

# Hamid Dehghani

## List of Publications by Citations

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199  
papers

6,909  
citations

45  
h-index

79  
g-index

284  
ext. papers

8,195  
ext. citations

4  
avg, IF

5.6  
L-index

#	Paper	IF	Citations
199	Near infrared optical tomography using NIRFAST: Algorithm for numerical model and image reconstruction. <i>Communications in Numerical Methods in Engineering</i> , <b>2008</b> , 25, 711-732		396
198	Mapping distributed brain function and networks with diffuse optical tomography. <i>Nature Photonics</i> , <b>2014</b> , 8, 448-454	33.9	308
197	Retinotopic mapping of adult human visual cortex with high-density diffuse optical tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 12169-74	11.5	263
196	Interpreting hemoglobin and water concentration, oxygen saturation, and scattering measured in vivo by near-infrared breast tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 12349-54	11.5	215
195	Multiwavelength three-dimensional near-infrared tomography of the breast: initial simulation, phantom, and clinical results. <i>Applied Optics</i> , <b>2003</b> , 42, 135-45	1.7	193
194	Imaging breast adipose and fibroglandular tissue molecular signatures by using hybrid MRI-guided near-infrared spectral tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 8828-33	11.5	186
193	Image-guided diffuse optical fluorescence tomography implemented with Laplacian-type regularization. <i>Optics Express</i> , <b>2007</b> , 15, 4066-82	3.3	165
192	Characterization of hemoglobin, water, and NIR scattering in breast tissue: analysis of intersubject variability and menstrual cycle changes. <i>Journal of Biomedical Optics</i> , <b>2004</b> , 9, 541-52	3.5	165
191	Structural information within regularization matrices improves near infrared diffuse optical tomography. <i>Optics Express</i> , <b>2007</b> , 15, 8043-58	3.3	144
190	Automated region detection based on the contrast-to-noise ratio in near-infrared tomography. <i>Applied Optics</i> , <b>2004</b> , 43, 1053-62	1.7	144
189	A quantitative spatial comparison of high-density diffuse optical tomography and fMRI cortical mapping. <i>NeuroImage</i> , <b>2012</b> , 61, 1120-8	7.9	140
188	Spectrally resolved bioluminescence optical tomography. <i>Optics Letters</i> , <b>2006</b> , 31, 365-7	3	139
187	Electrical impedance tomography of human brain function using reconstruction algorithms based on the finite element method. <i>NeuroImage</i> , <b>2003</b> , 20, 752-64	7.9	126
186	Three-dimensional optical tomography: resolution in small-object imaging. <i>Applied Optics</i> , <b>2003</b> , 42, 3117-28	7.7	125
185	Numerical modelling and image reconstruction in diffuse optical tomography. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2009</b> , 367, 3073-93	3	118
184	Time resolved optical tomography of the human forearm. <i>Physics in Medicine and Biology</i> , <b>2001</b> , 46, 1117-30	3.30	117
183	Magnetic resonance-coupled fluorescence tomography scanner for molecular imaging of tissue. <i>Review of Scientific Instruments</i> , <b>2008</b> , 79, 064302	1.7	116

