

Hartmut G Roskos

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277
papers

7,680
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42
h-index

80
g-index

370
ext. papers

9,391
ext. citations

3
avg, IF

5.6
L-index

#	Paper	IF	Citations
277	Coherent submillimeter-wave emission from Bloch oscillations in a semiconductor superlattice. <i>Physical Review Letters</i> , 1993 , 70, 3319-3322	7.4	613
276	Broadband THz emission from gas plasmas induced by femtosecond optical pulses: From fundamentals to applications. <i>Laser and Photonics Reviews</i> , 2007 , 1, 349-368	8.3	359
275	Coherent submillimeter-wave emission from charge oscillations in a double-well potential. <i>Physical Review Letters</i> , 1992 , 68, 2216-2219	7.4	355
274	Terahertz-pulse generation by photoionization of air with laser pulses composed of both fundamental and second-harmonic waves. <i>Optics Letters</i> , 2004 , 29, 1120-2	3	331
273	A 0.65 THz Focal-Plane Array in a Quarter-Micron CMOS Process Technology. <i>IEEE Journal of Solid-State Circuits</i> , 2009 , 44, 1968-1976	5.5	276
272	Rational design of high-responsivity detectors of terahertz radiation based on distributed self-mixing in silicon field-effect transistors. <i>Journal of Applied Physics</i> , 2009 , 105, 114511	2.5	202
271	Determination of the carrier-envelope phase of few-cycle laser pulses with terahertz-emission spectroscopy. <i>Nature Physics</i> , 2006 , 2, 327-331	16.2	192
270	Spin-conserving carrier recombination in conjugated polymers. <i>Nature Materials</i> , 2005 , 4, 340-6	27	167
269	Continuous-wave all-optoelectronic terahertz imaging. <i>Applied Physics Letters</i> , 2002 , 80, 3003-3005	3.4	160
268	. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2011 , 1, 183-200	3.4	152
267	Terahertz white-light pulses from an air plasma photo-induced by incommensurate two-color optical fields. <i>Optics Express</i> , 2010 , 18, 23173-82	3.3	148
266	. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2012 , 60, 3834-3843	4.1	147
265	THz electromagnetic emission by coherent infrared-active phonons. <i>Physical Review B</i> , 1996 , 53, 4005-4014	3.4	147
264	Emission of Submillimeter Electromagnetic Waves by Coherent Phonons. <i>Physical Review Letters</i> , 1995 , 74, 738-741	7.4	140
263	Generation of terahertz pulses by photoionization of electrically biased air. <i>Applied Physics Letters</i> , 2000 , 77, 453-455	3.4	138
262	Antenna-integrated 0.6 THz FET direct detectors based on CVD graphene. <i>Nano Letters</i> , 2014 , 14, 5834-8	11.5	137
261	Terahertz dark-field imaging of biomedical tissue. <i>Optics Express</i> , 2001 , 9, 616-21	3.3	137

