

Withawat Withayachumnankul

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7734154/withawat-withayachumnankul-publications-by-year.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

154
papers

5,516
citations

40
h-index

71
g-index

225
ext. papers

6,855
ext. citations

4.9
avg, IF

6.03
L-index

#	Paper	IF	Citations
154	Frequency-Selective-Surface-Based Mechanically Reconfigurable Terahertz Bandpass Filter. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2022 , 1-1	3.4	2
153	Tutorial on broadband transmissive metasurfaces for wavefront and polarization control of terahertz waves. <i>Journal of Applied Physics</i> , 2022 , 131, 061101	2.5	5
152	Frequency-Reconfigurable Circularly-Polarized Omnidirectional Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2022 , 1-1	4.9	
151	Timing-Jitter Tolerant Nyquist Pulse for Terahertz Communications. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	
150	Circuit-Based Design and Optimization for Broadband Terahertz Metasurfaces 2021 ,		1
149	Gratingless integrated tunneling multiplexer for terahertz waves. <i>Optica</i> , 2021 , 8, 621	8.6	8
148	Nondestructive Testing of Defects in Polymer Matrix Composite Materials for Marine Applications Using Terahertz Waves. <i>Journal of Nondestructive Evaluation</i> , 2021 , 40, 1	2.1	4
147	IEEE 802.15.3d-Compliant Waveforms for Terahertz Wireless Communications. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	3
146	All-Silicon Terahertz Planar Horn Antenna. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2021 , 1-1	3.8	3
145	Effective-medium-clad Bragg grating filters. <i>APL Photonics</i> , 2021 , 6, 076105	5.2	7
144	Terahertz transmissive half-wave metasurface with enhanced bandwidth. <i>Optics Letters</i> , 2021 , 46, 4164-4167	4.167	5
143	Terahertz transmissive half-wave metasurface with enhanced bandwidth: publisher's note. <i>Optics Letters</i> , 2021 , 46, 4640	3	
142	Broadband Single-Mode Hybrid Photonic Crystal Waveguides for Terahertz Integration on a Chip. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000117	6.8	11
141	Triple-Band Reconfigurable Low-Profile Monopolar Antenna With Independent Tunability. <i>IEEE Open Journal of Antennas and Propagation</i> , 2020 , 1, 47-56	1.9	10
140	High-Q Terahertz Absorber With Stable Angular Response. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2020 , 10, 204-211	3.4	17
139	Characteristics of Effective-Medium-Clad Dielectric Waveguides. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2020 , 1-1	3.4	11
138	Assessing frost damage in barley using terahertz imaging. <i>Optics Express</i> , 2020 , 28, 30644-30655	3.3	8

137	Ultra-wideband far-infrared absorber based on anisotropically etched doped silicon. <i>Optics Letters</i> , 2020 , 45, 1196-1199	3	14
136	Wideband Circularly Polarized 3-D Printed Dielectric Rod Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2020 , 68, 745-753	4.9	6
135	Terahertz Waveguides: Broadband Single-Mode Hybrid Photonic Crystal Waveguides for Terahertz Integration on a Chip (Adv. Mater. Technol. 7/2020). <i>Advanced Materials Technologies</i> , 2020 , 5, 2070039	6.8	1
134	Unclad Microphotronics for Terahertz Waveguides and Systems. <i>Journal of Lightwave Technology</i> , 2020 , 1-1	4	16
133	Broadband terahertz transmissive quarter-wave metasurface. <i>APL Photonics</i> , 2020 , 5, 096108	5.2	13
132	Fast Semi-Analytical Design for Single-FSS-Layer Circuit-Analog Absorbers. <i>IEEE Open Journal of Antennas and Propagation</i> , 2020 , 1, 483-492	1.9	3
131	Dielectrics for Terahertz Metasurfaces: Material Selection and Fabrication Techniques. <i>Advanced Optical Materials</i> , 2020 , 8, 1900750	8.1	40
130	Ultra-wideband tri-layer transmissive linear polarization converter for terahertz waves. <i>APL Photonics</i> , 2020 , 5, 046101	5.2	20
129	Broadband and wide-angle reflective linear polarization converter for terahertz waves. <i>APL Photonics</i> , 2019 , 4, 096104	5.2	18
128	Single-FSS-Layer Absorber With Improved Bandwidth-Thickness Tradeoff Adopting Impedance-Matching Superstrate. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2019 , 18, 916-920	3.8	18
127	Horizontally Polarized 360° Beam-Steerable Frequency-Reconfigurable Antenna. <i>IEEE Transactions on Antennas and Propagation</i> , 2019 , 67, 5231-5242	4.9	11
126	Terahertz Reflectarray with Enhanced Bandwidth. <i>Advanced Optical Materials</i> , 2019 , 7, 1900791	8.1	14
125	Terahertz Reflectarray: Terahertz Reflectarray with Enhanced Bandwidth (Advanced Optical Materials 20/2019). <i>Advanced Optical Materials</i> , 2019 , 7, 1970076	8.1	
124	Evolution from Air-Cladded to Effective-Medium-Cladded Dielectric Waveguides 2019 ,		1
123	Broadband Terahertz Quarter-Wave Plate Design 2019 ,		1
122	Effective-medium-cladded dielectric waveguides for terahertz waves. <i>Optics Express</i> , 2019 , 27, 38721-38734	3.34	26
121	Terahertz Absorber Design Adopting Metallic FSS in Sub-Skin-Depth Thickness 2019 ,		1
120	Polarization Responses of Terahertz Dielectric Rod Antenna Arrays 2019 ,		1

