

Norbert PaÅ,ka

List of Publications by Year in descending order

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152
papers

1,107
citations

430874

18
h-index

477307

29
g-index

153
all docs

153
docs citations

153
times ranked

1114
citing authors

#	ARTICLE	IF	CITATIONS
1	Sensors and Systems for the Detection of Explosive Devices - An Overview. Metrology and Measurement Systems, 2012, 19, 3-28.	1.4	88
2	Identification of concealed materials, including explosives, by terahertz reflection spectroscopy. Optical Engineering, 2013, 53, 031202.	1.0	58
3	Monolithic high-index contrast grating: a material independent high-reflectance VCSEL mirror. Optics Express, 2015, 23, 11674.	3.4	57
4	Detailed non-destructive evaluation of UHMWPE composites in the terahertz range. Optical and Quantum Electronics, 2014, 46, 515-525.	3.3	43
5	Passive imaging of concealed objects in terahertz and long-wavelength infrared. Applied Optics, 2015, 54, 3826.	2.1	42
6	3-D-Printed Flat Optics for THz Linear Scanners. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 314-316.	3.1	41
7	Polymorphism of Resorcinol Explored by Complementary Vibrational Spectroscopy (FT-RS, THz-TDS,) Tj ETQq1 1 0.784314 rgBT /Overl 2015, 119, 1681-1695.	2.6	35
8	Precise Determination of Thicknesses of Multilayer Polyethylene Composite Materials by Terahertz Time-Domain Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 578-596.	2.2	35
9	Impact of additives and processing on microstructure and dielectric properties of willemite ceramics for LTCC terahertz applications. Journal of the European Ceramic Society, 2020, 40, 362-370.	5.7	35
10	Non-destructive evaluation of puncture region in polyethylene composite by terahertz and X-ray radiation. Composites Part B: Engineering, 2016, 92, 315-325.	12.0	33
11	THz Reflection Spectroscopy of Explosives Measured by Time Domain Spectroscopy. Acta Physica Polonica A, 2011, 120, 713-715.	0.5	33
12	A Sagnac-Michelson fibre optic interferometer: Signal processing for disturbance localization. Opto-electronics Review, 2007, 15, .	2.4	32
13	Characterization of prospective explosive materials using terahertz time-domain spectroscopy. Applied Optics, 2016, 55, 4575.	2.1	30
14	Quantitative Analysis of Hexahydro-1,3,5-trinitro-1,3,5, Triazine/Pentaerythritol Tetranitrate (RDX&PETN) Mixtures by Terahertz Time Domain Spectroscopy. Applied Spectroscopy, 2015, 69, 1464-1471.	2.2	25
15	Refractive indices and birefringence of hybrid liquid crystal - nanoparticles composite materials in the terahertz region. AIP Advances, 2015, 5, .	1.3	25
16	Terahertz Shielding Properties of Carbon Black Based Polymer Nanocomposites. Materials, 2021, 14, 835.	2.9	22
17	High order kinoforms as a broadband achromatic diffractive optics for terahertz beams. Optics Express, 2014, 22, 3137.	3.4	21
18	3D Non-destructive Imaging of Punctures in Polyethylene Composite Armor by THz Time Domain Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 770-788.	2.2	21