260	Large-area electro-optic ZnTe terahertz emitters. <i>Optics Express</i> , 2005 , 13, 5353-62	3.3	113
259	Diagnosing water content in paper by terahertz radiation. <i>Optics Express</i> , 2008 , 16, 9060-6	3.3	95
258	Antenna-coupled field-effect transistors for multi-spectral terahertz imaging up to 4.25 THz. <i>Optics Express</i> , 2014 , 22, 19235-41	3.3	89
257	Coupled-cavity resonant passive mode-locked Ti:sapphire laser. <i>Optics Letters</i> , 1990 , 15, 1377-9	3	89
256	Terahertz responsivity and low-frequency noise in biased silicon field-effect transistors. <i>Applied Physics Letters</i> , 2013 , 102, 153505	3.4	75
255	Terahertz heterodyne detection with silicon field-effect transistors. <i>Applied Physics Letters</i> , 2010 , 96, 042106	3.4	69
254	Continuous-wave terahertz imaging with a hybrid system. <i>Applied Physics Letters</i> , 2007 , 90, 091111	3.4	68
253	All-optoelectronic continuous wave THz imaging for biomedical applications. <i>Physics in Medicine and Biology</i> , 2002 , 47, 3743-8	3.8	66
252	Gas-pressure dependence of terahertz-pulse generation in a laser-generated nitrogen plasma. <i>Journal of Applied Physics</i> , 2002 , 91, 2611-2614	2.5	63
251	Low-dispersion thin-film microstrip lines with cyclotene (benzocyclobutene) as dielectric medium. <i>Applied Physics Letters</i> , 1997 , 70, 2233-2235	3.4	60
250	Superradiant emission from Bloch oscillations in semiconductor superlattices. <i>Physical Review B</i> , 1996 , 54, R14325-R14328	3.3	57
249	Terahertz electromagnetic radiation from quantum wells. <i>Applied Physics B: Lasers and Optics</i> , 1994 , 58, 249-259	1.9	57
248	Visualization and classification in biomedical terahertz pulsed imaging. <i>Physics in Medicine and Biology</i> , 2002 , 47, 3847-52	3.8	55
247	Exploration of Terahertz Imaging with Silicon MOSFETs. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014 , 35, 63-80	2.2	52
246	Radiation field screening in photoconductive antennae studied via pulsed terahertz emission spectroscopy. <i>Applied Physics Letters</i> , 2007 , 91, 232506	3.4	51
245	Comparative performance of terahertz emitters in amplifier-laser-based systems. <i>Semiconductor Science and Technology</i> , 2005 , 20, S134-S141	1.8	51
244	Performance and performance variations of sub-1 THz detectors fabricated with 0.15 [μm] CMOS foundry process. <i>Electronics Letters</i> , 2011 , 47, 661	1.1	50
243	Indium tin oxide-coated glass as dichroic mirror for far-infrared electromagnetic radiation. <i>Journal of Applied Physics</i> , 2002 , 92, 2210-2212	2.5	48

242	Free-carrier dynamics in low-temperature-grown GaAs at high excitation densities investigated by time-domain terahertz spectroscopy. <i>Physical Review B</i> , 2002 , 65,	3.3	47
241	A High-Sensitivity AlGaIn/GaN HEMT Terahertz Detector With Integrated Broadband Bow-Tie Antenna. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2019 , 9, 430-444	3.4	46
240	Terahertz imaging with GaAs field-effect transistors. <i>Electronics Letters</i> , 2008 , 44, 408	1.1	46
239	CMOS detector arrays in a virtual 10-kilopixel camera for coherent terahertz real-time imaging. <i>Optics Letters</i> , 2012 , 37, 536-8	3	43
238	Optoelectronic on-chip characterization of ultrafast electric devices: Measurement techniques and applications. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1996 , 2, 586-604	3.8	43
237	Generation of terahertz electromagnetic pulses from quantum-well structures. <i>IEEE Journal of Quantum Electronics</i> , 1994 , 30, 1478-1488	2	43
236	Spatio-spectral characteristics of ultra-broadband THz emission from two-colour photoexcited gas plasmas and their impact for nonlinear spectroscopy. <i>New Journal of Physics</i> , 2013 , 15, 075023	2.9	42
235	Excitonic Emission of THz Radiation: Experimental Evidence of the Shortcomings of the Bloch Equation Method. <i>Physical Review Letters</i> , 1997 , 78, 2232-2235	7.4	41
234	THz-photomixer based on quasi-ballistic transport. <i>Semiconductor Science and Technology</i> , 2005 , 20, S178-S190	4.1	41
233	DESIGN OF A TERAHERTZ POLARIZATION ROTATOR BASED ON A PERIODIC SEQUENCE OF CHIRAL-METAMATERIAL AND DIELECTRIC SLABS. <i>Progress in Electromagnetics Research</i> , 2012 , 124, 301-314	3.8	38
232	Silicon lens-coupled bow-tie InGaAs-based broadband terahertz sensor operating at room temperature. <i>Electronics Letters</i> , 2006 , 42, 825	1.1	38
231	Terahertz sensing application by using planar split-ring-resonator structures. <i>Microsystem Technologies</i> , 2012 , 18, 2071-2076	1.7	37
230	Bloch oscillations in GaAs/AlGaAs superlattices after excitation well above the bandgap. <i>Superlattices and Microstructures</i> , 1994 , 15, 281	2.8	37
229	Experimental evidence for electron repulsion in multiphoton double ionization. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001 , 34, L449-L455	1.3	36
228	Broadband Terahertz Power Detectors Based on 90-nm Silicon CMOS Transistors With Flat Responsivity Up to 2.2 THz. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1413-1416	4.4	36
227	. <i>IEEE Sensors Journal</i> , 2013 , 13, 124-132	4	35
226	Terahertz heterodyne imaging with InGaAs-based bow-tie diodes. <i>Applied Physics Letters</i> , 2011 , 99, 131101	1.1	34
225	Remote identification of protrusions and dents on surfaces by terahertz reflectometry with spatial beam filtering and out-of-focus detection. <i>Applied Physics Letters</i> , 2003 , 83, 3996-3998	3.4	33