119	Linear Series-Fed Patch Array with Dual Circular Polarization or Arbitrary Linear Polarization 2019 ,		4
118	Study of Microstrip-Based Terahertz Phase Shifter Using Liquid Crystal 2019 ,		1
117	All-dielectric rod antenna array for terahertz communications. <i>APL Photonics</i> , 2018 , 3, 051707	5.2	43
116	Tutorial: Terahertz beamforming, from concepts to realizations. <i>APL Photonics</i> , 2018 , 3, 051101	5.2	63
115	Broadband Terahertz Circular-Polarization Beam Splitter. <i>Advanced Optical Materials</i> , 2018 , 6, 1700852	8.1	42
114	Dielectric-resonator metasurfaces for broadband terahertz quarter- and half-wave mirrors. <i>Optics Express</i> , 2018 , 26, 14392-14406	3.3	23
113	Wideband Endfire 3-D-Printed Dielectric Antenna With Designable Permittivity. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2018 , 17, 2085-2089	3.8	16
112	Low-profile monopole antenna with via-less shorting 2018 ,		2
111	Impact of Infill Pattern on 3D Printed Dielectric Resonator Antennas 2018 ,		8
110	Terahertz multi-beam antenna using photonic crystal waveguide and Luneburg lens. <i>APL Photonics</i> , 2018 , 3, 126105	5.2	41
109	Integrated Silicon Photonic Crystals Toward Terahertz Communications. <i>Advanced Optical Materials</i> , 2018 , 6, 1800401	8.1	33
108	Fabry-Pérot interferometer for sensing polar liquids at terahertz frequencies. <i>Journal of Applied Physics</i> , 2017 , 121, 204502	2.5	8
107	Recent Progress in Terahertz Metasurfaces. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2017 , 38, 1067-1084	2.2	36
106	Terahertz Reflectarrays and Nonuniform Metasurfaces. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017 , 23, 1-18	3.8	26
105	Dual Circularly Polarized Series-Fed Microstrip Patch Array With Coplanar Proximity Coupling. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2017 , 16, 1500-1503	3.8	32
104	Editorial Introduction to the Special Issue: Terahertz Metamaterials and Photonic Crystals. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2017 , 38, 1031-1033	2.2	2
103	Metal-Loaded Dielectric Resonator Metasurfaces for Radiative Cooling. <i>Advanced Optical Materials</i> , 2017 , 5, 1700460	8.1	99
102	Insulator-metal transition in substrate-independent VO thin film for phase-change devices. <i>Scientific Reports</i> , 2017 , 7, 17899	4.9	40

