Maxim M Nazarov

List of Publications by Year
in descending order

112	1,460	279798	345221
papers	citations	23 h-index	36 g-index

113	113	113	1205
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Terahertz biophotonics as a tool for studies of dielectric and spectral properties of biological tissues and liquids. Progress in Quantum Electronics, 2018, 62, 1-77.	7.0	204
2	Terahertz time-domain spectroscopy of biological tissues. Quantum Electronics, 2008, 38, 647-654.	1.0	100
3	Noninvasive blood glucose monitoring in the terahertz frequency range. Optical and Quantum Electronics, 2016, 48, 1.	3.3	81
4	Determination of the refractive index of Î²-NaYF4/Yb3+/Er3+/Tm3+ nanocrystals using spectroscopic refractometry. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2015, 118, 609-613.	0.6	55
5	Terahertz time-domain and Raman spectroscopy of the sulfur-containing peptide dimers: Low-frequency markers of disulfide bridges. Vibrational Spectroscopy, 2008, 47, 53-58.	2.2	50
6	GaSe1âˆ'xSx and GaSe1âˆ'xTex thick crystals for broadband terahertz pulses generation. Applied Physics Letters, 2011, 99, .	3.3	45
7	Studying of dielectric properties of polymers in the terahertz frequency range. Proceedings of SPIE, 2012, , .	0.8	43
8	Study of the dielectric function of aqueous solutions of glucose and albumin by THz time-domain spectroscopy. Quantum Electronics, 2016, 46, 488-495.	1.0	41
9	Characteristic responses of biological and nanoscale systems in the terahertz frequency range. Quantum Electronics, 2014, 44, 614-632.	1.0	40
10	Ultraviolet-to-millimeter-band supercontinua driven by ultrashort mid-infrared laser pulses. Optica, 2020, 7, 15.	9.3	40
11	Excitation and propagation of surface electromagnetic waves studied by terahertz spectrochronography. Laser Physics Letters, 2005, 2, 471-475.	1.4	35
12	Eight-Capillary Cladding THz Waveguide With Low Propagation Losses and Dispersion. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 183-191.	3.1	35
13	On the choice of nonlinear optical and semiconductor converters of femtosecond laser pulses into terahertz range. Radiophysics and Quantum Electronics, 2009, 52, 536-545.	0.5	34
14	Propagation of THz plasmon pulse on corrugated and flat metal surface. Surface Science, 2006, 600, 4771-4776.	1.9	32
15	Analysis of blood plasma at terahertz frequencies. Optics and Spectroscopy (English Translation of) Tj ETQq1 1 0.784314 rgBT /Overlo	0.6	32
16	THz Spectroscopy of Bound Water in Glucose: Direct Measurements from Crystalline to Dissolved State. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1057-1068.	2.2	30
17	THz monitoring of the dehydration of biological tissues affected by hyperosmotic agents. Physics of Wave Phenomena, 2014, 22, 169-176.	1.1	29
18	Study of terahertz-radiation-induced DNA damage in human blood leukocytes. Quantum Electronics, 2014, 44, 247-251.	1.0	28

