

Jerzy Lusakowski

List of Publications by Year in descending order

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116
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docs citations

117
times ranked

942
citing authors

#	ARTICLE	IF	CITATIONS
1	Beatings of ratchet current magneto-oscillations in GaN-based grating gate structures: Manifestation of spin-orbit band splitting. Physical Review B, 2021, 104, . Terahertz Sources Based on Emission from a GaAs	1.1	10
2			

#	ARTICLE	IF	CITATIONS
19	Toggling plasmon cavities with the gate bias. , 2016, , .		0
20	Parasitic Effects Affecting Responsivity of Sub-THz Radiation Detector Built of a MOSFET. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 1059-1075.	1.2	17
21	Photoresponse of a two-dimensional electron gas at the second harmonic of the cyclotron resonance. Physical Review B, 2015, 91, .	1.1	15
22	Magnetoplasmons in high electron mobility CdTe/CdMgTe quantum wells. Physical Review B, 2015, 91, .	1.1	12
23	Plasma excitations in a high electron mobility GaAs/AlGaAs heterostructure controlled by a visible light. Optical Engineering, 2015, 54, 017101.	0.5	0
24	Magnetic field tuning of exciton-polaritons in a semiconductor microcavity. Physical Review B, 2015, 91, .	1.1	41
25	Terahertz magneto-spectroscopy of a point contact based on CdTe/CdMgTe quantum well. Journal of Nanophotonics, 2015, 9, 093082.	0.4	4
26	Asymmetric transmission of transverse magnetic or radially polarized THz waves through sub-wavelength gratings. , 2015, , .		0
27	Exciton Binding Energy and Oscillator Strength in a Shallow Quantum Well in an External Magnetic Field. Acta Physica Polonica A, 2015, 128, 237-239.	0.2	0
28	Exciton Binding Energy and Oscillator Strength in a Shallow Quantum Well in an External Magnetic Field. Acta Physica Polonica A, 2015, 128, 236-239.	0.2	0
29	Terahertz detectors based on a gated two-dimensional electron plasma in CdMnTe/CdMgTe quantum wells. , 2014, , .		0
30	Terahertz magnetospectroscopy of a point contact based on CdTe/CdMgTe quantum well. Proceedings of SPIE, 2014, , .	0.8	2
31	Imaging of a THz beam with Si-MOSFET detectors. , 2014, , .		0
32	Magnetic-field tunable THz detectors based on GaAs/AlGaAs and CdTe/CdMgTe quantum wells. , 2014, , .		0
33	Asymmetric transmission of radially polarized THz radiation through a double circular grating. Optics Express, 2014, 22, 30547.	1.7	4
34	Plasmon dispersions in high electron mobility terahertz detectors. Applied Physics Letters, 2014, 104, .	1.5	19
35	Plasmonic terahertz detectors based on a high-electron mobility GaAs/AlGaAs heterostructure. Journal of Applied Physics, 2014, 115, 214503.	1.1	72
36	Visible-light controlled plasma excitations in high electron mobility GaAs/AlGaAs heterostructure. Proceedings of SPIE, 2014, , .	0.8	0