101	Dielectric Resonator Nanoantennas: A Review of the Theoretical Background, Design Examples, Prospects, and Challenges. <i>IEEE Antennas and Propagation Magazine</i> , 2017 , 59, 30-42	1.7	13
100	Efficient terahertz metasurface-based flat lens 2017 ,		1
99	Demonstration of a highly efficient terahertz flat lens employing tri-layer metasurfaces. <i>Optics Letters</i> , 2017 , 42, 1867-1870	3	38
98	Terahertz near-field imaging of dielectric resonators. <i>Optics Express</i> , 2017 , 25, 3756-3764	3.3	13
97	All-dielectric integration of dielectric resonator antenna and photonic crystal waveguide. <i>Optics Express</i> , 2017 , 25, 14706-14714	3.3	27
96	Compact Second-Order Bandstop Filter Based on Dual-Mode Complementary Split-Ring Resonator. <i>IEEE Microwave and Wireless Components Letters</i> , 2016 , 26, 571-573	2.6	24
95	Analysis of 3D-printed metal for rapid-prototyped reflective terahertz optics. <i>Optics Express</i> , 2016 , 24, 17384-96	3.3	21
94	Nanoscale TiO ₂ dielectric resonator absorbers. <i>Optics Letters</i> , 2016 , 41, 3391-4	3	34
93	Microwave microfluidic sensor based on microstrip-line-coupled complementary resonator 2016 ,		8
92	Terahertz and optical Dielectric Resonator Antennas: Potential and challenges for efficient designs 2016 ,		5
91	Attenuated Total Reflection Terahertz Time-Domain Spectroscopy: Uncertainty Analysis and Reduction Scheme. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2016 , 6, 32-39	3.4	20
90	Varactor-Tunable Second-Order Bandpass Frequency-Selective Surface With Embedded Bias Network. <i>IEEE Transactions on Antennas and Propagation</i> , 2016 , 64, 1672-1680	4.9	92
89	Mechanically Tunable Dielectric Resonator Metasurfaces at Visible Frequencies. <i>ACS Nano</i> , 2016 , 10, 133-41	16.7	198
88	Demonstration of short-range terahertz radar using high-gain leaky-wave antenna 2016 ,		1
87	Low-Profile Terahertz Radar Based on Broadband Leaky-Wave Beam Steering. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2016 , 1-10	3.4	18
86	Dielectric Resonator Reflectarray as High-Efficiency Nonuniform Terahertz Metasurface. <i>ACS Photonics</i> , 2016 , 3, 1019-1026	6.3	67
85	Plasmonics: Ultrabroadband Plasmonic Absorber for Terahertz Waves (Advanced Optical Materials 3/2015). <i>Advanced Optical Materials</i> , 2015 , 3, 274-274	8.1	
84	Directional excitation of surface plasmons by dielectric resonators. <i>Physical Review B</i> , 2015 , 91,	3.3	13

83	Flexible bi-layer terahertz chiral metamaterials. <i>Journal of Optics (United Kingdom)</i> , 2015 , 17, 085101	1.7	6
82	Doped polymer for low-loss dielectric material in the terahertz range. <i>Optical Materials Express</i> , 2015 , 5, 1373	2.6	21
81	Second-Order Terahertz Bandpass Frequency Selective Surface With Miniaturized Elements. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2015 , 5, 761-769	3.4	63
80	Polarization-dependent thin-film wire-grid reflectarray for terahertz waves. <i>Applied Physics Letters</i> , 2015 , 107, 031111	3.4	17
79	Terahertz Magnetic Mirror Realized with Dielectric Resonator Antennas. <i>Advanced Materials</i> , 2015 , 27, 7137-44	24	48
78	Flexible metasurfaces and metamaterials: A review of materials and fabrication processes at micro- and nano-scales. <i>Applied Physics Reviews</i> , 2015 , 2, 011303	17.3	204
77	Ultrabroadband Plasmonic Absorber for Terahertz Waves. <i>Advanced Optical Materials</i> , 2015 , 3, 376-380	8.1	76
76	Microfluidic-based Split-Ring-Resonator Sensor for Real-time and Label-free Biosensing. <i>Procedia Engineering</i> , 2015 , 120, 163-166		15
75	Terahertz bandpass frequency selective surface with improved out-of-band response 2015 ,		3
74	Higher-order tunable frequency selective surface with miniaturized elements 2015 ,		8
73	Microwave microfluidic sensor for determination of glucose concentration in water 2015 ,		58
72	Real-time and label-free biosensing with microfluidic-based split-ring-resonator sensor 2015 ,		3
71	Resonance breakdown of dielectric resonator antennas on ground plane at visible frequencies 2015 ,		1
70	Terahertz plasmonic Bessel beamformer. <i>Applied Physics Letters</i> , 2015 , 106, 021101	3.4	26
69	Compact Dual-Mode Wideband Filter Based on Complementary Split-Ring Resonator. <i>IEEE Microwave and Wireless Components Letters</i> , 2014 , 24, 152-154	2.6	29
68	Fundamentals of Measurement in Terahertz Time-Domain Spectroscopy. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014 , 35, 610-637	2.2	131
67	High-Sensitivity Metamaterial-Inspired Sensor for Microfluidic Dielectric Characterization. <i>IEEE Sensors Journal</i> , 2014 , 14, 1345-1351	4	395
66	Ultrasensitive terahertz sensing with high-Q Fano resonances in metasurfaces. <i>Applied Physics Letters</i> , 2014 , 105, 171101	3.4	398

