

Maciej Sakowicz

List of Publications by Year in descending order

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67
papers

1,471
citations

623734

14
h-index

330143

37
g-index

68
all docs

68
docs citations

68
times ranked

1620
citing authors

#	ARTICLE	IF	CITATIONS
1	Crucial Aspects of the Device Processing of Quantum Cascade Lasers. NATO Science for Peace and Security Series B: Physics and Biophysics, 2021, , 45-60.	0.3	0
2	AlGa _N /Ga _N heterostructures for plasma wave detection and emission in THz regime. , 2021, , .		0
3	Double-Quantum-Well AlGa _N /Ga _N Field Effect Transistors with Top and Back Gates: Electrical and Noise Characteristics. Micromachines, 2021, 12, 721.	2.9	1
4	Optical Performance of Two Dimensional Electron Gas and Ga _N :C Buffer Layers in AlGa _N /Al _N /Ga _N Heterostructures on SiC Substrate. Applied Sciences (Switzerland), 2021, 11, 6053.	2.5	12
5	Mid-infrared quantum cascade laser waveguides with non-vertical sidewalls. Infrared Physics and Technology, 2021, 118, 103902.	2.9	1
6	Modified bow-tie antennas AlGa _N /Ga _N FinFETs for sub-THz detection. , 2021, , .		0
7	Graphene as a Schottky Barrier Contact to AlGa _N /Ga _N Heterostructures. Materials, 2020, 13, 4140.	2.9	13
8	AlGa _N /Ga _N on SiC Devices without a Ga _N Buffer Layer: Electrical and Noise Characteristics. Micromachines, 2020, 11, 1131.	2.9	19
9	Sub-terahertz detection by fin-shaped Ga _N /AlGa _N transistors. , 2020, , .		0
10	Anomalous sub-THz detection by Ga _N /AlGa _N FinFETs. , 2020, , .		0
11	AlGa _N /Ga _N HEMTs for THz Plasma Wave Detection and Emission. , 2020, , .		2
12	Optimization of Cavity Designs of Tapered Al _{In} As/InGaAs/InP Quantum Cascade Lasers Emitting at 4.5 μ m. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-9.	2.9	5
13	Mid-Infrared Quantum Cascade Lasers With Nonuniformly Tapered Waveguides. Journal of Lightwave Technology, 2019, 37, 2324-2327.	4.6	4
14	Low frequency noise and trap density in Ga _N /AlGa _N field effect transistors. Applied Physics Letters, 2019, 115, .	3.3	27
15	Electrical and Noise Characteristics of Fin-Shaped Ga _N /AlGa _N Devices for High Frequency Operation. , 2019, , .		3
16	AlGa _N /Ga _N field effect transistor with two lateral Schottky barrier gates towards resonant detection in sub-mm range. Semiconductor Science and Technology, 2019, 34, 024002.	2.0	15
17	AlGaAs/GaAs terahertz quantum cascade lasers with copper waveguides (Conference Presentation). , 2019, , .		0
18	Efficient Three-Dimensional Electromagnetic Modeling of Metalâ€Metal Waveguides Employed for Quantum Cascade Lasers Operating in the THz Band. Journal of Lightwave Technology, 2018, 36, 1721-1729.	4.6	5

#	ARTICLE	IF	CITATIONS
19	Transverse Mode Propagation in Folded Waveguides of Quantum Cascade Lasers. , 2018, , .		0
20	Utilization of Methane/Hydrogen/Chlorine-Based Plasma Etching for Production of 4.7 μ m Wavelength QCLs with Taper-Type Ridge Waveguides. , 2018, , .		0
21	AlGaAs/GaAs Terahertz Quantum Cascade Laser with Gold-Based Metal "Metal Waveguide. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 145-149.	0.3	2
22	Technologia wytwarzania terahercowych laserów kaskadowych. Przegląd Elektrotechniczny, 2017, 1, 52-55.	0.2	0
23	The effect of phase morphology on the nature of long-lived charges in semiconductor polymer:fullerene systems. Journal of Materials Chemistry C, 2015, 3, 3722-3729.	5.5	22
24	Processing of AlGaAs/GaAs quantum-cascade structures for terahertz laser. Journal of Nanophotonics, 2015, 9, 093079.	1.0	6
25	Processing of AlGaAs/GaAs QC structures for terahertz laser. , 2014, , .		1
26	Room temperature AlInAs/InGaAs/inP quantum cascade lasers. Photonics Letters of Poland, 2014, 6, .	0.4	4
27	Two-dimensional spatial coherence of excitons in semicrystalline polymeric semiconductors: Effect of molecular weight. Physical Review B, 2013, 88, .	3.2	96
28	Recombination dynamics in InGaN/GaN nanowire heterostructures on Si(111). Nanotechnology, 2013, 24, 045702.	2.6	11
29	Long-lived photoexcitations in intercalated, partially and predominantly non-intercalated polymer:fullerene blends. , 2013, , .		0
30	Optical signatures of the interplay between intermolecular and intramolecular coupling in plastic semiconductors. Proceedings of SPIE, 2012, , .	0.8	0
31	Plasma nonlinearities and terahertz detection by Field Effect Transistors. , 2012, , .		0
32	Slow geminate charge-pair recombination dynamics at polymer: Fullerene heterojunctions in efficient organic solar cells. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1395-1404.	2.1	12
33	AlGaN/GaN based field effect transistors for terahertz detection and imaging. , 2012, , .		1
34	A broadband THz imager in a low-cost CMOS technology. , 2011, , .		66
35	Charge-transfer excitons at semiconductor polymer heterojunctions in efficient organic photovoltaic diodes. , 2011, , .		0
36	Terahertz responsivity of field effect transistors versus their static channel conductivity and loading effects. Journal of Applied Physics, 2011, 110, .	2.5	142