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19	Low temperature sintering of Zn4B6O13 based substrates, their microstructure and dielectric properties up to the THz range. Journal of Alloys and Compounds, 2020, 819, 153025.	5.5	19
20	THz spectroscopy and imaging in security applications. , 2012, , .		15
21	Hidden Object Detection System Based on Fusion of THz and VIS Images. Acta Physica Polonica A, 2013, 124, 490-493.	0.5	15
22	THz Beam Shaping Based on Paper Diffractive Optics. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 568-575.	3.1	15
23	Spectral investigation of nematic liquid crystals with high optical anisotropy at THz frequency range. Phase Transitions, 2012, 85, 337-344.	1.3	14
24	Transmission and Reflection Terahertz Spectroscopy of Insensitive Melt-Cast High-Explosive Materials. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 977-992.	2.2	13
25	Terahertz Detection of Wavelength-Size Metal Particles in Pressboard Samples. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 99-107.	3.1	13
26	LTCC and Bulk Zn4B6O13â€“Zn2SiO4 Composites for Submillimeter Wave Applications. Materials, 2021, 14, 1014.	2.9	13
27	Spectroscopy of Explosive Materials in the THz Range. Acta Physica Polonica A, 2010, 118, 1229-1231.	0.5	13
28	Spectral Properties of Nematic Liquid Crystal Mixtures Composed with Long and Short Molecules in THz Frequency Range. Molecular Crystals and Liquid Crystals, 2012, 561, 74-81.	0.9	12
29	Improvement of passive THz camera images. , 2012, , .		11
30	Polarization-insensitive metamaterial absorber of selective response in terahertz frequency range. Journal of Optics (United Kingdom), 2014, 16, 105104.	2.2	10
31	THz detectors based on Si-CMOS technology field effect transistors â€“ advantages, limitations and perspectives for THz imaging and spectroscopy. Opto-electronics Review, 2018, 26, 261-269.	2.4	10
32	Structural, Thermal and Dielectric Properties of Low Dielectric Permittivity Cordierite-Mullite-Glass Substrates at Terahertz Frequencies. Materials, 2021, 14, 4030.	2.9	9
33	THz spectroscopy of explosive-related simulants and oxidizers. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2011, 59, 445-447.	0.8	8
34	Comparison of terahertz technologies for detection and identification of explosives. Proceedings of SPIE, 2014, , .	0.8	8
35	Terahertz properties of liquid crystals doped with ferroelectric BaTiO3 nanoparticles. Liquid Crystals, 2017, 44, 1207-1215.	2.2	8
36	Recent development of fibre optic sensors for perimeter security. , 0, , .		7

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37	Influence of surface of explosive on its detection and identification using the SDA method for analysis of the reflected THz signal. Proceedings of SPIE, 2013, , .	0.8	7
38	Vibrational Response of Felodipine in the THz Domain: Optical and Neutron Spectroscopy Versus Plane-Wave DFT Modeling. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1301-1336.	2.2	7
39	Fiber optic perimeter protection sensor with intruder localization. , 2004, , .		6
40	Integrated radar-camera security system: experimental results. Proceedings of SPIE, 2011, , .	0.8	6
41	Efficiency of the detection and identification of ceramic explosive using the reflected THz signal. Proceedings of SPIE, 2012, , .	0.8	6
42	Moisture detection in composites by terahertz spectroscopy. Journal of Physics: Conference Series, 2015, 628, 012100.	0.4	6
43	Processing of AlGaAs/GaAs quantum-cascade structures for terahertz laser. Journal of Nanophotonics, 2015, 9, 093079.	1.0	6
44	Towards Fingerprint Spoofing Detection in the Terahertz Range. Sensors, 2020, 20, 3379.	3.8	6
45	Terahertz Frequency Domain Spectroscopy Identification System Based on Decision Trees. Acta Physica Polonica A, 2012, 122, 891-895.	0.5	6
46	Demodulation of output signals from unbalanced fibre optic Michelson interferometer. , 0, , .		5
47	The method of the spectral dynamics analysis of reflected signal for problem of identification of substance. Proceedings of SPIE, 2011, , .	0.8	5
48	Increasing the instrumental resolution of a commercially available passive THz camera due to computer treatment of image. , 2012, , .		5
49	Multispectral concealed weapon detection in visible, infrared, and terahertz. Proceedings of SPIE, 2014, , .	0.8	5
50	Face re-identification in thermal infrared spectrum based on ThermalFaceNet neural network. , 2018, , .		5
51	Monitoring of air voids at plastic-metal interfaces by terahertz radiation. Infrared Physics and Technology, 2020, 104, 103119.	2.9	5
52	Sintering, Microstructure, and Dielectric Properties of Copper Borates for High Frequency LTCC Applications. Materials, 2021, 14, 4017.	2.9	5
53	Comparison of spectra of materials measured by Time Domain and Fourier Transform Spectroscopy in Terahertz range. Photonics Letters of Poland, 2011, 3, .	0.4	5
54	Investigation of concealed objects detection in visible, infrared and terahertz ranges of radiation. Photonics Letters of Poland, 2013, 5, .	0.4	5