65	Efficiency and Scalability of Dielectric Resonator Antennas at Optical Frequencies. <i>IEEE Photonics Journal</i> , 2014 , 6, 1-10	1.8	9
64	Metamaterial-Inspired Rotation Sensor With Wide Dynamic Range. <i>IEEE Sensors Journal</i> , 2014 , 14, 2609-2614		102
63	Plasmonic Resonance toward Terahertz Perfect Absorbers. <i>ACS Photonics</i> , 2014 , 1, 625-630	6.3	62
62	High Frequency Properties and Applications of Elastomeric Silicones 2014 , 211-224		
61	Spectral and angular characteristics of dielectric resonator metasurface at optical frequencies. <i>Applied Physics Letters</i> , 2014 , 105, 191109	3-4	17
60	Terahertz reflectarray for bidirectional beam splitting 2014 ,		2
59	Second-order bandpass frequency selective surface for terahertz applications 2014 ,		5
58	Plasmonic Absorber Based on Nano-scale Dielectric Resonator Antennas 2014 ,		1
57	Terahertz reflectarray as a polarizing beam splitter. <i>Optics Express</i> , 2014 , 22, 16148-60	3-3	83
56	Dual-mode behavior of the complementary electric-LC resonators loaded on transmission line: Analysis and applications. <i>Journal of Applied Physics</i> , 2014 , 116, 083705	2-5	33
55	Design of dual-band frequency selective surface with miniaturized elements 2014 ,		13
54	Ultrabroadband reflective polarization converter for terahertz waves. <i>Applied Physics Letters</i> , 2014 , 105, 181111	3-4	136
53	Hybrid metasurface for ultra-broadband terahertz modulation. <i>Applied Physics Letters</i> , 2014 , 105, 181108	3-4	28
52	Limitation in thin-film sensing with transmission-mode terahertz time-domain spectroscopy. <i>Optics Express</i> , 2014 , 22, 972-86	3-3	45
51	Rapid detection of hairline cracks on the surface of piezoelectric ceramics. <i>International Journal of Advanced Manufacturing Technology</i> , 2013 , 64, 1275-1283	3-2	11
50	Metamaterial-Inspired Bandpass Filters for Terahertz Surface Waves on Goubau Lines. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013 , 3, 851-858	3-4	35
49	Dielectric resonator nanoantennas at visible frequencies. <i>Optics Express</i> , 2013 , 21, 1344-52	3-3	147
48	Mechanically tunable terahertz metamaterials. <i>Applied Physics Letters</i> , 2013 , 102, 121101	3-4	119

47	Terahertz Localized Surface Plasmon Resonances in Coaxial Microcavities. <i>Advanced Optical Materials</i> , 2013 , 1, 443-448	8.1	17
46	Dual-Mode Terahertz Time-Domain Spectroscopy System. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2013 , 3, 216-220	3.4	14
45	Metamaterial-based microfluidic sensor for dielectric characterization. <i>Sensors and Actuators A: Physical</i> , 2013 , 189, 233-237	3.9	249
44	Beam deflection lens at terahertz frequencies using a hole lattice metamaterial 2013 ,		4
43	Analysis and design of planar dipole array for terahertz magnetic surface wave propagation 2013 ,		1
42	Tunable electric-LC resonators using liquid crystal 2013 ,		11
41	Flexible terahertz metamaterials for dual-axis strain sensing. <i>Optics Letters</i> , 2013 , 38, 2104-6	3	48
40	Plasmonics: Terahertz Localized Surface Plasmon Resonances in Coaxial Microcavities (Advanced Optical Materials 6/2013). <i>Advanced Optical Materials</i> , 2013 , 1, 412-412	8.1	
39	Interlayer tuning of X-band frequency-selective surface using liquid crystal 2013 ,		16
38	Experimental demonstration of reflectarray antennas at terahertz frequencies. <i>Optics Express</i> , 2013 , 21, 2875-89	3.3	91
37	A Review on Thin-film Sensing with Terahertz Waves. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2012 , 33, 245-291	2.2	133
36	Sub-diffraction thin-film sensing with planar terahertz metamaterials. <i>Optics Express</i> , 2012 , 20, 3345-52	3.3	82
35	Design and implementation of terahertz reflectarray 2012 ,		3
34	Metamaterial-inspired microfluidic-based sensor for chemical discrimination 2012 ,		6
33	Practical method for determining inductance and capacitance of metamaterial resonators. <i>Electronics Letters</i> , 2012 , 48, 225	1.1	5
32	Elastomeric silicone substrates for terahertz fishnet metamaterials. <i>Applied Physics Letters</i> , 2012 , 100, 061101	3.4	51
31	Near-field interactions in electric inductive-capacitive resonators for metamaterials. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 485101	3	9
30	Distributed source model for the full-wave electromagnetic simulation of nonlinear terahertz generation. <i>Optics Express</i> , 2012 , 20, 18397-414	3.3	6