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37	Analysis of sub-THz radiation detector built of planar antenna integrated with MOSFET. Microelectronics Journal, 2014, 45, 1168-1176.	1.1	14
38	Asymmetric transmission of terahertz radiation through a double grating. Optics Letters, 2013, 38, 839.	1.7	97
39	Broadband asymmetric transmission of THz radiation through double metallic gratings. , 2013, , .		0
40	Terahertz properties of metallic layers and grids. , 2012, , .		0
41	Magnetoplasmons in a High Electron Mobility GaAs/AlGaAs Heterostructure. Acta Physica Polonica A, 2012, 122, 1096-1098.	0.2	1
42	Magnetic Field Induced Redistribution of Exciton-Polariton Density on Confined Modes. Acta Physica Polonica A, 2012, 122, 1093-1095.	0.2	0
43	Resonant Plasmon Response of a Periodically Modulated Two-Dimensional Electron Gas. Acta Physica Polonica A, 2012, 122, 1090-1092.	0.2	0
44	THz Time Domain Spectroscopy of Thin Gold Layers on GaAs. Acta Physica Polonica A, 2012, 122, 1118-1120.	0.2	1
45	Terahertz Response of a Point Contact Based on CdTe/CdMgTe Quantum Well in Magnetic Field. Acta Physica Polonica A, 2012, 122, 1069-1072.	0.2	1
46	Planar antennas for detection of 340 GHz band with single Si metal-oxide-semiconductor field-effect transistors. , 2011, , .		3
47	Magneto-optical studies of resonant plasma excitations in grating-gate GaN/AlGaN-based field-effect transistors. , 2011, , .		0
48	Magnetotransport properties of grating-gate THz detectors based on high electron mobility GaN/AlGaN heterostructures. , 2011, , .		1
49	Localized and collective magnetoplasmon excitations in AlGaN/GaN-based grating-gate terahertz modulators. Applied Physics Letters, 2011, 99, .	1.5	14
50	Tunable Resonant Detection of sub-THz Radiation with GaAs ^x AlGaAs High Electron Mobility Transistors at Magnetic Fields. , 2011, , .		0
51	Field Effect Transistors for Terahertz Detection and Emission. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 618-628.	1.2	40
52	Occupation of electron subbands in optically excited $\text{GaAs/Al}_{x}\text{Ga}_{1-x}\text{As}$ acceptor-doped	1.1	6
53	Physics of THz Field-Effect Transistors. Acta Physica Polonica A, 2011, 119, 114-116.	0.2	3
54	Terahertz Photovoltaic Response of Si-MOSFETs: Spin Related Effect. Acta Physica Polonica A, 2011, 120, 927-929.	0.2	0

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55	Mobility of Holes in Nanometer Ge-on-Si p-Type Metal-Oxide-Semiconductor Field-Effect Transistors at Low Temperatures. <i>Acta Physica Polonica A</i> , 2011, 120, 933-935.	0.2	0
56	The Role of Gated and Ungated Plasma in THz Detection by Field Effect Transistors. , 2010, , .		1
57	Field effect transistors for terahertz detection - silicon versus III-V material issue. <i>Opto-electronics Review</i> , 2010, 18, .	2.4	10
58	Plasma excitations in field effect transistors for terahertz detection and emission. <i>Comptes Rendus Physique</i> , 2010, 11, 433-443.	0.3	12
59	Optical $\Gamma_6 \rightarrow \Gamma_8$ Free-to-Bound Transition in Acceptor Γ -doped Single Heterostructure - Theoretical Analysis. , 2010, , .		0
60	A High Mobility Field-Effect Transistor as an Antenna for sub-THz Radiation. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	9
61	HIGH MAGNETIC FIELD IN THz PLASMA WAVE DETECTION BY HIGH ELECTRON MOBILITY TRANSISTORS. <i>International Journal of Modern Physics B</i> , 2009, 23, 3029-3034.	1.0	2
62	Influence of Shubnikov de Haas and cyclotron resonance effect on terahertz detection by field effect transistors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 2858-2860.	0.8	1
63	Terahertz radiation detection by field effect transistor in magnetic field. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	25
64	THz DETECTION BY FIELD-EFFECT TRANSISTORS IN MAGNETIC FIELDS: SHALLOW WATER VS DEEP WATER MECHANISM OF ELECTRON PLASMA INSTABILITY. <i>Selected Topics in Electronics and Systems</i> , 2009, , 191-200.	0.2	0
65	High Magnetic Field Effects on Plasma Wave THz Detection in Field-Effect Transistors. <i>Acta Physica Polonica A</i> , 2009, 116, 939-940.	0.2	1
66	Onset of quasi-ballistic transport and mobility degradation in ultra scaled MOSFETs: a Monte Carlo study. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 123-126.	0.8	2
67	Terahertz detection by two dimensional plasma field effect transistors in quantizing magnetic fields. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	12
68	Polarization sensitive detection of 100 GHz radiation by high mobility field-effect transistors. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	44
69	Plasma wave oscillations in nanometer field effect transistors for terahertz detection and emission. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 384205.	0.7	59
70	Potential fluctuations in CdTe epitaxial layers studied by shallow donor spectroscopy in the far infrared. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 195217.	0.7	2
71	THz DETECTION BY FIELD-EFFECT TRANSISTORS IN MAGNETIC FIELDS: SHALLOW WATER VS DEEP WATER MECHANISM OF ELECTRON PLASMA INSTABILITY. <i>International Journal of High Speed Electronics and Systems</i> , 2008, 18, 949-958.	0.3	5
72	Optical $\Gamma_6 \rightarrow \Gamma_8$ Free-to-Bound Transitions in Acceptor Γ -Doped Single Heterostructure - Theoretical Analysis. <i>Acta Physica Polonica A</i> , 2008, 114, 1079-1083.	0.2	3