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55	Multisensor systems for security of critical infrastructures: concept, data fusion, and experimental results. Proceedings of SPIE, 2011, , .	0.8	4
56	An influence of the absolute phase of THz pulse on linear and nonlinear medium response. , 2011, , .		4
57	Increasing the quality of image of a commercially available passive THz camera due to computer processing of image. Proceedings of SPIE, 2012, , .	0.8	4
58	Detection and identification of compound explosive using the SDA method of the reflected THz signal. , 2012, , .		4
59	Detection of the THz waves from the 5m distance. Proceedings of SPIE, 2013, , .	0.8	4
60	Detection of covered materials in the TDS-THz setup. Proceedings of SPIE, 2013, , .	0.8	4
61	Discrimination and identification of RDX/PETN explosives by chemometrics applied to terahertz time-domain spectral imaging. , 2015, , .		4
62	Liquid crystal phase shifter for THz radiation with cholesteric liquid crystal. Molecular Crystals and Liquid Crystals, 2017, 657, 51-55.	0.9	4
63	Monitoring the role of enantiomers in the surface modification and adsorption process of polymers imprinted by chiral molecules: theory and practice. Journal of Materials Science, 2020, 55, 10626-10642.	3.7	4
64	Focusing with 2D Square Photonic Crystal with Concavo-Concavo Boundaries. Acta Physica Polonica A, 2009, 116, 368-370.	0.5	4
65	Complex THz Reflectance Spectra of Hexogen Measured for Various Surfaces. Acta Physica Polonica A, 2012, 122, 854-857.	0.5	4
66	Processing of THz images acquired by passive camera. Photonics Letters of Poland, 2012, 4, .	0.4	4
67	Modal interference fiber optic sensor. , 2004, 5611, 225.		3
68	<title>Optimal contrast function in the unbalanced fiber optic Michelson interferometer for dislocation sensor</title>. , 2004, , .		3
69	Efficiency of the detection of explosive using the spectral dynamics analysis of reflected signal. Proceedings of SPIE, 2011, , .	0.8	3
70	Liquid crystal-tunable metamaterial absorber for THz frequency range. , 2013, , .		3
71	Terahertz and Raman spectra of non-centrosymmetrical organic molecular crystals. Optical Materials, 2014, 37, 28-35.	3.6	3
72	High-contrast grating reflectors for 980 nm vertical-cavity surface-emitting lasers. , 2015, , .		3

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73	SU-8 based planar metamaterials with fourfold symmetry as selective terahertz absorbers. Opto-electronics Review, 2018, 26, 329-337.	2.4	3
74	Benzyltrimethylammonium cadmium dicyanamide with polar order in multiple phases and prospects for linear and nonlinear optical temperature sensing. Dalton Transactions, 2021, 50, 10580-10592.	3.3	3
75	Thermal Face Verification through Identification. Sensors, 2021, 21, 3301.	3.8	3
76	Detection of Inflatable Boats and People in Thermal Infrared with Deep Learning Methods. Sensors, 2021, 21, 5330.	3.8	3
77	Sensing properties of photonic crystal fibers. European Physical Journal Special Topics, 2005, 129, 143-145.	0.2	2
78	Conventional and photonic crystal optical fibre for localization sensor. European Physical Journal Special Topics, 2006, 137, 157-160.	0.2	2
79	Simple method for determination of photonic crystal fibers geometry. , 2007, , .		2
80	Military application of non-destructive properties of THz radiation. , 2012, , .		2
81	The evaluation methodology of THz-VIS fused images. , 2013, , .		2
82	3D printed flat optics and InP heterojunction bipolar transistor based-detector for THz imaging. , 2015, , .		2
83	THz Reflection Spectra of Different Materials, Including Explosives, Measured at a Distance up to 5 m. Acta Physica Polonica A, 2015, 127, 689-692.	0.5	2
84	Al _{0.45} Ga _{0.55} As / GaAs -based single-mode distributed-feedback quantum-cascade lasers with surface gratings. Journal of Nanophotonics, 2017, 11, 026004.	1.0	2
85	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
86	THz, Raman, IR and DFT studies of noncentrosymmetric metal dicyanamide frameworks comprising benzyltrimethylammonium cations. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 251, 119416.	3.9	2
87	Terahertz Spectra of Explosives Measured by Optical Parametric Oscillator-Based System and Time Domain Spectroscopy. Acta Physica Polonica A, 2012, 122, 946-949.	0.5	2
88	Detection of THz nanosecond pulses by fast Hot Electron Bolometer. Photonics Letters of Poland, 2012, 4, .	0.4	2
89	<title>Sensitivity of perimeter sensor based on Sagnac interferometer</title>. , 2004, , .		1
90	<title>Fiber sensors for optic cable monitoring</title>. , 2004, , .		1