224	Broadband terahertz spectroscopy: principles, fundamental research and potential for industrial applications. <i>European Journal of Physics</i> , 2013 , 34, S179-S199	0.8	31
223	Application of liftoff low-temperature-grown GaAs on transparent substrates for THz signal generation. <i>Applied Physics Letters</i> , 1996 , 69, 2903-2905	3.4	31
222	Propagation of picosecond electrical pulses on a silicon-based microstrip line with buried cobalt silicide ground plane. <i>Applied Physics Letters</i> , 1991 , 58, 2604-2606	3.4	31
221	How good would the conductivity of graphene have to be to make single-layer-graphene metamaterials for terahertz frequencies feasible?. <i>Carbon</i> , 2015 , 94, 301-308	10.4	30
220	0.25- μm GaN TeraFETs Optimized as THz Power Detectors and Intensity-Gradient Sensors. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2016 , 6, 348-350	3.4	30
219	Terahertz imaging with Si MOSFET focal-plane arrays 2009 ,		30
218	Terahertz profilometry at 600 GHz with 0.5 microm depth resolution. <i>Optics Express</i> , 2008 , 16, 11289-93	3.3	30
217	Dual-band polarization-independent sub-terahertz fishnet metamaterial. <i>Current Applied Physics</i> , 2012 , 12, 443-450	2.6	29
216	Radiative decay of optically excited coherent plasmons in a two-dimensional electron gas. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996 , 13, 1045	1.7	29
215	Efficient Terahertz Pulse Generation in Laser-Induced Gas Plasmas. <i>Acta Physica Polonica A</i> , 2005 , 107, 99-108	0.6	28
214	Camera for High-Speed THz Imaging. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2015 , 36, 986-997		27
213	Phase-locking of the beat signal of two distributed-feedback diode lasers to oscillators working in the MHz to THz range. <i>Optics Express</i> , 2010 , 18, 8621-9	3.3	27
212	Fast Active THz Cameras with Ranging Capabilities. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2009 , 30, 1281	2.2	27
211	Influence of Pr doping and oxygen deficiency on the scattering behavior of YBa ₂ Cu ₃ O ₇ thin films. <i>Physical Review B</i> , 1996 , 53, 12502-12508	3.3	27
210	Optimization of YBa ₂ Cu ₃ O ₇ submicrometer structure fabrication. <i>Applied Physics Letters</i> , 1993 , 63, 1149-1151	3.4	27
209	Redox-Active Ferrocenylboronium Polyelectrolytes with Main Chain Charge-Transfer Structure. <i>Macromolecules</i> , 2010 , 43, 5256-5261	5.5	26
208	Roadmap of Terahertz Imaging 2021. <i>Sensors</i> , 2021 , 21,	3.8	26
207	A fully tunable dual-color CW Ti:Al/sub 2/O/sub 3/ laser. <i>IEEE Journal of Quantum Electronics</i> , 1999 , 35, 1731-1736	2	25

