Yaochun Shen

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Detection and identification of explosives using terahertz pulsed spectroscopic imaging. Applied Physics Letters, 2005, 86, 241116.	3.3	582
2	Terahertz pulsed spectroscopy and imaging for pharmaceutical applications: A review. International Journal of Pharmaceutics, 2011, 417, 48-60.	5.2	268
3	Ultrabroadband terahertz radiation from low-temperature-grown GaAs photoconductive emitters. Applied Physics Letters, 2003, 83, 3117-3119.	3.3	180
4	Analysis of Coating Structures and Interfaces in Solid Oral Dosage Forms by Three Dimensional Terahertz Pulsed Imaging. Journal of Pharmaceutical Sciences, 2007, 96, 330-340.	3.3	179
5	Temperature-dependent low-frequency vibrational spectra of purine and adenine. Applied Physics Letters, 2003, 82, 2350-2352.	3.3	170
6	Preparation, Structure, and Properties of Three-Dimensional Ordered α-Fe2O3Nanoparticulate Film. Chemistry of Materials, 2000, 12, 790-794.	6.7	166
7	iParker—A New Smart Car-Parking System Based on Dynamic Resource Allocation and Pricing. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 2637-2647.	8.0	159
8	Advances in Photoacoustic Noninvasive Glucose Testing. Clinical Chemistry, 1999, 45, 1587-1595.	3.2	156
9	Development and Application of Terahertz Pulsed Imaging for Nondestructive Inspection of Pharmaceutical Tablet. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 407-415.	2.9	150
10	Analysis of sustained-release tablet film coats using terahertz pulsed imaging. Journal of Controlled Release, 2007, 119, 253-261.	9.9	145
11	Ceneration and detection of ultrabroadband terahertz radiation using photoconductive emitters and receivers. Applied Physics Letters, 2004, 85, 164-166.	3.3	144
12	Non-destructive quantification of pharmaceutical tablet coatings using terahertz pulsed imaging and optical coherence tomography. Optics and Lasers in Engineering, 2011, 49, 361-365.	3.8	120
13	Terahertz In-Line Sensor for Direct Coating Thickness Measurement of Individual Tablets During Film Coating in Real-Time. Journal of Pharmaceutical Sciences, 2011, 100, 1535-1544.	3.3	120
14	Smart Parking Guidance, Monitoring and Reservations: A Review. IEEE Intelligent Transportation Systems Magazine, 2017, 9, 6-16.	3.8	118
15	Terahertz Sensor for Non-Contact Thickness and Quality Measurement of Automobile Paints of Varying Complexity. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 432-439.	3.1	110
16	Elimination of scattering effects in spectral measurement of granulated materials using terahertz pulsed spectroscopy. Applied Physics Letters, 2008, 92, .	3.3	105
17	Terahertz time-domain spectroscopy of glucose and uric Acid. Journal of Biological Physics, 2003, 29, 117-121.	1.5	97
18	Recent Advances in the Development of Materials for Terahertz Metamaterial Sensing. Advanced Optical Materials, 2022, 10, .	7.3	92

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19	Theoretical Modeling of a Photoconductive Antenna in a Terahertz Pulsed System. IEEE Transactions on Antennas and Propagation, 2013, 61, 1538-1546.	5.1	89
20	Sensitization of nanocrystalline TiO2 electrode with quantum sized CdSe and ZnTCPc molecules. Chemical Physics Letters, 1997, 270, 145-151.	2.6	83
21	Applications of terahertz pulsed imaging to sustained-release tablet film coating quality assessment and dissolution performance. Journal of Controlled Release, 2008, 127, 79-87.	9.9	81
22	The use of Fourier-transform infrared spectroscopy for the quantitative determination of glucose concentration in whole blood. Physics in Medicine and Biology, 2003, 48, 2023-2032.	3.0	78
23	Far-infrared vibrational modes of polycrystalline saccharides. Vibrational Spectroscopy, 2004, 35, 139-143.	2.2	75