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73	Mechanism of Radiation Coupling to Plasma Wave Field Effect Transistor Sub-THz Detectors. Acta Physica Polonica A, 2008, 114, 1337-1342.	0.2	6
74	Terahertz Detection by the Entire Channel of High Electron Mobility Transistors. Acta Physica Polonica A, 2008, 114, 1343-1348.	0.2	1
75	Local Electric In-Plane Potential Fluctuations in the CdTe/CdMgTe Based Multiple Quantum Wells. Acta Physica Polonica A, 2008, 114, 1259-1265.	0.2	0
76	Interband polarization spectroscopy to test the spherical model of a shallow acceptor in δ -doped heterostructures. Journal of Physics Condensed Matter, 2007, 19, 236205.	0.7	4
77	Transport and quantum scattering time in field-effect transistors. Applied Physics Letters, 2007, 90, 172104.	1.5	8
78	Quasiballistic transport in nanometer Si metal-oxide-semiconductor field-effect transistors: Experimental and Monte Carlo analysis. Journal of Applied Physics, 2007, 101, 114511.	1.1	24
79	Low electron mobility of field-effect transistor determined by modulated magnetoresistance. Journal of Applied Physics, 2007, 102, 103701.	1.1	11
80	The Stark effect on a bound hole in δ -acceptor doped GaAs/Al _x Ga _{1-x} As heterostructures. Solid State Communications, 2007, 142, 299-301.	0.9	3
81	Nanometer transistors for emission and detection of THz radiation. Thin Solid Films, 2007, 515, 4327-4332.	0.8	5
82	Spectroscopy of Be Acceptor Ground State in GaAs/AlGaAs Heterostructure. Acta Physica Polonica A, 2007, 112, 209-213.	0.2	0
83	Low temperature electron mobility and concentration under the gate of AlGa δ -GaN field effect transistors. Journal of Applied Physics, 2006, 100, 113726.	1.1	10
84	Electron mobility in quasi-ballistic Si MOSFETs. Solid-State Electronics, 2006, 50, 632-636.	0.8	24
85	Room-temperature terahertz emission from nanometer field-effect transistors. Applied Physics Letters, 2006, 88, 141906.	1.5	122
86	Terahertz Plasma Oscillations in Nanotransistors. , 2006, , 63-71.		0
87	Influence of dislocation and ionized impurity scattering on the electron mobility in GaN/AlGaN heterostructures. Journal of Crystal Growth, 2005, 281, 194-201.	0.7	9
88	High magnetic field studies of AlGa δ /GaN heterostructures grown on bulk GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1355-1359.	0.8	3
89	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.	0.8	3
90	Terahertz generation by plasma waves in nanometer gate high electron mobility transistors. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 656-659.	0.8	7