206	Detection of Bloch oscillations in a semiconductor superlattice by time-resolved terahertz spectroscopy and degenerate four-wave mixing. <i>Solid-State Electronics</i> , 1994 , 37, 1321-1326	1.7	25
205	Optimization of single-cycle terahertz generation in LiNbO3 for sub-50 femtosecond pump pulses. <i>Optics Express</i> , 2013 , 21, 6826-36	3.3	24
204	Field Screening in Low-Temperature-Grown GaAs Photoconductive Antennas. <i>Japanese Journal of Applied Physics</i> , 2004 , 43, 1038-1043	1.4	24
203	Emission of picosecond electromagnetic pulses from optically excited superconducting bridges. <i>Physical Review B</i> , 1996 , 54, R6889-R6892	3.3	24
202	Terahertz Imaging Detectors in CMOS Technology. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2009 , 30, 1269	2.2	23
201	Efficiency of submillimeter-wave generation and amplification by coherent wave-packet oscillations in semiconductor structures. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1994 , 11, 2470	1.7	23
200	Cooling of a carrier plasma in germanium investigated with subpicosecond infrared pulses. <i>Applied Physics Letters</i> , 1988 , 53, 2406-2408	3.4	23
199	Illumination Aspects in Active Terahertz Imaging. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2010 , 58, 2008-2013	4.1	22
198	Optical second-harmonic probe for silicon millimeter-wave circuits. <i>Applied Physics Letters</i> , 1996 , 68, 1699-1701	3.4	22
197	Fabrication and characterization of freely positionable silicon-on-sapphire photoconductive probes. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1994 , 11, 2547	1.7	22
196	Numerical and experimental investigation of fishnet-based metamaterial in a X-band waveguide. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 255101	3	21
195	Detection of terahertz-sub-terahertz radiation by asymmetrically-shaped 2DEG layers. <i>Electronics Letters</i> , 2004 , 40, 631	1.1	21
194	Electronic Structure, Photophysics, and Relaxation Dynamics of Charge Transfer Excited States in Boron-Nitrogen-Bridged Ferrocene-Donor Organic-Acceptor Compounds. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 3281-3291	2.8	21
193	Giga- and terahertz frequency band detector based on an asymmetrically necked n-n+-GaAs planar structure. <i>Journal of Applied Physics</i> , 2003 , 93, 3034-3038	2.5	21
192	Operation of an infrared dye laser synchronously pumped by a mode-locked CW Nd:YAG laser. <i>IEEE Journal of Quantum Electronics</i> , 1986 , 22, 697-703	2	21
191	A CMOS focal-plane array for heterodyne terahertz imaging 2009 ,		20
190	Ultrafast Fiske effect in semiconductor superlattices. <i>Physical Review Letters</i> , 2006 , 96, 137403	7.4	20
189	Electro-optic near-field mapping of planar resonators. <i>IEEE Transactions on Antennas and Propagation</i> , 1998 , 46, 284-291	4.9	20

