Zachary D Taylor

List of Publications by Year
in descending order

35 papers	1,060 citations	687363 13 h-index	501196 28 g-index
35 all docs	35 docs citations	35 times ranked	919 citing authors

#	Article	IF	Citations
1	Design and Characterization of Phase Holograms for Standoff Localization at Millimeter and Submillimeter Waves. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 907-918.	4.6	4
2	Terahertz (THz) biophotonics technology: Instrumentation, techniques, and biomedical applications. Chemical Physics Reviews, 2022, 3, .	5.7	42
3	Millimeter- and Submillimeter-Wave Imaging Through Dispersive Hologram and Deep Neural Networks. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3281-3290.	4.6	4
4	Calibration Alignment Sensitivity in Corneal Terahertz Imaging. Sensors, 2022, 22, 3237.	3.8	4
5	Vector spherical harmonic analysis and experimental validation of spherical shells illuminated with broadband, millimeter wave Gaussian beams: applications to corneal sensing. Biomedical Optics Express, 2022, 13, 3699.	2.9	5
6	Extraction of Thickness and Water-Content Gradients in Hydrogel-Based Water-Backed Corneal Phantoms Via Submillimeter-Wave Reflectometry. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 647-659.	3.1	11
7	Quasioptical System for Corneal Sensing at 220â€“330ÂGHz: Design, Evaluation, and Ex Vivo Cornea Parameter Extraction. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 135-149.	3.1	14
8	Submillimeter-Wave Permittivity Measurements of Bound Water in Collagen Hydrogels via Frequency Domain Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 538-547.	3.1	9
9	Axicon-hyperbolic lens for reflectivity measurements of curved surfaces. , 2020, , .		4
10	Inâ€depth analysis of antibacterial mechanisms of laser generated shockwave treatment. Lasers in Surgery and Medicine, 2019, 51, 339-344.	2.1	4
11	Methods for registering and calibrating in vivo terahertz images of cutaneous burn wounds. Biomedical Optics Express, 2019, 10, 322.	2.9	22
12	Optical System Design for Noncontact, Normal Incidence, THz Imaging of in vivo Human Cornea. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 1-12.	3.1	28
13	THz Imaging System for in vivo Human Cornea. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 27-37.	3.1	58
14	Resolution and material assessment capability of a vibroacoustographic imaging system. AIP Advances, 2018, 8, 085315.	1.3	0
15	Point-of-Care Cerebrospinal Fluid Detection. Otolaryngology - Head and Neck Surgery, 2018, 159, 824-829.	1.9	13
16	Polypeptide-Based Gold Nanoshells for Photothermal Therapy. SLAS Technology, 2017, 22, 18-25.	1.9	13
17	Terahertz Imaging of Cutaneous Edema: Correlation With Magnetic Resonance Imaging in Burn Wounds. IEEE Transactions on Biomedical Engineering, 2017, 64, 2682-2694.	4.2	22
18	Laser-generated shockwaves enhance antibacterial activity against biofilmsin vitro. Lasers in Surgery and Medicine, 2017, 49, 539-547.	2.1	8

#	Article	IF	Citations
19	Dynamic Optical Contrast Imaging: A Technique to Differentiate Parathyroid Tissue from Surrounding Tissues. Otolaryngology - Head and Neck Surgery, 2017, 156, 480-483.	1.9	26
20	Dynamic optical contrast imaging as a novel modality for rapidly distinguishing head and neck squamous cell carcinoma from surrounding normal tissue. Cancer, 2017, 123, 879-886.	4.1	15
21	Engineering A11 Minibody-Conjugated, Polypeptide-Based Gold Nanoshells for Prostate Stem Cell Antigen (PSCA)â€“Targeted Photothermal Therapy. SLAS Technology, 2017, 22, 26-35.	1.9	11
22	Non-invasive terahertz imaging of tissue water content for flap viability assessment. Biomedical Optics Express, 2017, 8, 460.	2.9	38
23	Preliminary results of non-contact THz imaging of cornea. , 2015, 9362, .		8
24	Imaging autofluorescence temporal signatures of the human ocular fundus in vivo. Journal of Biomedical Optics, 2015, 20, 1.	2.6	1
25	THz and mm-Wave Sensing of Corneal Tissue Water Content: Electromagnetic Modeling and Analysis. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 170-183.	3.1	75
26	THz and mm-Wave Sensing of Corneal Tissue Water Content: In Vivo Sensing and Imaging Results. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 184-196.	3.1	98
27	Exploration of wound physiology using THz imaging. , 2014, , .		0
28	THz medical imaging: Current status and future outlooks. , 2014, , .		1
29	Effects of window index and thickness on hydration sensitivity and probing depth of THz imaging systems. , 2014, , .		0
30	THz hydration sensitivity: Dielectric substrate window considerations. , 2014, , .		0
31	Ultrasound-stimulated vibro-acoustography for high-resolution differentiation based on viscoelastic properties of tissue mimicking phantoms. Studies in Health Technology and Informatics, 2014, 196, 262-4.	0.3	4
32	In vivo terahertz imaging of rat skin burns. Journal of Biomedical Optics, 2012, 17, 040503.	2.6	72
33	Stratified Media Model for Terahertz Reflectometry of the Skin. IEEE Sensors Journal, 2011, 11, 1253-1262.	4.7	66
34	Terahertz sensing in corneal tissues. Journal of Biomedical Optics, 2011, 16, 057003.	2.6	98
35	THz Medical Imaging: in vivo Hydration Sensing. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 201-219.	3.1	282