
146	Low-frequency noise in GaN nanowire transistors. <i>Journal of Applied Physics</i> , 2008 , 103, 064501	2.5	23
145	Temperature dependence of turn-on processes in 4H-SiC thyristors. <i>Solid-State Electronics</i> , 2001 , 45, 453-459	1.7	23
144	Highly doped thin-channel GaN-metal-semiconductor field-effect transistors. <i>Applied Physics Letters</i> , 2001 , 78, 769-771	3.4	23
143	Low-frequency noise in GaN/AlGaIn heterostructure field-effect transistors at cryogenic temperatures. <i>Journal of Applied Physics</i> , 2002 , 92, 4726-4730	2.5	23
142	Proton-irradiation-immune electronics implemented with two-dimensional charge-density-wave devices. <i>Nanoscale</i> , 2019 , 11, 8380-8386	7.7	22
141	On the low frequency noise mechanisms in GaN/AlGaIn HFETs. <i>Semiconductor Science and Technology</i> , 2003 , 18, 589-593	1.8	22

140	Concentration dependence of the $1/f$ noise in AlGaIn/GaN heterostructure field effect transistors. <i>Semiconductor Science and Technology</i> , 2002 , 17, 476-479	1.8	22
139	Electrically Insulating Flexible Films with Quasi-1D van der Waals Fillers as Efficient Electromagnetic Shields in the GHz and Sub-THz Frequency Bands. <i>Advanced Materials</i> , 2021 , 33, e2007286	2.4	22
138	Unique features of the generation-recombination noise in quasi-one-dimensional van der Waals nanoribbons. <i>Nanoscale</i> , 2018 , 10, 19749-19756	7.7	21
137	On the Hooge relation in semiconductors and metals. <i>Journal of Applied Physics</i> , 2009 , 106, 024514	2.5	20
136	Generation-recombination noise in MOSFETs. <i>Semiconductor Science and Technology</i> , 1999 , 14, 298-304	1.8	20
135	Low-frequency noise spectroscopy of charge-density-wave phase transitions in vertical quasi-2D 1T-TaS ₂ devices. <i>Applied Physics Express</i> , 2019 , 12, 037001	2.4	19
134	12 kV, 1 cm ² SiC GTO Thyristors with Negative Bevel Termination. <i>Materials Science Forum</i> , 2012 , 717-720, 1151-1154	0.4	18
133	Low frequency noise in heavily doped polysilicon thin film resistors. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1998 , 16, 1881		18
132	Impact of high energy electron irradiation on high voltage Ni/4H-SiC Schottky diodes. <i>Applied Physics Letters</i> , 2017 , 110, 083503	3.4	17
131	MATERIALS PROPERTIES OF NITRIDES: SUMMARY. <i>International Journal of High Speed Electronics and Systems</i> , 2004 , 14, 1-19	0.5	17
130	Turn-off performance of 2.6 kV 4H-SiC asymmetrical GTO thyristor. <i>Semiconductor Science and Technology</i> , 2001 , 16, 260-262	1.8	17
129	Turn-off operation of a MOS-gate 2.6 kV 4H-SiC gate turn-off thyristor. <i>Solid-State Electronics</i> , 2000 , 44, 2155-2159	1.7	17
128	Low-frequency noise in cadmium-selenide thin-film transistors. <i>Applied Physics Letters</i> , 2000 , 77, 2234-2236	3.4	17
127	Optical polarization control of photo-pumped stimulated emissions at 238 nm from AlGaIn multiple-quantum-well laser structures on AlN substrates. <i>Applied Physics Express</i> , 2017 , 10, 012702	2.4	16
126	Homodyne phase sensitive terahertz spectrometer. <i>Applied Physics Letters</i> , 2017 , 111, 121105	3.4	16
125	Electrical and noise properties of proton irradiated 4H-SiC Schottky diodes. <i>Journal of Applied Physics</i> , 2018 , 123, 024502	2.5	16
124	Optical triggering of 12 kV, 100 A 4H-SiC thyristors. <i>Semiconductor Science and Technology</i> , 2012 , 27, 015012	1.8	16
123	Low frequency and $1/f$ noise in wide-gap semiconductors: silicon carbide and gallium nitride. <i>IET Circuits, Devices and Systems</i> , 2002 , 149, 32-39		16