188	Oxygen control of dc-sputtered Bi ₂ Sr ₂ Ca ₁ Cu ₂ O ₈ + δ films. <i>Applied Physics Letters</i> , 1994 , 64, 378-380	3.4	20
187	Anisotropic excitation of surface plasmon polaritons on a metal film by a scattering-type scanning near-field microscope with a non-rotationally-symmetric probe tip. <i>Nanophotonics</i> , 2018 , 7, 269-276	6.3	20
186	Efficient high-power optical pulse compression with logarithmic wing analysis. <i>Optics Communications</i> , 1987 , 61, 81-86	2	19
185	Coherent Hall effect in a semiconductor superlattice. <i>Physical Review Letters</i> , 2002 , 88, 086801	7.4	18
184	Broadside-coupled triangular split-ring-resonators for terahertz sensing. <i>EPJ Applied Physics</i> , 2013 , 61, 30402	1.1	17
183	High signal-to-noise-ratio electro-optical terahertz imaging system based on an optical demodulating detector array. <i>Optics Letters</i> , 2009 , 34, 3424-6	3	17
182	SiGe wires and dots grown by local epitaxy. <i>Journal of Crystal Growth</i> , 1995 , 150, 1060-1064	1.6	17
181	Surface resistance and penetration depth of YBa ₂ Cu ₃ O _{7-x} thin films on silicon at ultrahigh frequencies. <i>Applied Physics Letters</i> , 1994 , 64, 3326-3328	3.4	17
180	Field-Effect Transistor Based Detectors for Power Monitoring of THz Quantum Cascade Lasers. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2018 , 8, 613-621	3.4	17
179	Influence of LO-Phonon Emission on Bloch Oscillations in Semiconductor Superlattices. <i>Physica Status Solidi (B): Basic Research</i> , 1997 , 204, 83-86	1.3	16
178	Direct nanoscopic observation of plasma waves in the channel of a graphene field-effect transistor. <i>Light: Science and Applications</i> , 2020 , 9, 97	16.7	15
177	Characterization of Fe(II) complexes exhibiting the ligand-driven light-induced spin-change effect using SQUID and magnetic circular dichroism. <i>Comptes Rendus Chimie</i> , 2007 , 10, 125-136	2.7	15
176	Motional-narrowing-type dephasing of electron and hole spins of itinerant excitons in magnetically doped II-VI bulk semiconductors. <i>Physical Review Letters</i> , 2006 , 96, 117203	7.4	15
175	Vertical silicon metal-semiconductor-metal photodetectors with buried CoSi ₂ contact. <i>Applied Physics Letters</i> , 1995 , 66, 866-868	3.4	15
174	Terahertz frequency upconversion via relativistic Doppler reflection from a photoinduced plasma front in a solid-state medium. <i>Physical Review B</i> , 2013 , 87,	3.3	14
173	Experimental realization of the Bloch oscillator in a semiconductor superlattice. <i>Semiconductor Science and Technology</i> , 1994 , 9, 416-418	1.8	14
172	Cooling of photoexcited carriers in undoped and n-doped Ga _{0.47} In _{0.53} As studied within the first few picoseconds. <i>Physical Review B</i> , 1989 , 40, 1396-1399	3.3	14
171	Enhancement of the Monolayer Tungsten Disulfide Exciton Photoluminescence with a Two-Dimensional Material/Air/Gallium Phosphide In-Plane Microcavity. <i>ACS Nano</i> , 2019 , 13, 5259-5267	16.7	13