182	Image-guided optical spectroscopy provides molecular-specific information in vivo: MRI-guided spectroscopy of breast cancer hemoglobin, water, and scatterer size. <i>Optics Letters</i> , <b>2007</b> , 32, 933-5	3	112
181	Fast segmentation and high-quality three-dimensional volume mesh creation from medical images for diffuse optical tomography. <i>Journal of Biomedical Optics</i> , <b>2013</b> , 18, 86007	3.5	111
180	Combining near-infrared tomography and magnetic resonance imaging to study in vivo breast tissue: implementation of a Laplacian-type regularization to incorporate magnetic resonance structure. <i>Journal of Biomedical Optics</i> , <b>2005</b> , 10, 051504	3.5	111
179	Weight-matrix structured regularization provides optimal generalized least-squares estimate in diffuse optical tomography. <i>Medical Physics</i> , <b>2007</b> , 34, 2085-98	4.4	110
178	The finite element model for the propagation of light in scattering media: a direct method for domains with nonscattering regions. <i>Medical Physics</i> , <b>2000</b> , 27, 252-64	4.4	110
177	Near-infrared (NIR) tomography breast image reconstruction with a priori structural information from MRI: algorithm development for reconstructing heterogeneities. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2003</b> , 9, 199-209	3.8	106
176	Diffuse optical imaging. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2009</b> , 367, 3055-72	3	103
175	Three-dimensional time-resolved optical tomography of a conical breast phantom. <i>Applied Optics</i> , <b>2001</b> , 40, 3278-87	1.7	102
174	Near-infrared characterization of breast tumors in vivo using spectrally-constrained reconstruction. <i>Technology in Cancer Research and Treatment</i> , <b>2005</b> , 4, 513-26	2.7	96
173	Depth sensitivity and image reconstruction analysis of dense imaging arrays for mapping brain function with diffuse optical tomography. <i>Applied Optics</i> , <b>2009</b> , 48, D137-43	0.2	95
172	Near-Infrared Spectroscopy in the Monitoring of Adult Traumatic Brain Injury: A Review. <i>Journal of Neurotrauma</i> , <b>2015</b> , 32, 933-41	5.4	90
171	Spectrally constrained chromophore and scattering near-infrared tomography provides quantitative and robust reconstruction. <i>Applied Optics</i> , <b>2005</b> , 44, 1858-69	1.7	79
170	Magnetic resonance-guided near-infrared tomography of the breast. <i>Review of Scientific Instruments</i> , <b>2004</b> , 75, 5262-5270	1.7	72
169	Optical tomography in the presence of void regions. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2000</b> , 17, 1659-70	1.8	70
168	Near-infrared imaging in the small animal brain: optimization of fiber positions. <i>Journal of Biomedical Optics</i> , <b>2003</b> , 8, 102-10	3.5	69
167	Image analysis methods for diffuse optical tomography. <i>Journal of Biomedical Optics</i> , <b>2006</b> , 11, 33001	3.5	68
166	A microcomputed tomography guided fluorescence tomography system for small animal molecular imaging. <i>Review of Scientific Instruments</i> , <b>2009</b> , 80, 043701	1.7	67
165	A method for three-dimensional time-resolved optical tomography. <i>International Journal of Imaging Systems and Technology</i> , <b>2000</b> , 11, 2-11	2.5	67

164	Subsurface diffuse optical tomography can localize absorber and fluorescent objects but recovered image sensitivity is nonlinear with depth. <i>Applied Optics</i> , <b>2007</b> , 46, 1669-78	1.7	65
163	The effects of internal refractive index variation in near-infrared optical tomography: a finite element modelling approach. <i>Physics in Medicine and Biology</i> , <b>2003</b> , 48, 2713-27	3.8	62
162	Calibration techniques and datatype extraction for time-resolved optical tomography. <i>Review of Scientific Instruments</i> , <b>2000</b> , 71, 3415-3427	1.7	61
161	In vivo bioluminescence tomography with a blocking-off finite-difference SP3 method and MRI/CT coregistration. <i>Medical Physics</i> , <b>2010</b> , 37, 329-38	4.4	60
160	Spectral priors improve near-infrared diffuse tomography more than spatial priors. <i>Optics Letters</i> , <b>2005</b> , 30, 1968-70	3	58
159	Light transport in biological tissue using three-dimensional frequency-domain simplified spherical harmonics equations. <i>Physics in Medicine and Biology</i> , <b>2009</b> , 54, 2493-509	3.8	56
158	In vivo hemoglobin and water concentrations, oxygen saturation, and scattering estimates from near-infrared breast tomography using spectral reconstruction. <i>Academic Radiology</i> , <b>2006</b> , 13, 195-202	4.3	54
157	Spectrally resolved bioluminescence tomography using the reciprocity approach. <i>Medical Physics</i> , <b>2008</b> , 35, 4863-71	4.4	52
156	3D optical tomography in the presence of void regions. <i>Optics Express</i> , <b>2000</b> , 7, 462-7	3.3	49
155	Early-photon fluorescence tomography: spatial resolution improvements and noise stability considerations. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2009</b> , 26, 1444-57	1.8	46
154	Boundary conditions for light propagation in diffusive media with nonscattering regions. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2000</b> , 17, 1671-81	1.8	44
153	Image quality analysis of high-density diffuse optical tomography incorporating a subject-specific head model. <i>Frontiers in Neuroenergetics</i> , <b>2012</b> , 4, 6		42
152	Endoscopic, rapid near-infrared optical tomography. <i>Optics Letters</i> , <b>2006</b> , 31, 2876-8	3	42
151	Evaluation of intravoxel incoherent motion fitting methods in low-perfused tissue. <i>Journal of Magnetic Resonance Imaging</i> , <b>2017</b> , 45, 1325-1334	5.6	41
150	Maps of in vivo oxygen pressure with submillimetre resolution and nanomolar sensitivity enabled by Cherenkov-excited luminescence scanned imaging. <i>Nature Biomedical Engineering</i> , <b>2018</b> , 2, 254-264	19	38
149	Critical computational aspects of near infrared circular tomographic imaging: Analysis of measurement number, mesh resolution and reconstruction basis. <i>Optics Express</i> , <b>2006</b> , 14, 6113-27	3.3	37
148	Optical tomography of a realistic neonatal head phantom. <i>Applied Optics</i> , <b>2003</b> , 42, 3109-16	1.7	36
147	Magnetic-resonance-imaging-coupled broadband near-infrared tomography system for small animal brain studies. <i>Applied Optics</i> , <b>2005</b> , 44, 2177-88	1.7	34