24	Delayed Release Tablet Dissolution Related to Coating Thickness by Terahertz Pulsed Image Mapping. Journal of Pharmaceutical Sciences, 2008, 97, 1543-1550.	3.3	70
25	Hardness and Density Distributions of Pharmaceutical Tablets Measured by Terahertz Pulsed Imaging. Journal of Pharmaceutical Sciences, 2013, 102, 2179-2186.	3.3	70
26	Measurement of the Intertablet Coating Uniformity of a Pharmaceutical Pan Coating Process With Combined Terahertz and Optical Coherence Tomography In-Line Sensing. Journal of Pharmaceutical Sciences, 2017, 106, 1075-1084.	3.3	69
27	Terahertz pulsed imaging as an analytical tool for sustained-release tablet film coating. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 117-123.	4.3	64
28	The design of second-order nonlinear optical chromophores exhibiting blue-shifted absorption and large nonlinearities: the role of the combined conjugation bridge. Chemical Communications, 2001, , 171-172.	4.1	58
29	Quantifying Pharmaceutical Film Coating with Optical Coherence Tomography and Terahertz Pulsed Imaging: An Evaluation. Journal of Pharmaceutical Sciences, 2015, 104, 3377-3385.	3.3	55
30	Chemical mapping using reflection terahertz pulsed imaging. Semiconductor Science and Technology, 2005, 20, S254-S257.	2.0	54
31	Effects of film coating thickness and drug layer uniformity on in vitro drug release from sustained-release coated pellets: A case study using terahertz pulsed imaging. International Journal of Pharmaceutics, 2009, 382, 151-159.	5.2	53
32	Fabrication, characterization and photovoltaic study of a TiO2 microporous electrode. Thin Solid Films, 1995, 257, 144-146.	1.8	48
33	Characterization of Crystalline Phaseâ€Transformations in Theophylline by Timeâ€Domain Terahertz Spectroscopy. Spectroscopy Letters, 2006, 39, 215-224.	1.0	46
34	Further investigation on water antennas. IET Microwaves, Antennas and Propagation, 2015, 9, 735-741.	1.4	46
35	Spinning disk for compressive imaging. Optics Letters, 2012, 37, 46.	3.3	44
36	Review of Terahertz Pulsed Imaging for Pharmaceutical Film Coating Analysis. Sensors, 2020, 20, 1441.	3.8	43

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37	Vibrational spectra of nucleosides studied using terahertz time-domain spectroscopy. Vibrational Spectroscopy, 2004, 35, 111-114.	2.2	42
38	Monitoring the Film Coating Unit Operation and Predicting Drug Dissolution Using Terahertz Pulsed Imaging. Journal of Pharmaceutical Sciences, 2009, 98, 4866-4876.	3.3	42
39	Non-Destructive Evaluation of Polymer Coating Structures on Pharmaceutical Pellets Using Full-Field Optical Coherence Tomography. Journal of Pharmaceutical Sciences, 2014, 103, 161-166.	3.3	42
40	Improvement in photoelectric conversion of a phthalocyanine-sensitized TiO2 electrode by doping with porphyrin. Chemical Physics, 1998, 231, 95-103.	1.9	41
41	Comparison of Terahertz Pulse Imaging and Near-Infrared Spectroscopy for Rapid, Non-Destructive Analysis of Tablet Coating Thickness and Uniformity. Journal of Pharmaceutical Innovation, 2007, 2, 29-36.	2.4	41
42	Impact of Processing Conditions on Inter-tablet Coating Thickness Variations Measured by Terahertz In-Line Sensing. Journal of Pharmaceutical Sciences, 2015, 104, 2513-2522.	3.3	41
43	Nondestructive testing of marine protective coatings using terahertz waves with stationary wavelet transform. Ocean Engineering, 2016, 111, 582-592.	4.3	41
44	Determination of Glucose Concentration in Whole Blood using Fourier-Transform Infrared Spectroscopy. Journal of Biological Physics, 2003, 29, 129-133.	1.5	38
45	Terahertz photoconductive antenna efficiency. , 2011, , .		38