29	Metamaterial-Inspired Multichannel Thin-Film Sensor. <i>IEEE Sensors Journal</i> , 2012 , 12, 1455-1458	4	87
28	Terahertz magnetic plasmon waveguides 2012 ,		1
27	Design and analysis of a metasurface for supporting spoof surface plasmon polaritons 2012 ,		1
26	Metamaterial-based strain sensors 2011 ,		5
25	Planar Array of Electric- LC Resonators With Broadband Tunability. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2011 , 10, 577-580	3.8	46
24	Compact wideband filter element-based on complementary split-ring resonators 2011 ,		3
23	Modeling terahertz heating effects on water. <i>Optics Express</i> , 2010 , 18, 4727-39	3.3	44
22	Compact electric-LC resonators for metamaterials. <i>Optics Express</i> , 2010 , 18, 25912-21	3.3	54
21	A Systemized View of Superluminal Wave Propagation. <i>Proceedings of the IEEE</i> , 2010 , 98, 1775-1786	14.3	26
20	Measurement of linearity in THz-TDS 2009 ,		6
19	Metamaterials in the Terahertz Regime. <i>IEEE Photonics Journal</i> , 2009 , 1, 99-118	1.8	225
18	Uncertainty in terahertz time-domain spectroscopy measurement. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008 , 25, 1059	1.7	108
17	Material thickness optimization for transmission-mode terahertz time-domain spectroscopy. <i>Optics Express</i> , 2008 , 16, 7382-96	3.3	64
16	Gas recognition with terahertz time-domain spectroscopy and reference-free spectrum: A preliminary study 2008 ,		1
15	Survey of terahertz metamaterial devices 2008 ,		1
14	Numerical removal of water vapour effects from terahertz time-domain spectroscopy measurements. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2008 , 464, 2435-2456	2.4	39
13	Quarter-wavelength multilayer interference filter for terahertz waves. <i>Optics Communications</i> , 2008 , 281, 2374-2379	2	51
12	Classification of osteosarcoma T-ray responses using adaptive and rational wavelets for feature extraction 2007 ,		1

11	Retrofittable antireflection coatings for T-rays. <i>Microwave and Optical Technology Letters</i> , 2007 , 49, 2267-2270		
10	Analysis of measurement uncertainty in THz-TDS 2007 ,		8
9	Removal of water-vapor-induced fluctuations in T-ray signals: a preliminary study 2007 ,		2
8	Gas recognition with terahertz time-domain spectroscopy and spectral catalog: a preliminary study 2007 ,		11
7	T-ray sensing and imaging. <i>Proceedings of the IEEE</i> , 2007 , 95, 1528-1558	14.3	121
6	DIRECT FABRY-PHOT EFFECT REMOVAL. <i>Fluctuation and Noise Letters</i> , 2006 , 06, L227-L239	1.2	15
5	T-ray relevant frequencies for osteosarcoma classification 2005 ,		1
4	Simple material parameter estimation via terahertz time-domain spectroscopy. <i>Electronics Letters</i> , 2005 , 41, 800	1.1	23
3	Ultrasonic diffraction tomography by pulse-plane wave: experimental result by frequency synthesis method. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2005 , 2005, 1822-5		
2	Material parameter extraction for terahertz time-domain spectroscopy using fixed-point iteration 2005 ,		23
1	Ultrasonic refractive index and sound velocity tomography		3