122	The effect of a transverse magnetic field on 1/f noise in graphene. <i>Applied Physics Letters</i> , 2013 , 103, 173114	3.4	15
121	1/f noise in conducting channels of topological insulator materials. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011 , 208, 144-146	1.6	15
120	Understanding noise measurements in MOSFETs: the role of traps structural relaxation 2010 ,		15
119	Effect of ambient pressure on resistance and resistance fluctuations in single-wall carbon nanotube devices. <i>Journal of Applied Physics</i> , 2006 , 100, 024315	2.5	15
118	Low-frequency noise of GaN-based ultraviolet light-emitting diodes. <i>Journal of Applied Physics</i> , 2005 , 97, 123107	2.5	15
117	Observation of the memory steps in graphene at elevated temperatures. <i>Applied Physics Letters</i> , 2011 , 98, 222107	3.4	14
116	SixGey:H-based micro-bolometers studied in the terahertz frequency range. <i>Solid-State Electronics</i> , 2010 , 54, 417-419	1.7	14
115	Tunneling mechanism of the 1/f noise in GaN/AlGaIn heterojunction field-effect transistors. <i>Journal of Applied Physics</i> , 2005 , 97, 123706	2.5	14
114	Noise spectroscopy of local surface levels in semiconductors. <i>Semiconductor Science and Technology</i> , 2000 , 15, 164-168	1.8	14
113	Low frequency noise and trap density in GaN/AlGaIn field effect transistors. <i>Applied Physics Letters</i> , 2019 , 115, 183501	3.4	14
112	Terahertz Beam Testing of Millimeter Wave Monolithic Integrated Circuits. <i>IEEE Sensors Journal</i> , 2017 , 17, 5487-5491	4	13
111	Low 1/f Noise in AlGaIn/GaN HFETs on SiC Substrates. <i>Physica Status Solidi A</i> , 1999 , 176, 201-204		13
110	CdS based novel photo-impedance light sensor. <i>Semiconductor Science and Technology</i> , 2014 , 29, 025002	1.8	12
109	Localized and collective magnetoplasmon excitations in AlGaIn/GaN-based grating-gate terahertz modulators. <i>Applied Physics Letters</i> , 2011 , 99, 213501	3.4	12
108	Steady state current - voltage characteristics of 4H - SiC thyristors at high and superhigh current densities. <i>Semiconductor Science and Technology</i> , 1997 , 12, 1498-1499	1.8	12
107	Low frequency noise in 4H-SiC metal oxide semiconductor field effect transistors. <i>Journal of Applied Physics</i> , 2008 , 104, 094505	2.5	12
106	HfO ₂ /AlGaIn/GaN structures with HfO ₂ deposited at ultra low pressure using an e-beam. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007 , 1, 199-201	2.5	12
105	Generation-recombination noise in forward biased 4H-SiC p-n diodes. <i>Journal of Applied Physics</i> , 2006 , 100, 064505	2.5	12

104	Nanometer Scale Complementary Silicon MOSFETs as Detectors of Terahertz and Sub-terahertz Radiation 2007 ,		12
103	Forward current-voltage characteristics of silicon carbide thyristors and diodes at high current densities. <i>Semiconductor Science and Technology</i> , 1998 , 13, 1006-1010	1.8	12
102	Nature of the 1/f noise in 6H-SiC. <i>Semiconductor Science and Technology</i> , 1994 , 9, 2080-2084	1.8	12
101	Holding current and switch-on mechanisms in 12 kV, 100 A 4H-SiC optically triggered thyristors. <i>Semiconductor Science and Technology</i> , 2013 , 28, 015008	1.8	11
100	Transient response of highly doped thin channel GaN metal-semiconductor and metal-oxide-semiconductor field effect transistors. <i>Solid-State Electronics</i> , 2002 , 46, 711-714	1.7	11
99	Structural and transport properties of CdS films deposited on flexible substrates. <i>Solid-State Electronics</i> , 2002 , 46, 1417-1420	1.7	11