170	High-sensitivity wideband THz detectors based on GaN HEMTs with integrated bow-tie antennas 2015 ,		13
169	Experimental demonstration of efficient pulsed terahertz emission from a stacked GaAs/AlGaAs p-i-n-i heterostructure. <i>Applied Physics Letters</i> , 2011 , 98, 091103	3-4	13
168	Coherent electro-optical detection of terahertz radiation from an optical parametric oscillator. <i>Optics Express</i> , 2010 , 18, 11316-26	3-3	13
167	Evidence for long-living charge carriers in electrically biased low-temperature-grown GaAs photoconductive switches. <i>Applied Physics Letters</i> , 2007 , 90, 052101	3-4	13
166	All-Optoelectronic Terahertz Imaging Systems and Examples of Their Application. <i>Proceedings of the IEEE</i> , 2007 , 95, 1576-1582	14-3	13
165	Bloch oscillations. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1996 , 354, 2295-2310	3	13
164	Stable optoelectronic detection of free-running microwave signals with 150-GHz bandwidth. <i>Microelectronic Engineering</i> , 1996 , 31, 397-408	2-5	13
163	Terahertz Bloch oscillations in semiconductor superlattices. <i>Semiconductor Science and Technology</i> , 1994 , 9, 1959-1964	1-8	13
162	Pulse shortening to 25 ps in a cw mode-locked Nd: YAG laser by introducing an intracavity etalon. <i>Applied Physics B, Photophysics and Laser Chemistry</i> , 1986 , 40, 59-65		13
161	Field-effect transistors as electrically controllable nonlinear rectifiers for the characterization of terahertz pulses. <i>APL Photonics</i> , 2018 , 3, 051705	5-2	12
160	Passive Detection and Imaging of Human Body Radiation Using an Uncooled Field-Effect Transistor-Based THz Detector. <i>Sensors</i> , 2020 , 20,	3-8	12
159	Ultrafast dynamic conductivity and scattering rate saturation of photoexcited charge carriers in silicon investigated with a midinfrared continuum probe. <i>Physical Review B</i> , 2015 , 91,	3-3	11
158	9.74-THz electronic Far-Infrared detection using Schottky barrier diodes in CMOS 2014 ,		11
157	Synthesis, structure, photoluminescence and photoreactivity of 2,3-diphenyl-4-neopentyl-1-silacyclobut-2-enes. <i>Chemistry - A European Journal</i> , 2009 , 15, 8625-45	4-8	11
156	Microwave sensor based on modulation-doped GaAs/AlGaAs structure. <i>Semiconductor Science and Technology</i> , 2004 , 19, S436-S439	1-8	11
155	Time-resolved photocurrent spectroscopy of the evolution of the electric field in optically excited superlattices and the prospects for Bloch gain. <i>Applied Physics Letters</i> , 2005 , 86, 102103	3-4	11
154	Optimization of the surface morphology of magnetron-sputtered Y1Ba2Cu3O7 δ films. <i>Applied Physics Letters</i> , 1994 , 64, 3166-3168	3-4	11
153	Relativistic Doppler frequency upconversion of terahertz pulses reflecting from a photoinduced plasma front in silicon. <i>Physical Review B</i> , 2014 , 90,	3-3	10

152	Surface topography and bulk structure of Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ films observed by scanning tunneling microscopy and high-resolution transmission electron microscopy. <i>Physica C: Superconductivity and Its Applications</i> , 1995 , 245, 84-92	1.3	10
151	Generation and detection of picosecond electric pulses with freely positionable photoconductive probes. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 1995 , 43, 2856-2862	4.1	10
150	Coherent submillimeter-wave emission from non-equilibrium two-dimensional free carrier plasmas in AlGa/AsGaAs heterojunctions. <i>Surface Science</i> , 1996 , 361-362, 368-371	1.8	10
149	Optimization of the Design of Terahertz Detectors Based on Si CMOS and AlGa _N /Ga _N Field-Effect Transistors. <i>International Journal of High Speed Electronics and Systems</i> , 2016 , 25, 1640013	0.5	10
148	Dielectric properties of vertically aligned multi-walled carbon nanotubes in the terahertz and mid-infrared range. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 034004	3	10
147	Efficient Detection of 3 THz Radiation from Quantum Cascade Laser Using Silicon CMOS Detectors. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2017 , 38, 1183-1188	2.2	9
146	Detectors for terahertz multi-pixel coherent imaging and demonstration of real-time imaging with a 12x12-pixel CMOS array 2012 ,		9
145	All-optoelectronic continuous-wave terahertz systems. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2004 , 362, 263-79; discussion 279-81	3	9
144	Propagation effects in electro-optic sampling of terahertz pulses in GaAs. <i>Applied Optics</i> , 1998 , 37, 3368-71	7.1	9
143	Bloch Oscillations in Semiconductor Superlattices. <i>Japanese Journal of Applied Physics</i> , 1995 , 34, 1370-1375	1.5	9
142	Direct Near-Field Observation of Surface Plasmon Polaritons on Silver Nanowires. <i>ACS Omega</i> , 2019 , 4, 21962-21966	3.9	9
141	3D Fourier imaging based on 2D heterodyne detection at THz frequencies. <i>APL Photonics</i> , 2019 , 4, 1061082	1.8	8
140	Heterodyne and subharmonic mixing at 0.6 THz in an AlGaAs/InGaAs/AlGaAs heterostructure field effect transistor. <i>Applied Physics Letters</i> , 2013 , 103, 093505	3.4	8
139	Phase-channel dynamics reveal the role of impurities and screening in a quasi-one-dimensional charge-density wave system. <i>Scientific Reports</i> , 2017 , 7, 2039	4.9	8
138	The potential for sensitivity enhancement by the thermoelectric effect in carbon-nanotube and graphene Tera-FETs. <i>Journal of Physics: Conference Series</i> , 2015 , 647, 012004	0.3	8
137	CMOS integrated antenna-coupled field-effect-transistors for the detection of 0.2 to 4.3 THz 2012 ,		8
136	Effect of the Metallization on the Resonances of THz Fishnet Metamaterials. <i>Journal of the European Optical Society-Rapid Publications</i> , 2012 , 7,	2.5	8
135	Mode calculations for a terahertz quantum cascade laser. <i>Optics Express</i> , 2004 , 12, 2062-9	3.3	8