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91	Contrastometric Fiber Optic Elongation Sensor. , 2006, , .		1
92	Elongation sensitivity of photonic crystal fibers. European Physical Journal: Special Topics, 2008, 154, 143-147.	2.6	1
93	Modelling of thermal emissivity of covered bulk explosive materials in the THz range. Proceedings of SPIE, 2009, , .	0.8	1
94	Non-destructive terahertz investigations of polyethylene composite materials. , 2011, , .		1
95	THz-TDS spectroscopy of selected organic crystalline forms. , 2012, , .		1
96	Hot electron bolometer for detection of fast terahertz pulses from optical parametric oscillator. , 2012, , .		1
97	Processing of AlGaAs/GaAs QC structures for terahertz laser. , 2014, , .		1
98	Textile influence on remote identification of explosives in the THz range. , 2015, , .		1
99	Chemical imaging and quantification of RDX/PETN mixtures by PLS applied on terahertz time-domain spectroscopy. , 2015, , .		1
100	The influence of smoke on the THz imaging. Photonics Letters of Poland, 2012, 4, .	0.4	1
101	Face recognition in the thermal infrared domain. , 2017, , .		1
102	Optoelectronic tracking system for shooting simulator - tests in a virtual reality application. Photonics Letters of Poland, 2020, 12, 61.	0.4	1
103	SELECTED ASPECTS OF TERAHERTZ SPECTROSCOPY IN PHARMACEUTICAL SCIENCES. Acta Poloniae Pharmaceutica, 2015, 72, 851-66.	0.1	1
104	Fiber optic polarizer with D-type waveguide. , 2000, 4239, 217.		0
105	Investigations of temperature and strain properties of fiber Bragg grating for dislocation sensors. , 2003, , .		0
106	Simulations and experimental research of fiber optic contrast-based dislocation sensor. , 2004, , .		0
107	Novel fiber optic contrast-based sensor. , 2004, , .		0
108	<title>Linearization of periodic contrast function for fiber optic dislocation sensor</title>. , 2004, , .		0