98	Low-frequency noise in 4H-silicon carbide junction field effect transistors. <i>Applied Physics Letters</i> , 1996 , 68, 2669-2671	3.4	11
97	Band-to-band illumination in noise semiconductor spectroscopy. <i>Semiconductor Science and Technology</i> , 1996 , 11, 177-180	1.8	11
96	The discrete noise of magnons. <i>Applied Physics Letters</i> , 2019 , 114, 090601	3.4	10
95	High-frequency current oscillations in charge-density-wave 1T-TaS ₂ devices: Revisiting the Barrow band noise concept. <i>Applied Physics Letters</i> , 2020 , 116, 163101	3.4	10
94	Temperature dependence of turn-on process in 4H-SiC thyristors. <i>Electronics Letters</i> , 1997 , 33, 914	1.1	10
93	Thin n-GaN films with low level of 1/f noise. <i>Electronics Letters</i> , 2001 , 37, 720	1.1	10
92	Low frequency noise in complementary npn and pnp polysilicon emitter bipolar junction transistors. <i>Microelectronics Reliability</i> , 2000 , 40, 1855-1861	1.2	10
91	Low frequency noise in degenerate semiconductors. <i>Journal of Applied Physics</i> , 2001 , 90, 301-305	2.5	10
90	Optical triggering of high-voltage (18 kV-class) 4H-SiC thyristors. <i>Semiconductor Science and Technology</i> , 2013 , 28, 125017	1.8	9
89	Electrical properties of the conducting polydiacetylene poly-1,1,6,6-tetraphenylhexadienediamine. <i>Physics of the Solid State</i> , 1997 , 39, 690-694	0.8	9
88	Frequency properties of 4H-SiC thyristors at high current density. <i>Semiconductor Science and Technology</i> , 1999 , 14, 207-209	1.8	9
87	Broadening of noise spectra in semiconductors and the 1/f ^{1.5} problem. <i>Semiconductor Science and Technology</i> , 1995 , 10, 1126-1130	1.8	9

86	MBE grown GaN/AlGaIn lateral Schottky barrier diodes for high frequency applications. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016 , 34, 02L118	1.3	9
85	Low-Frequency Electronic Noise in Quasi-2D van der Waals Antiferromagnetic Semiconductor FePS ₃ Signatures of Phase Transitions. <i>Advanced Electronic Materials</i> , 2016 , 2, 100408	6.4	9
84	Effect of high energy electron irradiation on low frequency noise in 4H-SiC Schottky diodes. <i>Applied Physics Letters</i> , 2017 , 110, 133501	3.4	8
83	Strained-Si modulation doped field effect transistors as detectors of terahertz and sub-terahertz radiation. <i>Semiconductor Science and Technology</i> , 2008 , 23, 105001	1.8	8
82	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. <i>Journal of Applied Physics</i> , 2008 , 103, 044501	2.5	8
81	Low frequency noise in InAlAs/InGaAs modulation doped field effect transistors with 50-nm gate length. <i>Journal of Applied Physics</i> , 2007 , 102, 064506	2.5	8
80	Wavelength-resolved low-frequency noise of GaInN/GaN green light emitting diodes. <i>Journal of Applied Physics</i> , 2006 , 100, 084506	2.5	8
79	Low frequency noise in two-dimensional metal-semiconductor field effect transistor. <i>Applied Physics Letters</i> , 1996 , 68, 3138-3140	3.4	8
78	Selective Gas Sensor Using Porous Silicon. <i>Sensor Letters</i> , 2016 , 14, 588-591	0.9	8
77	Si-like low-frequency noise characteristics of 4H-SiC MOSFETs. <i>Semiconductor Science and Technology</i> , 2011 , 26, 085015	1.8	7
76	Noise in micro-bolometers with silicon-germanium thermo-sensing layer. <i>Thin Solid Films</i> , 2010 , 518, 3310-3312	0.3	7
75	Dynamic Performance of 3.1 kV 4H-SiC Asymmetrical GTO Thyristors. <i>Materials Science Forum</i> , 2002 , 389-393, 1349-1352	0.4	7
74	Transient processes in AlGaIn/GaN heterostructure field effect transistors. <i>Electronics Letters</i> , 2000 , 36, 757	1.1	7