46	Measurement of residual stress using laser-generated ultrasound. International Journal of Pressure Vessels and Piping, 2010, 87, 762-765.	2.6	36
47	Trapping and rotating of a metallic particle trimer with optical vortex. Applied Physics Letters, 2016, 109, .	3.3	35
48	Co-sensitization of microporous TiO2 electrodes with dye molecules and quantum-sized semiconductor particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 175, 135-140.	4.7	34
49	Measurement of the optical absorption coefficient of a liquid by use of a time-resolved photoacoustic technique. Applied Optics, 2000, 39, 4007.	2.1	34
50	Real-time detection of laser-induced transient gratings and surface acoustic wave pulses with a Michelson interferometer. Journal of Applied Physics, 1997, 82, 4758-4762.	2.5	32
51	Terahertz generation from coherent optical phonons in a biased GaAs photoconductive emitter. Physical Review B, 2004, 69, .	3.2	32
52	Fault Location Method in Power Network by Applying Accurate Information of Arrival Time Differences of Modal Traveling Waves. IEEE Transactions on Industrial Informatics, 2020, 16, 3124-3132.	11.3	32
53	Terahertz pulsed spectroscopic imaging using optimized binary masks. Applied Physics Letters, 2009, 95, 231112.	3.3	31
54	Investigating dissolution performance critical areas on coated tablets: A case study using terahertz pulsed imaging. Journal of Pharmaceutical Sciences, 2010, 99, 392-402.	3.3	31

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55	High resolution corneal and single pulse imaging with line field spectral domain optical coherence tomography. Optics Express, 2016, 24, 12395.	3.4	31
56	Terahertz plasmonic phase-jump manipulator for liquid sensing. Nanophotonics, 2020, 9, 3011-3021.	6.0	30
57	Photosensitization of TiO2 semiconductor with porphyrin. Journal of Photochemistry and Photobiology A: Chemistry, 1998, 114, 209-212.	3.9	29
58	Terahertz spectroscopy of explosive materials. , 2004, , .		29
59	HR-Si prism coupled tightly confined spoof surface plasmon polaritons mode for terahertz sensing. Optics Express, 2019, 27, 34067.	3.4	29
60	An efficient method-development strategy for quantitative chemical imaging using terahertz pulse spectroscopy. Journal of Pharmaceutical Innovation, 2006, 1, 63-75.	2.4	28
61	A Review of the Applications of OCT for Analysing Pharmaceutical Film Coatings. Applied Sciences (Switzerland), 2018, 8, 2700.	2.5	28
62	Vision-based system for simultaneous monitoring of shaft rotational speed and axial vibration using non-projection composite fringe pattern. Mechanical Systems and Signal Processing, 2019, 120, 765-776.	8.0	28
63	Neural network-based hybrid signal processing approach for resolving thin marine protective coating by terahertz pulsed imaging. Ocean Engineering, 2019, 173, 58-67.	4.3	28
64	Nondestructive analysis of automotive paints with spectral domain optical coherence tomography. Applied Optics, 2016, 55, 3695.	2.1	25
65	Pharmaceutical Film Coating Catalog for Spectral Domain Optical Coherence Tomography. Journal of Pharmaceutical Sciences, 2017, 106, 3171-3176.	3.3	25
66	Second-order optical nonlinearity study of CdS nanoparticles via hyper-Rayleigh scattering. Journal of Physics and Chemistry of Solids, 2001, 62, 903-906.	4.0	24
67	New nonlinear optical chromophores exhibiting good transparency and large nonlinearity: synthesis and characterization of chromophores with stilbene and ring-locked triene as a combined conjugation bridge. Journal of Materials Chemistry, 2002, 12, 863-867.	6.7	24
68	Aggregation and the photoelectric behavior of tetrasulfonated phthalocyanine adsorbed on a TiO2 microporous electrode. Journal of Photochemistry and Photobiology A: Chemistry, 1996, 99, 71-74.	3.9	22