134	High resolution transmission electron microscopy study of interface structures and growth defects in epitaxial Bi ₂ Sr ₂ Ca _{n-1} Cu _n O _{4+2n} + Γ films on SrTiO ₃ and LaAlO ₃ . <i>Journal of Materials Research</i> , 1996 , 11, 2416-2428	2.5	8
133	Coherent emission of electromagnetic pulses from bloch oscillations in semiconductor superlattices 1995 , 297-315		8
132	Nonlocal collective ultrastrong interaction of plasmonic metamaterials and photons in a terahertz photonic crystal cavity. <i>Optics Express</i> , 2019 , 27, 24455-24468	3.3	8
131	Sub-picosecond pulsed THz FET detector characterization in plasmonic detection regime based on autocorrelation technique. <i>Semiconductor Science and Technology</i> , 2018 , 33, 124013	1.8	8
130	Terahertz propagation properties of free-standing woven-steel-mesh metamaterials: Pass-bands and signatures of abnormal group velocities. <i>Journal of Applied Physics</i> , 2011 , 110, 064902	2.5	7
129	Saturable absorption of femtosecond optical pulses in multilayer turbostratic graphene. <i>Optics Express</i> , 2016 , 24, 15261-73	3.3	7
128	Terahertz Detection With a Low-Cost Packaged GaAs High-Electron-Mobility Transistor. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2019 , 9, 27-37	3.4	7
127	Imaging and Spectroscopic Sensing with Low-Repetition-Rate Terahertz Pulses and GaN TeraFET Detectors. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2018 , 39, 262-272	2.2	7
126	Thermal noise-limited sensitivity of FET-based terahertz detectors 2017 ,		6
125	Hybrid Continuous-Wave Demodulating Multipixel Terahertz Imaging Systems. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2010 , 58, 2022-2026	4.1	6
124	Fast active THz camera with range detection by frequency modulation 2009 ,		6
123	Towards an active real-time THz camera: first realization of a hybrid system 2007 ,		6
122	Influence of a strong magnetic field on the Wannier-Stark states of an electrically biased GaAs/Al _x Ga _{1-x} As superlattice. <i>Physical Review B</i> , 2003 , 67,	3.3	6
121	Electro-optic investigation of the Coherent Hall Effect in semiconductor superlattices. <i>Physica Status Solidi (B): Basic Research</i> , 2005 , 242, 1175-1178	1.3	6
120	Charge accumulation effects and microwave absorption of coplanar waveguides fabricated on high-resistivity Si with SiO ₂ insulation layer. <i>Applied Physics Letters</i> , 1995 , 67, 2624-2626	3.4	6
119			6
118	. <i>IEEE Photonics Technology Letters</i> , 1995 , 7, 1189-1191	2.2	6
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