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19	In vitro terahertz monitoring of muscle tissue dehydration under the action of hyperosmotic agents. Quantum Electronics, 2014, 44, 633-640.	1.0	27
20	Competition between linear and nonlinear processes during generation of pulsed terahertz radiation in a ZnTe crystal. Quantum Electronics, 2005, 35, 407-414.	1.0	26
21	Surface plasmon THz waves on gratings. Comptes Rendus Physique, 2008, 9, 232-247.	0.9	25
22	Noncollinear excitation of surface electromagnetic waves: Enhancement of nonlinear optical surface response. Physical Review B, 2004, 69, .	3.2	24
23	THz surface plasmon jump between two metal edges. Optics Communications, 2007, 277, 33-39.	2.1	24
24	Application of time-domain THz spectroscopy for studying blood plasma of rats with experimental diabetes. Physics of Wave Phenomena, 2014, 22, 185-188.	1.1	23
25	Malignant and benign thyroid nodule differentiation through the analysis of blood plasma with terahertz spectroscopy. Biomedical Optics Express, 2021, 12, 1020.	2.9	23
26	A Comprehensive Study of Albumin Solutions in the Extended Terahertz Frequency Range. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 840-853.	2.2	21
27	The use of combination of nonlinear optical materials to control terahertz pulse generation and detection. Applied Physics Letters, 2008, 92, .	3.3	19
28	Fibonacci-like photonic structure for femtosecond pulse compression. Physical Review E, 2007, 75, 036609.	2.1	18
29	Simultaneous generation of second and third optical harmonics on a metal grating. Physical Review B, 2006, 74, .	3.2	13
30	Excitation and focusing of terahertz surface plasmons using a grating coupler with elliptically curved grooves. Applied Physics Letters, 2009, 94, 231108.	3.3	13
31	A Complex Study of the Peculiarities of Blood Serum Absorption of Rats with Experimental Liver Cancer. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 126, 721-729.	0.6	13
32	From two-beam surface plasmon interaction to femtosecond surface optics and spectroscopy. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 276, 127-132.	2.1	11
33	Characterization of Highly Doped Si Through the Excitation of THz Surface Plasmons. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 680-686.	3.1	11
34	Studying human and animal skin optical properties by terahertz time-domain spectroscopy. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 479-483.	0.6	10
35	Coherently enhanced microwave pulses from midinfrared-driven laser plasmas. Optics Letters, 2021, 46, 1081.	3.3	10
36	<title>Modification of terahertz pulsed spectrometer to study biological samples</title>. , 2007, 6535, 481.		9

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37	ÄŒerenkov radiation excited by an ultrashort laser pulse with oblique amplitude front. Radiophysics and Quantum Electronics, 2007, 50, 922-928.	0.5	8
38	Structure-sensitive changes in the terahertz absorption spectra of merocyanine dye derivatives. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 107, 505-514.	0.6	7
39	Dipole antennas based on SI-GaAs:Cr for generation and detection of terahertz radiation. Russian Physics Journal, 2013, 55, 890-898.	0.4	7
40	A flexible terahertz waveguide for delivery and filtering of quantum-cascade laser radiation. Applied Physics Letters, 2018, 113, .	3.3	7
41	Polarization and Spatial Mode Structure of Mid-Infrared-Driven Terahertz-to-Microwave Radiation. ACS Photonics, 2021, 8, 1988-1996.	6.6	7
42	Broadband terahertz generation by optical rectification of ultrashort multiterawatt laser pulses near the beam breakup threshold. Optics Letters, 2021, 46, 5866.	3.3	7
43	Structure-Sensitive Maxima in the Absorption Spectra of Polymers in the Terahertz Frequency Range. Radiophysics and Quantum Electronics, 2015, 57, 881-890.	0.5	6
44	Hybrid x-ray laser-plasma/laser-synchrotron facility for pumpâ€“probe studies of the extreme state of matter at NRC â€œKurchatov Instituteâ€• Review of Scientific Instruments, 2021, 92, 053101.	1.3	6
45	Electronic properties and influence of doping on GaSe crystal nonlinear optical parameters for the applications in terahertz range. Proceedings of SPIE, 2010, , .	0.8	5
46	Study of the properties of nanostructured aluminum oxyhydroxide in the terahertz frequency range. Radiophysics and Quantum Electronics, 2012, 54, 591-599.	0.5	5
47	Terahertz response of a polymer composite with high concentration of silicon micro- and nanoparticles. Nanotechnologies in Russia, 2015, 10, 247-253.	0.7	5
48	Investigation of bovine serum albumin glycation by THz spectroscopy. Proceedings of SPIE, 2016, , .	0.8	5
49	Sensitivity of Reflecting Terahertz Sensors of Aqueous Solutions. Technical Physics, 2021, 66, 305-315.	0.7	5
50	Peculiarities of excitation of surface plasmons upon noncollinear light scattering. Quantum Electronics, 2005, 35, 27-32.	1.0	4
51	Band gaps in the spectra of terahertz surface plasmons on metallic diffraction gratings. JETP Letters, 2009, 90, 177-180.	1.4	4
52	THz and IR Spectroscopy of Molecular Systems That Simulate Function-Related Structural Changes of Proteins. Spectroscopy, 2012, 27, 429-432.	0.8	4
53	Thin and thick dielectric films for THz surface plasmon control. Laser Physics, 2013, 23, 056008.	1.2	4
54	Determination of the Boundary Transition Temperatures in Polypropylene on the Basis of Measurements in the Terahertz Band. Radiophysics and Quantum Electronics, 2017, 60, 409-416.	0.5	4