69	Deformation velocity imaging using optical coherence tomography and its applications to the cornea. Biomedical Optics Express, 2017, 8, 5579.	2.9	22
70	Non-destructive analysis of flake properties in automotive paints with full-field optical coherence tomography and 3D segmentation. Optics Express, 2017, 25, 18614.	3.4	22
71	3D chemical mapping using terahertz pulsed imaging. , 2005, , .		21
72	Real-time monitoring of structural vibration using spectral-domain optical coherence tomography. Optics and Lasers in Engineering, 2011, 49, 127-131.	3.8	21

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73	Investigating Intra-Tablet Coating Uniformity With Spectral-Domain Optical Coherence Tomography. Journal of Pharmaceutical Sciences, 2017, 106, 546-553.	3.3	20
74	Optical spanner for nanoparticle rotation with focused optical vortex generated through a Pancharatnam–Berry phase metalens. Applied Optics, 2021, 60, 4820.	1.8	19
75	Self-assembled multilayers of alternating gold nanoparticles and dithiols: approaching to superlattice. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2000, 175, 217-223.	4.7	16
76	A Novel Sub-THz Photomixer With Nano-Trapezoidal Electrodes. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 501-508.	3.1	16
77	Quasi-perfect vortices generated by Pancharatnam-Berry phase metasurfaces for optical spanners and OAM communication. Scientific Reports, 2022, 12, 1053.	3.3	16
78	Current-voltage characteristics of complex films. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 237, 165-168.	2.1	15
79	Graphene/Insulator Stack Based Ultrasensitive Terahertz Sensor With Surface Plasmon Resonance. IEEE Photonics Journal, 2017, 9, 1-11.	2.0	15
80	Scan-Less Line Field Optical Coherence Tomography, with Automatic Image Segmentation, as a Measurement Tool for Automotive Coatings. Applied Sciences (Switzerland), 2017, 7, 351.	2.5	15
81	Trapping waves with tunable prism-coupling terahertz metasurfaces absorber. Optics Express, 2019, 27, 25647.	3.4	15
82	Efficient and Accurate Measurement of Absorption Cross Section of a Lossy Object in Reverberation Chamber Using Two One-Antenna Methods. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 686-693.	2.2	14
83	Technique for minimising the effects of ground plane on planar ultra-wideband monopole antennas. IET Microwaves, Antennas and Propagation, 2012, 6, 510.	1.4	13
84	Nonlinear Optical Response of Colloidal Gold Nanoparticles Studied by Hyper-Rayleigh Scattering Technique. Chemistry Letters, 2000, 29, 1140-1141.	1.3	12
85	Arylaldehydes-pentafluorophenyl Hydrazones as Second-order Nonlinear Optical Chromophores: A Novel Approach for Remarkably Defeating the Nonlinearity-transparency Trade-off. Chemistry Letters, 2002, 31, 232-233.	1.3	11
86	Observation of far-infrared emission from excited cytosine molecules. Applied Physics Letters, 2005, 87, 011105.	3.3	10
87	Line-Field Optical Coherence Tomography as a tool for In vitro characterization of corneal biomechanics under physiological pressures. Scientific Reports, 2019, 9, 6321.	3.3	10
88	Cosensitization and photoelectric conversion of a nanostructured TiO 2 electrode with tetrasulfonated porphyrins. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 659.	1.7	9
89	FDTD-based quantitative analysis of terahertz wave detection for multilayered structures. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2285.	1.5	9
90	Characterization of Electrical–Thermal–Mechanical Deformation of Bonding Wires Under Silicone Gel Using LF-OCT. IEEE Transactions on Power Electronics, 2021, 36, 11045-11054.	7.9	9

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91	Vertically-oriented nanoparticle dimer based on focused plasmonic trapping. Optics Express, 2016, 24, 16052.	3.4	8