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109	Experimental results of fiber optic contrast-sensitive dislocation sensor. , 2005, , .		0
110	Phase sensitivity of the photonic crystal fibers. , 2005, , .		0
111	Physical aspects of photonic crystal fibers. European Physical Journal Special Topics, 2005, 129, 159-164.	0.2	0
112	Comparative study of phase sensitivity of conventional and index-guiding photonic crystal fibres. , 0, , .		0
113	Physical Aspects of Photonic Crystal Fibers. , 2006, , .		0
114	Core-ring Photonic Crystal Fibers for sensing. European Physical Journal: Special Topics, 2008, 154, 139-142.	2.6	0
115	Influence of phlegmatization on spectra of explosives in THz range. , 2010, , .		0
116	Influence of packaging on spectra of materials in THz range. Proceedings of SPIE, 2010, , .	0.8	0
117	LO-TO splitting in terahertz measurements of NLO molecular crystals. , 2011, , .		0
118	Experimental verification of the explosives identification model in THz range. Proceedings of SPIE, 2011, , .	0.8	0
119	Some aspects of far-infrared spectroscopy of explosive materials. , 2011, , .		0
120	Terahertz properties of metallic layers and grids. , 2012, , .		0
121	Terahertz measurements of selected crystalline forms. , 2012, , .		0
122	FIR and Raman spectra of organic molecular crystals. , 2012, , .		0
123	Thermal human phantom for testing of millimeter wave cameras. , 2012, , .		0
124	Terahertz spectra of materials measured by the OPO-based system. , 2013, , .		0
125	THz-VIS passive imaging system for visualization of hidden threats. , 2013, , .		0
126	Multispectral THz-VIS passive imaging system for hidden threats visualization. , 2013, , .		0

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127	The evaluation of THz-VIS fused images. , 2013, , .		0
128	Extension of the p-Spectrum Method to the Higher Frequencies. Acta Physica Polonica A, 2013, 124, 534-537.	0.5	0
129	Reflection measurement of Hexogen from 5-m distance. , 2013, , .		0
130	THz structures fabricated in laser direct patterning. , 2014, , .		0
131	Application of THz radiation to polyethylene composite materials. , 2014, , .		0
132	Resonator structures on AlN ceramics surface treated by laser radiation. , 2014, , .		0
133	Investigations on time stability of passive THz imaging. , 2014, , .		0
134	Transfer matrix method for precise determination of thicknesses in a 150-ply polyethylene composite material. , 2015, , .		0
135	Non-destructive testing of polyethylene composite by terahertz radiation. , 2016, , .		0
136	Al _{0.45} Ga _{0.55} As/GaAs-based single-mode distributed-feedback quantum-cascade lasers with surface gratings. , 2017, , .		0
137	Optics for free space THz transmission. , 2018, , .		0
138	APPLICATIONS OF THE TERAHERTZ ATR SPECTROSCOPY TO PHARMACOLOGY. Acta Poloniae Pharmaceutica, 2021, 78, 467-474.	0.1	0
139	Contrastometric fiber optic elongation sensor. European Physical Journal Special Topics, 2005, 129, 165-167.	0.2	0
140	Sagnac-Michelson Interferometer as Perimeter Sensor. , 2006, , .		0
141	Performance of a nitrogen implanted large aperture THz emitter. Photonics Letters of Poland, 2012, 4, .	0.4	0
142	The methodology of THz-VIS fused images evaluation. Photonics Letters of Poland, 2013, 5, .	0.4	0
143	Computer Processing of Images Captured with a Commercially Available THz Camera at Long Distances. NATO Science for Peace and Security Series B: Physics and Biophysics, 2014, , 167-174.	0.3	0
144	Simple thermal to thermal face verification method based on local texture descriptors. , 2017, , .		0

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145	Weryfikacja osób na podstawie wizerunku twarzy i odcisku palca - badania eksperymentalne. Przegląd Elektrotechniczny, 2017, 1, 154-159.	0.2	0
146	Demonstrator biometrycznego systemu wjazdu/wyjazdu do strefy Schengen - badania eksperymentalne. Przegląd Elektrotechniczny, 2018, 1, 111-116.	0.2	0
147	Mobile border verification of travellers based on fingerprints: experimental studies. , 2018, , .		0
148	Face re-identification across pose in thermal infrared spectrum based on local texture descriptors. , 2018, , .		0
149	AlGaAs/GaAs terahertz quantum cascade lasers with copper waveguides (Conference Presentation). , 2019, , .		0
150	Objects tracking in virtual reality applications using SteamVR tracking system: selected issues. , 2019, , .		0
151	Microwave sensors for detection of floating objects on rivers. , 2020, , .		0
152	Terahertz detection of fingerprint spoofing. , 2020, , .		0