# Vincent P Wallace

## List of Publications by Citations

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117 7,582 3.9 5.45 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
98	The 2017 terahertz science and technology roadmap. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 04300	13	724
97	Biomedical applications of terahertz technology. <i>Journal Physics D: Applied Physics</i> , <b>2006</b> , 39, R301-R310	)3	509
96	Terahertz pulse imaging in reflection geometry of human skin cancer and skin tissue. <i>Physics in Medicine and Biology</i> , <b>2002</b> , 47, 3853-63	3.8	460
95	Terahertz pulsed spectroscopy of freshly excised human breast cancer. Optics Express, 2009, 17, 12444-	<b>53</b> 43	414
94	In vivo study of human skin using pulsed terahertz radiation. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1595-607	3.8	344
93	Terahertz pulsed imaging of human breast tumors. <i>Radiology</i> , <b>2006</b> , 239, 533-40	20.5	283
92	Terahertz pulse imaging of ex vivo basal cell carcinoma. <i>Journal of Investigative Dermatology</i> , <b>2003</b> , 120, 72-8	4.3	282
91	Terahertz pulsed spectroscopy of human Basal cell carcinoma. <i>Applied Spectroscopy</i> , <b>2006</b> , 60, 1127-33	3.1	251
90	Terahertz pulsed imaging of basal cell carcinoma ex vivo and in vivo. <i>British Journal of Dermatology</i> , <b>2004</b> , 151, 424-32	4	225
89	Terahertz pulsed imaging of freshly excised human colonic tissues. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, 4333-53	3.8	200
88	Terahertz pulsed imaging of skin cancer in the time and frequency domain. <i>Journal of Biological Physics</i> , <b>2003</b> , 29, 257-9	1.6	199
87	Optimizing multi-dimensional terahertz imaging analysis for colon cancer diagnosis. <i>Expert Systems With Applications</i> , <b>2013</b> , 40, 2043-2050	7.8	143
86	Simulation of terahertz pulse propagation in biological systems. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2190-	231.942	141
85	Influence of optical properties on two-photon fluorescence imaging in turbid samples. <i>Applied Optics</i> , <b>2000</b> , 39, 1194-201	1.7	140
84	Terahertz pulsed imaging and spectroscopy for biomedical and pharmaceutical applications. <i>Faraday Discussions</i> , <b>2004</b> , 126, 255-63; discussion 303-11	3.6	120
83	Three-dimensional terahertz pulse imaging of dental tissue. <i>Journal of Biomedical Optics</i> , <b>2003</b> , 8, 303-7	3.5	117
82	Terahertz biophotonics as a tool for studies of dielectric and spectral properties of biological tissues and liquids. <i>Progress in Quantum Electronics</i> , <b>2018</b> , 62, 1-77	9.1	113

# (2015-2000)

81	Spectrophotometric assessment of pigmented skin lesions: methods and feature selection for evaluation of diagnostic performance. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 735-51	3.8	85	
80	Simulating the response of terahertz radiation to basal cell carcinoma using ex vivo spectroscopy measurements. <i>Journal of Biomedical Optics</i> , <b>2005</b> , 10, 064021	3.5	83	
79	Improved sample characterization in terahertz reflection imaging and spectroscopy. <i>Optics Express</i> , <b>2009</b> , 17, 3848-54	3.3	72	
78	Three-dimensional imaging of optically opaque materials using nonionizing terahertz radiation.  Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 3120-33	1.8	70	
77	Classification of terahertz-pulsed imaging data from excised breast tissue. <i>Journal of Biomedical Optics</i> , <b>2012</b> , 17, 016005	3.5	68	
76	Accuracy and resolution of THz reflection spectroscopy for medical imaging. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 4825-38	3.8	64	
75	Terahertz pulse imaging: a pilot study of potential applications in dentistry. <i>Caries Research</i> , <b>2003</b> , 37, 352-9	4.2	63	
74	Two-photon laser scanning microscopy of epithelial cell-modulated collagen density in engineered human lung tissue. <i>Tissue Engineering</i> , <b>2001</b> , 7, 191-202		58	
73	Photodynamic therapy of human glioma spheroids using 5-aminolevulinic acid. <i>Photochemistry and Photobiology</i> , <b>2000</b> , 72, 128-34	3.6	57	
7 <sup>2</sup>	The interaction between electromagnetic fields at megahertz, gigahertz and terahertz frequencies with cells, tissues and organisms: risks and potential. <i>Journal of the Royal Society Interface</i> , <b>2017</b> , 14,	4.1	55	
71	Ultrathin tunable terahertz absorber based on MEMS-driven metamaterial. <i>Microsystems and Nanoengineering</i> , <b>2017</b> , 3, 17033	7.7	51	
70	A comparison of terahertz pulsed imaging with transmission microradiography for depth measurement of enamel demineralisation in vitro. <i>Caries Research</i> , <b>2007</b> , 41, 49-55	4.2	51	
69	Terahertz pulsed imaging with 1.06 h laser excitation. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 4113-4115	3.4	51	
68	Use of a handheld terahertz pulsed imaging device to differentiate benign and malignant breast tissue. <i>Biomedical Optics Express</i> , <b>2017</b> , 8, 2932-2945	3.5	48	
67	Terahertz pulsed imaginga potential medical imaging modality?. <i>Photodiagnosis and Photodynamic Therapy</i> , <b>2009</b> , 6, 128-34	3.5	47	
66	Non-Contact, Non-Destructive Testing in Various Industrial Sectors with Terahertz Technology. <i>Sensors</i> , <b>2020</b> , 20,	3.8	46	
65	Terahertz time-domain spectroscopy of human blood. <i>IEEE Journal of Biomedical and Health Informatics</i> , <b>2013</b> , 17, 774-8	7.2	43	
64	A dielectric model of human breast tissue in terahertz regime. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2015</b> , 62, 699-707	5	42	