92	Simultaneous optical coherence tomography and Scheimpflug imaging using the same incident light. Optics Express, 2020, 28, 39660.	3.4	8
93	Fabrication, characterization and photovoltaic study of a GaTSPc–CdS/TiO2 particulate film. Journal of Materials Chemistry, 1997, 7, 737-740.	6.7	7
94	Synthesis and Nonlinear Optical Properties ofp-(Dimethylamino)benzylidene Dyes Containing Different Acceptors. Chemistry Letters, 2000, 29, 1426-1427.	1.3	7
95	Terahertz pulsed imaging of surface variations on pharmaceutical tablets. , 2010, , .		7
96	Optical Trapping and Separation of Metal Nanoparticles by Cylindrical Metalenses With Phase Gradients. IEEE Photonics Journal, 2020, 12, 1-10.	2.0	7
97	Sub-surface imaging of soiled cotton fabric using full-field optical coherence tomography. Optics Express, 2019, 27, 13951.	3.4	7
98	FDTD Study of a Novel Terahertz Emitter with Electrical Field Enhancement Using Surface Plasmon Resonance. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 153-156.	0.4	6
99	Angular resonance absorption spectra of Langmuir-Blodgett films studied by the photoacoustic technique. Thin Solid Films, 1994, 248, 36-40.	1.8	5
100	Blood glucose measurements by photoacoustics. , 1999, , .		5
101	Time-resolved photoacoustics for glucose concentration measurement: theory and experiment. , 1999, , \cdot		5
102	Fast Blur Detection and Parametric Deconvolution of Retinal Fundus Images. Lecture Notes in Computer Science, 2017, , 194-201.	1.3	5
103	Pharmaceutical tablet hardness measurements with thz pulsed imaging. , 2009, , .		4
104	Terahertz applications in the pharmaceutical industry. , 2013, , 579-614.		4
105	Broadband U-shaped water antenna for DVB-H applications. , 2014, , .		4
106	Steps towards numerical verification of the terahertz inâ€line measurement of tablet mixing by means of discrete element modelling. IET Microwaves, Antennas and Propagation, 2018, 12, 1775-1779.	1.4	4
107	Differentiating Generic versus Branded Pharmaceutical Tablets Using Ultra-High-Resolution Optical Coherence Tomography. Coatings, 2019, 9, 326.	2.6	4
108	Optical manipulation of Rayleigh particles by metalenses—a numerical study. Applied Optics, 2019, 58, 5794.	1.8	4

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109	Optically transparent metasurfaces based on ITO: Numerical design and measurements in THz domain. Applied Physics Express, 2020, 13, 102002.	2.4	4
110	Nondestructive in situ monitoring of pea seeds germination using optical coherence tomography. Plant Direct, 2022, 6, .	1.9	4
111	Light-induced Difference Terahertz Spectroscopy. Journal of Biological Physics, 2003, 29, 135-139.	1.5	3
112	Real-time in situ measurement of particle size in flowing powders by terahertz time-domain spectroscopy. , 2009, , .		3
113	Near-infrared spectroscopy for non-destructive coating analysis calibrated by Terahertz Pulsed Imaging. , 2010, , .		3
114	Subsampled terahertz data reconstruction based on spatio-temporal dictionary learning. , 2015, 43, 1-7.		3
115	Applications of optical coherence tomography in the non-contact assessment of automotive paints. , 2017, , .		3
116	Interaction between tetrasulfophthalocyanines and colloidal titanium dioxide and photoelectric behavior on sensitized microporous TiO2 electrodes. Science Bulletin, 1997, 42, 1447-1451.	1.7	2
117	Excitation of higher harmonics in transient laser gratings by an ablative mechanism. Applied Physics Letters, 1998, 73, 1640-1642.	3.3	2
118	Synthesis and second-order optical nonlinearity of carbazolyl-substituted furan chromophores with high thermal stability and good transparency. Journal of Chemical Research, 2001, 2001, 418-420.	1.3	2