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91	Terahertz Emission and Detection by Plasma Waves in Nanoscale Transistors. AIP Conference Proceedings, 2005, , .	0.3	0
92	TeraHertz Emission and Noise Spectra in HEMTs. AIP Conference Proceedings, 2005, , .	0.3	2
93	Magnetic field effect on the terahertz emission from nanometer InGaAs/AlInAs high electron mobility transistors. Journal of Applied Physics, 2005, 97, 114313.	1.1	73
94	Ballistic and pocket limitations of mobility in nanometer Si metal-oxide semiconductor field-effect transistors. Applied Physics Letters, 2005, 87, 053507.	1.5	44
95	Effectiveg*factor in the diluted nitridesGa1 \hat{y} lnyNxAs1 \hat{x} . Physical Review B, 2005, 71, .	1.1	11
96	High mobility two-dimensional electron gas in AlGaN $\hat{\cdot}$ GaN heterostructures grown on bulk GaN by plasma assisted molecular beam epitaxy. Applied Physics Letters, 2005, 86, 102106.	1.5	56
97	Terahertz Generation and Detection by Plasma Waves in Nanometer Gate High Electron Mobility Transistors. Acta Physica Polonica A, 2005, 107, 82-91.	0.2	0
98	Magneto-resistance characterization of nanometer Si metal-oxide-semiconductor transistors. Journal of Applied Physics, 2004, 96, 5761-5765.	1.1	64
99	Mixing of impurity levels by a built-in electric field in a CdMgTe/CdZnTe heterostructure. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 605-608.	0.8	0
100	Magnetoconductivity of GaAs Transistors as Detectors of THz Radiation. Acta Physica Polonica A, 2003, 103, 545-551.	0.2	0
101	Symmetry of excitons in GaN. Physical Review B, 1999, 60, 4438-4441.	1.1	45
102	Influence of Interface-Induced Disorder on Classical and Quantum Conductivity of CdTe:IN Epitaxial Layers. Acta Physica Polonica A, 1997, 92, 911-914.	0.2	3
103	Autocorrelation Function and Mutual Information from Short Experimental Time Series. Acta Physica Polonica A, 1995, 87, 257-260.	0.2	6
104	Influence of Impact Ionization of Shallow Donors on Luminescence in GaAs. Acta Physica Polonica A, 1995, 87, 261-264.	0.2	0
105	Conductivity of Optically Excited Electrons in GaAs in Quantizing Magnetic Fields. Acta Physica Polonica A, 1995, 87, 482-486.	0.2	0
106	Electrical and Structural Properties of Ohmic Contacts to n-Type and High Resistivity CdTe. Acta Physica Polonica A, 1995, 87, 411-414.	0.2	0
107	Non-Ohmic Conductivity of High Resistivity CdTe. Acta Physica Polonica A, 1995, 88, 803-806.	0.2	1
108	Shallow donors and a fluctuating potential. Physica B: Condensed Matter, 1993, 184, 403-408.	1.3	2

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109	Fractal Dimensions from Chaotic Oscillations in Semi-Insulating GaAs. Acta Physica Polonica A, 1993, 84, 575-578.	0.2	1
110	A fluctuating potential and localization in semiinsulating GaAs. Solid State Communications, 1992, 84, 231-233.	0.9	3
111	Magnetic Field Induced Localization in Semiinsulating GaAs. Acta Physica Polonica A, 1992, 82, 551-560.	0.2	2
112	Electron Temperature in Semi-Insulating GaAs for Low Electric Fields. Acta Physica Polonica A, 1992, 82, 777-780.	0.2	1
113	Reconstruction of traveling waves in semi-insulating GaAs. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 152, 356-360.	0.9	9
114	Nonlinear Coupling of Oscillatory Modes in Current Flow in Semi-Insulating GaAs. Acta Physica Polonica A, 1991, 80, 425-428.	0.2	2
115	Current-Voltage Characteristic of Semi-Insulating GaAs, with Trap-Filling Effect. Acta Physica Polonica A, 1991, 79, 281-285.	0.2	0
116	Contact-related current oscillations in semi-insulating GaAs. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1990, 6, 1-4.	1.7	5