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37	Charge Separation in Semicrystalline Polymeric Semiconductors by Photoexcitation: Is the Mechanism Intrinsic or Extrinsic?. Physical Review Letters, 2011, 106, 197401.	7.8	118
38	Broadband terahertz imaging with highly sensitive silicon CMOS detectors. Optics Express, 2011, 19, 7827.	3.4	421
39	Field Effect Transistors for Terahertz Detection and Emission. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 618-628.	2.2	40
40	Terahertz detection by field effect transistors security imaging. Proceedings of SPIE, 2011, , .	0.8	0
41	The Role of Gated and Ungated Plasma in THz Detection by Field Effect Transistors. , 2010, , .		1
42	Imaging above 1 THz limit with Si-MOSFET detectors. , 2010, , .		9
43	THz imaging with low-cost 130 nm CMOS transistors. , 2010, , .		3
44	A High Mobility Field-Effect Transistor as an Antenna for sub-THz Radiation. AIP Conference Proceedings, 2010, , .	0.4	9
45	Room temperature imaging at 1.63 and 2.54 THz with field effect transistor detectors. Journal of Applied Physics, 2010, 108, .	2.5	34
46	Room temperature imaging above one terahertz by field effect transistor as detector. , 2010, , .		0
47	Detection of terahertz radiation by AlGaIn/GaN field-effect transistors. , 2009, , .		3
48	HIGH MAGNETIC FIELD IN THz PLASMA WAVE DETECTION BY HIGH ELECTRON MOBILITY TRANSISTORS. International Journal of Modern Physics B, 2009, 23, 3029-3034.	2.0	2
49	Field Effect Transistors for Terahertz Detection: Physics and First Imaging Applications. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 1319.	2.2	199
50	Terahertz imaging using high electron mobility transistors as plasma wave detectors. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2855-2857.	0.8	8
51	Terahertz radiation detection by field effect transistor in magnetic field. Applied Physics Letters, 2009, 95, .	3.3	25
52	Silicon MOSFETs as room temperature terahertz detectors. Journal of Physics: Conference Series, 2009, 193, 012095.	0.4	9
53	THz DETECTION BY FIELD-EFFECT TRANSISTORS IN MAGNETIC FIELDS: SHALLOW WATER VS DEEP WATER MECHANISM OF ELECTRON PLASMA INSTABILITY. Selected Topics in Electornics and Systems, 2009, , 191-200.	0.2	0
54	Terahertz detection by two dimensional plasma field effect transistors in quantizing magnetic fields. Applied Physics Letters, 2008, 92, .	3.3	12

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55	Polarization sensitive detection of 100 GHz radiation by high mobility field-effect transistors. Journal of Applied Physics, 2008, 104, .	2.5	44
56	THz DETECTION BY FIELD-EFFECT TRANSISTORS IN MAGNETIC FIELDS: SHALLOW WATER VS DEEP WATER MECHANISM OF ELECTRON PLASMA INSTABILITY. International Journal of High Speed Electronics and Systems, 2008, 18, 949-958.	0.7	5
57	THz detection by field effect transistors: Antenna and high magnetic field effects. , 2008, , .		0
58	Mechanism of Radiation Coupling to Plasma Wave Field Effect Transistor Sub-THz Detectors. Acta Physica Polonica A, 2008, 114, 1337-1342.	0.5	6
59	Terahertz Detection by the Entire Channel of High Electron Mobility Transistors. Acta Physica Polonica A, 2008, 114, 1343-1348.	0.5	1
60	Interband polarization spectroscopy to test the spherical model of a shallow acceptor in $\hat{\Gamma}$ -doped heterostructures. Journal of Physics Condensed Matter, 2007, 19, 236205.	1.8	4
61	Transport and quantum scattering time in field-effect transistors. Applied Physics Letters, 2007, 90, 172104.	3.3	8
62	Electron Mobility and Concentration on Submicrometer Scale $\hat{\Gamma}$ Investigation of Si and AlGaIn/GaN Field Effect Transistors by AC Magnetoresistance Method. AIP Conference Proceedings, 2007, , .	0.4	0
63	Low electron mobility of field-effect transistor determined by modulated magnetoresistance. Journal of Applied Physics, 2007, 102, 103701.	2.5	11
64	Magnetotransport characterization of AlGaIn/GaN interfaces. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 586-590.	1.8	0
65	Spectroscopy of Be Acceptor Ground State in GaAs/AlGaAs Heterostructure. Acta Physica Polonica A, 2007, 112, 209-213.	0.5	0
66	Low temperature electron mobility and concentration under the gate of AlGaIn $\hat{\Gamma}$ GaN field effect transistors. Journal of Applied Physics, 2006, 100, 113726.	2.5	10
67	Quantum and transport lifetimes of two-dimensional electrons gas in AlGaIn $\hat{\Gamma}$ GaN heterostructures. Applied Physics Letters, 2005, 87, 232107.	3.3	19