73	Low-frequency electronic noise in superlattice and random-packed thin films of colloidal quantum dots. <i>Nanoscale</i> , 2019 , 11, 20171-20178	7.7	7
72	Optical triggering of 4H-SiC thyristors (18 kV class) to high currents in purely inductive load circuit. <i>Semiconductor Science and Technology</i> , 2014 , 29, 115003	1.8	6
71	SiC THYRISTORS. <i>International Journal of High Speed Electronics and Systems</i> , 2005 , 15, 931-996	0.5	6
70	AlGaIn/GaN on SiC Devices without a GaN Buffer Layer: Electrical and Noise Characteristics. <i>Micromachines</i> , 2020 , 11,	3.3	6
69	Electrically controlled wire-channel GaN/AlGaIn transistor for terahertz plasma applications. <i>Applied Physics Letters</i> , 2018 , 112, 133502	3.4	5

68	A DETAIL ANALYSIS OF ELECTRICAL AND OPTICAL FLUCTUATIONS OF GREEN LIGHT-EMITTING DIODES BY CORRELATION METHOD. <i>Fluctuation and Noise Letters</i> , 2010 , 09, 179-192	1.2	5
67	GaN Heterodimensional Schottky Diode for THz Detection 2006 ,		5
66	1/f noise in GaN/AlGaIn heterostructure field-effect transistors in high magnetic fields at 300K. <i>Journal of Applied Physics</i> , 2004 , 96, 3845-3847	2.5	5
65	Photovoltaic effect in threads covered with CdS. <i>Electronics Letters</i> , 2001 , 37, 1036	1.1	5
64	SEMICONDUCTOR THIN FILMS AND THIN FILM DEVICES FOR ELECTROTEXTILES. <i>International Journal of High Speed Electronics and Systems</i> , 2002 , 12, 371-390	0.5	5
63	Excess noise in high-current diamond diodes. <i>Applied Physics Letters</i> , 2022 , 120, 062103	3.4	5
62	Graphene as a Schottky Barrier Contact to AlGaIn/GaN Heterostructures. <i>Materials</i> , 2020 , 13,	3.5	5
61	Room temperature depinning of the charge-density waves in quasi-two-dimensional 1T-TaS ₂ devices. <i>Applied Physics Letters</i> , 2021 , 118, 223101	3.4	5
60	Low frequency noise in two-dimensional lateral GaN/AlGaIn Schottky diodes. <i>Applied Physics Letters</i> , 2016 , 109, 033502	3.4	5
59	High-Vacuum Particulate-Free Deposition of Wafer-Scale Mono-, Bi-, and Trilayer Molybdenum Disulfide with Superior Transport Properties. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33457-33463	0.5	5
58	Detection of Terahertz Radiation by Dense Arrays of InGaAs Transistors. <i>International Journal of High Speed Electronics and Systems</i> , 2015 , 24, 1550002	0.5	4
57	Low-frequency noise in graphene field-effect transistors 2011 ,		4
56	Use of minority carriers in noise spectroscopy for the determination of local level parameters in 6H -SiC. <i>Semiconductor Science and Technology</i> , 1996 , 11, 1146-1150	1.8	4
55	Photovoltaic effect in CdS on flexible substrate. <i>Electronics Letters</i> , 2001 , 37, 518	1.1	4
54	Insulated Gate Nitride-Based Field Effect Transistors 2010 , 379-422		4
53	High current (1300 A) optical triggering of a 12 kV 4H-SiC thyristor. <i>Semiconductor Science and Technology</i> , 2013 , 28, 045016	1.8	3
52	Selective gas sensing with MoS ₂ thin film transistors 2014 ,		3
51	Optical Triggering of High Current (1300 A), High-Voltage (12 kV) 4H-SiC Thyristor. <i>Materials Science Forum</i> , 2014 , 778-780, 1021-1024	0.4	3

50	Electrical and noise characteristics of graphene field-effect transistors 2011 ,		3
49	LOW-FREQUENCY ELECTRONIC NOISE IN GRAPHENE TRANSISTORS: COMPARISON WITH CARBON NANOTUBES. <i>International Journal of High Speed Electronics and Systems</i> , 2011 , 20, 161-170	0.5	3
48	1/f noise in strongly doped n-type GaAs under band-band illumination conditions. <i>Semiconductors</i> , 1997 , 31, 728-732	0.7	3
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