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55	Study of blood and its components by terahertz pulsed spectroscopy. EPJ Web of Conferences, 2018, 195, 10003.	0.3	4
56	Free-beam spectral self-compression at supercritical peak powers. Optics Letters, 2018, 43, 5693.	3.3	4
57	Effect of Edge Plasmon Excitation at Metal Grating on the Second Harmonic Generation of Light. Physica Scripta, 1999, 60, 60-62.	2.5	3
58	Time-resolved nonlinear surface plasmon optics. JETP Letters, 2002, 75, 461-464.	1.4	3
59	GaSe<inf>1−x</inf>S<inf>x</inf> and GaSe<inf>1−x</inf>Te <inf>x</inf> solid solutions for terahertz generation and detection. , 2009, , .		3
60	Vibrational spectra of corticosteroid hormones in the terahertz range. Proceedings of SPIE, 2010, , .	0.8	3
61	Obtaining terahertz-range metamaterials by laser engraving. Journal of Optical Technology (A) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.4	3
62	Surface Plasmon Propagation on a Film with Subwavelength Holes in the Terahertz Frequency Range. Radiophysics and Quantum Electronics, 2013, 55, 634-647.	0.5	3
63	In-vitro terahertz spectroscopy of rat skin under the action of dehydrating agents. Proceedings of SPIE, 2014, , .	0.8	3
64	The investigation of blood and skin THz response at high glucose concentration. , 2015, , .		3
65	Dielectric properties of albumin and glucose solutions in the THz frequency range. , 2016, , .		3
66	Laser formation of Bragg gratings in polymer nanocomposite materials. Quantum Electronics, 2016, 46, 29-32.	1.0	3
67	Formation of channel optical waveguides in polymethylmethacrylate with embedded electro-optic chromophore DR13 by the photoinduced bleaching method. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.5	3
68	On the Fractal Absorption Spectra of Polymers in the Low-Frequency Part of the Terahertz Range. Radiophysics and Quantum Electronics, 2018, 61, 374-381.	0.5	3
69	High-intensity THz pulse generation by TW laser radiation in ionized gas and nonlinear crystals. Journal of Physics: Conference Series, 2020, 1556, 012008.	0.4	3
70	<title>Tooth study by terahertz time-domain spectroscopy</title>. Proceedings of SPIE, 2008, , .	0.8	2
71	Efficient terahertz generation in GaSe via eee-interaction type. , 2011, , .		2
72	Response to â€œComment on â€˜GaSe1â^'xSx and GaSe1â^'xTex thick crystals for broadband terahertz pulses generationâ€™â€•[Appl. Phys. Lett. 100, 136103 (2012)]. Applied Physics Letters, 2012, 100, 136104.	3.3	2