119	In-line monitoring of coating thickness of pharmaceutical tablets during production scale film coating by Terahertz imaging. , 2010, , .		2
120	A further study of THz photoconductive antennas. , 2012, , .		2
121	Studying the pharmaceutical film coating process with terahertz sensing, optical coherence tomography and numerical modelling. , 2016, , .		2
122	Reply to "Comments on â€~Theoretical Modeling of a Photoconductive Antenna in a Terahertz Pulsed System'― IEEE Transactions on Antennas and Propagation, 2016, 64, 2585-2585.	5.1	2
123	Quasi-tomography by free space line field spectral domain optical coherence reflectometry. Measurement Science and Technology, 2020, 31, 065203.	2.6	2
124	Virtual probe stimulated tip-enhanced Raman spectroscopy: The extreme field enhancement in virtual-real probe dimer. Journal of Applied Physics, 2021, 129, 133104.	2.5	2
125	Remote radar-camera vital sign monitoring system using a graph-based extraction algorithm. , 2021, , .		2
126	Energy Harvesting Using THz Electronics. Engineering Materials, 2014, , 241-265.	0.6	2

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127	Photoacoustic investigation of resonance absorption on corrugated surfaces. Applied Physics A: Materials Science and Processing, 1996, 62, 263-268.	2.3	1
128	Intensity distribution of light emitted from a fiber tip mapped by short surface acoustic wave pulses. Ultramicroscopy, 1998, 71, 225-229.	1.9	1
129	Neural Network-based non-destructive quantification of thin coating by terahertz pulsed imaging in the frequency domain. , 2010, , .		1
130	Studying pharmaceutical tablet coating process with real-time terahertz in-line sensing. , 2013, , .		1
131	Spatio-spectral data reconstruction in terahertz imaging. , 2014, , .		1
132	Validating terahertz in-line measurement of tablet mixing with discrete element modelling. , 2017, , .		1
133	Terahertz waveform selection of a pharmaceutical film coating process using a recurrent network. , 2021, , .		1
134	Optimizing Terahertz Waveform Selection of a Pharmaceutical Film Coating Process Using Recurrent Network. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 392-400.	3.1	1
135	Nonlinear surface acoustic waves launched by excitation of higher harmonics in transient laser gratings. , 1999, , .		0
136	<title>Hyper-Rayleigh scattering of CdS nanoparticles with different surfaces in solution</title> . , 2000, 3937, 123.		0
137	Nonlinear optical properties of rhodamine aggregates in solution at different pH studied by hyper-Rayleigh scattering technique. , 2000, 3939, 260.		0
138	Role of combined bridge on the second-order nonlinear optical properties of organic stilbazolium salts. , 2001, 4580, 601.		0
139	Multiphoton absorption and flourescence of an organic compound in THF pumped with nanosecond laser. , 2001, 4602, 284.		0
140	Optical Coherence Tomography-based Structural Vibration Sensor System. , 2011, , .		0
141	Fabric Defect Detection Using Wavelet-Enhanced Single-Point Photoelectric Sensing System. Applied Mechanics and Materials, 0, 162, 497-504.	0.2	0
142	The Application of Full-Field Optical Coherence Tomography on Evaluating Film Coating of Pharmaceutical Pellets. , 2015, , .		0
143	Investigation of pharmaceutical film coating process with terahertz sensing, optical coherence tomography and numerical modelling. , 2015, , .		0
144	Spinning disk as a spatial light modulator for rapid infrared imaging. IET Microwaves, Antennas and Propagation, 2017, 11, 317-323.	1.4	0

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145	Fabrication of highly reliable joint based on Cu@Ni@Sn double-layer powder for high temperature application. Additional Conferences (Device Packaging HiTEC HiTEN & CICMT), 2019, 2019, 000075-000084.	0.2	0