63	Terahertz pulsed imaging in vivo: measurements and processing methods. <i>Journal of Biomedical Optics</i> , <b>2011</b> , 16, 106010	3.5	37
62	Classification of reflectance spectra from pigmented skin lesions, a comparison of multivariate discriminant analysis and artificial neural networks. <i>Physics in Medicine and Biology</i> , <b>2000</b> , 45, 2859-71	3.8	37
61	Terahertz imaging and spectroscopy of human skin in vivo <b>2001</b> ,		37
60	In vivo terahertz reflection imaging of human scars during and after the healing process. <i>Journal of Biophotonics</i> , <b>2017</b> , 10, 1143-1151	3.1	35
59	Use of finite difference time domain simulations and Debye theory for modelling the terahertz reflection response of normal and tumour breast tissue. <i>PLoS ONE</i> , <b>2014</b> , 9, e99291	3.7	35
58	Gene inactivation by multiphoton-targeted photochemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2000</b> , 97, 9504-7	11.5	29
57	Terahertz pulsed imaging of knee cartilage. <i>Biomedical Optics Express</i> , <b>2010</b> , 1, 967-974	3.5	22
56	Two-photon excitation laser scanning microscopy of human, porcine, and rabbit nasal septal cartilage. <i>Tissue Engineering</i> , <b>2001</b> , 7, 599-606		21
55	Concentration analysis of breast tissue phantoms with terahertz spectroscopy. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 1334-1349	3.5	19
54	Terahertz Time-Domain Spectroscopy of Human Blood. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2013</b> , 3, 363-367	3.4	19
53	The Potential of the Double Debye Parameters to Discriminate Between Basal Cell Carcinoma and Normal Skin. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2015</b> , 5, 990-998	3.4	19
52	Deciphering Cell-to-Cell Communication in Acquisition of Cancer Traits: Extracellular Membrane Vesicles Are Regulators of Tissue Biomechanics. <i>OMICS A Journal of Integrative Biology</i> , <b>2016</b> , 20, 462-9	3.8	15
51	An intra-operative THz probe for use during the surgical removal of breast tumors 2008,		14
50	Chondrocyte repopulation of allograft cartilage: a preliminary investigation and strategy for developing cartilage matrices for reconstruction. <i>Otolaryngology - Head and Neck Surgery</i> , <b>2002</b> , 127, 265-70	5.5	13
49	An assessment of multimodal imaging of subsurface text in mummy cartonnage using surrogate papyrus phantoms. <i>Heritage Science</i> , <b>2018</b> , 6,	2.5	12
48	Terahertz pulse imaging in reflection geometry of skin tissue using time-domain analysis techniques <b>2002</b> , 4625, 160		12
47	Correlation between saturated fatty acid chain-length and intermolecular forces determined with terahertz spectroscopy. <i>Chemical Communications</i> , <b>2019</b> , 55, 3670-3673	5.8	10
46	Modulation of the Hydration Water Around Monoclonal Antibodies on Addition of Excipients  Detected by Terahertz Time-Domain Spectroscopy. <i>Journal of Pharmaceutical Sciences</i> . <b>2015</b> , 104, 4025	-4033	10