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73	Terahertz image processing for the skin cancer diagnostic. , 2014, , .		2
74	Application of terahertz time-domain spectroscopy for blood glucose monitoring. , 2016, , .		2
75	Optical Properties of Amorphous Perfluorinated Polymers in the Terahertz Range. Journal of Applied Spectroscopy, 2018, 85, 374-380.	0.7	2
76	Broadband ultrawide-angle laser-plasma microwave antennas. Physical Review A, 2022, 105, .	2.5	2
77	Study of surface plasmons with a scanning acoustic microscope. Quantum Electronics, 2003, 33, 451-456.	1.0	1
78	Terahertz time-domain spectroscopy and spectrochronography of amino acids and polypeptides. , 2006, , .		1
79	Heavy ions irradiated crystal GaAs as an active non-linear matrix for the generation of THz radiation. Radiation Measurements, 2008, 43, S591-S593.	1.4	1
80	Terahertz applications of the materials made from nanostructured alumina oxyhydroxide (NOA), its modifications and composites. , 2009, , .		1
81	Field localization of a broadband THz surface plasmon. , 2010, , .		1
82	Terahertz generation in GaSe0.71S0.29 and GaSe crystals via eee- and eoo-type optical rectification. , 2012, , .		1
83	Application of THz probe radiation in low-coherent tomographs based on spatially separated counterpropagating beams. Quantum Electronics, 2013, 43, 958-967.	1.0	1
84	Polymer matrix with nanoparticles as a high refraction material for the waveguides. , 2013, , .		1
85	Characterization of highly doped Si with surface plasmon. , 2013, , .		1
86	A Method for Measuring the Electro-optical Response of Chromofore-embedded Polymer Films Using a Prism Coupler. Instruments and Experimental Techniques, 2018, 61, 106-113.	0.5	1
87	Spectroscopy of solutions in the low frequency extended THz frequency range. EPJ Web of Conferences, 2018, 195, 10008.	0.3	1
88	Brewster angles for a dissipative film structure. , 2020, 63, 672-679.	0.1	1
89	Polarized coherent microwave supercontinua with a terawatt laser driver. Physical Review A, 2021, 104, .	2.5	1
90	Two-surface plasmon interaction to femtosecond surface spectroscopy. , 2001, 4243, 93.		0

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91	<title>Time-resolved nonlinear surface plasmon optics</title>. , 2002, 5023, 154.		0
92	Terahertz pulse plasmon interaction with metal grating. , 2006, 6194, 171.		0
93	<title>Guiding light in segmented waveguides: experimental demonstration in the terahertz domain</title>. , 2006, , .		0
94	Terahertz plasmon propagation on flat and corrugated metal surface. , 2007, , .		0
95	The role of material dispersion of nonlinear media in the broadband THz pulse generation. , 2007, , .		0
96	The impact of a donor-acceptor strength of the π-electron molecular systems on the THz range transitions efficiency and nonlinear-optical response. , 2007, , .		0
97	Heavy-ion irradiated GaAs crystals for high-efficient generation of terahertz radiation. , 2008, , .		0
98	Terahertz and infrared spectroscopy of yttrium tantalate and niobate phosphors. , 2009, , .		0
99	Terahertz surface plasmon interaction on a corrugated metal surface. , 2009, , .		0
100	Bulk, structural and interfacing water in the nanostructured alumina hydroxide studied by THz-TDS spectroscopy. , 2009, , .		0
101	Investigation of spectral features of progesterone, 17a-hydroxyprogesterone and cortisone in THz range. , 2010, , .		0
102	THz surface plasmon reflection on a corrugated metal surface. , 2010, , .		0
103	THz emission from a femtosecond laser focus in a bicolor scheme in the ionization-free regime. , 2010, , .		0
104	Bragg reflection of THz surface plasmon propagating over a diffraction grating. , 2011, , .		0
105	The effect of the nature of hydrogen bonding on THz and Raman spectra of cyclopentaphenanthrene derivatives. , 2011, , .		0
106	Propagation of broadband THz surface plasmon through thick and thin polymer layers. , 2012, , .		0
107	THz waveguide with a spit ring resonators layer. , 2014, , .		0
108	THz response of a transparent polymer at different tacticity and temperature. , 2016, , .		0

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109	Polymer waveguides for THz QCL radiation delivery and filtering. EPJ Web of Conferences, 2018, 195, 04005.	0.3	0
110	Photonic crystal fibers formed by air channels with a corrugated boundary. Journal of Physics: Conference Series, 2018, 1096, 012004.	0.4	0
111	How to Make Water Transparent for THz Radiation?. , 2019, , .		0
112	Ultrabroadband Characterization of Microwave-to-Terahertz Supercontinua Driven by Ultrashort Pulses in the Mid-Infrared. Journal of Lightwave Technology, 2021, 39, 7862-7868.	4.6	0