## (2008-2010)

45	Enhanced skin permeation and hydration by magnetic field array: preliminary in-vitro and in-vivo assessment. <i>Journal of Pharmacy and Pharmacology</i> , <b>2010</b> , 62, 696-701	4.8	8
44	Use of Terahertz Waves To Monitor Moisture Content in High-Pressure Natural Gas Pipelines. <i>Energy &amp; Energy &amp; E</i>	4.1	7
43	Two-Photon Microscopy in Highly Scattering Tissue <b>2001</b> , 180-199		7
42	Convergence of terahertz radiation and nanotechnology. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 10	94 <del>2.</del> 109	955
41	High correlation of double Debye model parameters in skin cancer detection. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2014</b> , 2014, 718-21	0.9	5
40	Using Terahertz Pulsed Imaging to Measure Enamel Demineralisation in Teeth 2006,		5
39	Extraction of thickness and water content gradients in hydrogel-based, water-backed corneal phantoms via submillimeter wave reflectometry. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2021</b> , 1-1	3.4	5
38	. IEEE Transactions on Terahertz Science and Technology, <b>2021</b> , 11, 538-547	3.4	5
37	Terahertz waveguide prism. Optics Express, 2013, 21, 19292-301	3.3	4
36	Application of Finite Difference Time Domain methods to Terahertz Spectroscopy Measurements of Breast Cancer. <i>IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium</i> , <b>2007</b> ,		4
35	Terahertz-pulsed imaging of cancers 2003,		4
34	Millimeter Wave Radiation Activates Leech Nociceptors via TRPV1-Like Receptor Sensitization. <i>Biophysical Journal</i> , <b>2019</b> , 116, 2331-2345	2.9	3
33	Prediction of the terahertz absorption features with a straightforward molecular dynamics method. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2020</b> , 236, 118330	4.4	3
32	The future of medical imaging <b>2010</b> ,		3
31	Using terahertz pulsed imaging (TPI) to identify colonic pathology. 2008,		3
30	Photodynamic Therapy of Human Glioma Spheroids Using 5-Aminolevulinic Acid ¶. <i>Photochemistry and Photobiology</i> , <b>2007</b> , 72, 128-134	3.6	3
29	The application of effective medium theory in tissue phantoms 2017,		2
28	Terahertz imaging detects cancerous tissue. SPIE Newsroom, 2008,		2

27	An oil and water emulsion phantom for biomedical terahertz spectroscopy 2007,		2
26	Terahertz spectroscopy of breast tumors <b>2007</b> ,		2
25	Medical applications of broadband terahertz pulsed radiation 2005,		2
24	Terahertz pulsed imaging and spectroscopy of breast tumors <b>2006</b> , 6386, 178		2
23	Potential uses of terahertz pulse imaging in dentistry: caries and erosion detection 2002,		2
22	Two-photon excited imaging of photosensitizers in tissues <b>1999</b> ,		2
21	Alterations in neuronal action potential shape and spiking rate caused by pulsed 60 GHz millimeter wave radiation <b>2016</b> ,		2
20	Breast Cancer classification using extracted parameters from a terahertz dielectric model of human breast tissue. Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference, 2015,	0.9	1
19	Breast cancer tissue diagnosis at terahertz frequencies <b>2012</b> ,		1
18	Nondestructive determination of defects in firmly joint plastic compounds with portable THz system <b>2013</b> ,		1
17	Improved sample characterization in terahertz reflection imaging and spectroscopy: erratum. <i>Optics Express</i> , <b>2011</b> , 19, 24782	3.3	1
16	Application of terahertz imaging to osteoarthritis 2008,		1
15	Terahertz pulsed imaging and spectroscopy of breast tumours 2006,		1
14	Terahertz Spectroscopy of Biologically Relevant Liquids at Low Temperatures 2006,		1
13	Development of a hand-held TPI system for medical applications 2005,		1
12	Monitoring pigmented skin lesions <b>2002</b> ,		1
11	Three-dimensional terahertz pulse imaging of dental tissue 2002,		1
10	Two-photon excitation laser scanning microscopy of rabbit nasal septal cartilage following Nd:YAG-laser-mediated stress relaxation <b>2000</b> ,		1

#### LIST OF PUBLICATIONS

9	Layered Monte Carlo model for the description of diffuse reflectance spectra from pigmented skin lesions <b>1999</b> ,		1
8	Terahertz Radiation Stimulates Neurite Growth in PC12 Derived Neurons During Development Phase: Preliminary Study <b>2020</b> ,		1
7	Preliminary study of different scar types with terahertz imaging <b>2016</b> ,		1
6	Terahertz characterization of an asphaltene sample and its polarity-based sub-fractions 2016,		1
5	Tissue classification using terahertz pulsed imaging <b>2004</b> , 5318, 23		О
4	Reproducibility of Terahertz Peaks in a Frozen Aqueous Solution of 5-Methylcytidine. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2021</b> , 42, 588-606	2.2	O
3	Two-photon excitation laser scanning microscopy of porcine nasal septal cartilage following Nd:YAG laser-mediated stress relaxation <b>2000</b> , 3907, 380		
2	Macrophage Targeted Photodynamic Regulation of Wound Healing. <i>Microscopy and Microanalysis</i> , <b>1998</b> , 4, 1090-1091	0.5	

Spatial point spread function with depth in two-photon microscopy **1999**, 3605, 112