146	Contrast-detail analysis characterizing diffuse optical fluorescence tomography image reconstruction. <i>Journal of Biomedical Optics</i> , <b>2005</b> , 10, 050501	3.5	34
145	Fluorescence tomography characterization for sub-surface imaging with protoporphyrin IX. <i>Optics Express</i> , <b>2008</b> , 16, 8581-93	3.3	33
144	Trans-rectal ultrasound-coupled near-infrared optical tomography of the prostate, part I: simulation. <i>Optics Express</i> , <b>2008</b> , 16, 17484-504	3.3	33
143	Improved quantification of small objects in near-infrared diffuse optical tomography. <i>Journal of Biomedical Optics</i> , <b>2004</b> , 9, 1161-71	3.5	32
142	Multiple-slice imaging of a tissue-equivalent phantom by use of time-resolved optical tomography. <i>Applied Optics</i> , <b>2000</b> , 39, 3380-7	1.7	32
141	Implicit and explicit prior information in near-infrared spectral imaging: accuracy, quantification and diagnostic value. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2011</b> , 369, 4531-57	3	31
140	Finite element implementation of Maxwell's equations for image reconstruction in electrical impedance tomography. <i>IEEE Transactions on Medical Imaging</i> , <b>2006</b> , 25, 55-61	11.7	31
139	Near-infrared spectroscopy of the adult head: effect of scattering and absorbing obstructions in the cerebrospinal fluid layer on light distribution in the tissue. <i>Applied Optics</i> , <b>2000</b> , 39, 4721-9	1.7	30
138	Iridium Nanoparticles for Multichannel Luminescence Lifetime Imaging, Mapping Localization in Live Cancer Cells. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 10242-10249	16.4	29
137	Wavelength band optimization in spectral near-infrared optical tomography improves accuracy while reducing data acquisition and computational burden. <i>Journal of Biomedical Optics</i> , <b>2008</b> , 13, 054037	3.5	29
136	Imaging of glioma tumor with endogenous fluorescence tomography. <i>Journal of Biomedical Optics</i> , <b>2009</b> , 14, 030501	3.5	28
135	Image reconstruction of effective Mie scattering parameters of breast tissue in vivo with near-infrared tomography. <i>Journal of Biomedical Optics</i> , <b>2006</b> , 11, 041106	3.5	28
134	High-density functional diffuse optical tomography based on frequency-domain measurements improves image quality and spatial resolution. <i>Neurophotonics</i> , <b>2019</b> , 6, 035007	3.9	28
133	Breast deformation modelling for image reconstruction in near infrared optical tomography. <i>Physics in Medicine and Biology</i> , <b>2004</b> , 49, 1131-45	3.8	27
132	Model-resolution-based basis pursuit deconvolution improves diffuse optical tomographic imaging. <i>IEEE Transactions on Medical Imaging</i> , <b>2014</b> , 33, 891-901	11.7	26
131	Quantitative evaluation of atlas-based high-density diffuse optical tomography for imaging of the human visual cortex. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 3882-900	3.5	25
130	A novel data calibration scheme for electrical impedance tomography. <i>Physiological Measurement</i> , <b>2003</b> , 24, 421-35	2.9	24
129	Incorporating a priori anatomical information into image reconstruction in electrical impedance tomography. <i>Physiological Measurement</i> , <b>1999</b> , 20, 87-102	2.9	24

128	Shining a Light on Awareness: A Review of Functional Near-Infrared Spectroscopy for Prolonged Disorders of Consciousness. <i>Frontiers in Neurology</i> , <b>2018</b> , 9, 350	4.1	23
127	Excitation patterns in three-dimensional electrical impedance tomography. <i>Physiological Measurement</i> , <b>2005</b> , 26, S185-97	2.9	23
126	High Speed Imaging of Cavitation around Dental Ultrasonic Scaler Tips. <i>PLoS ONE</i> , <b>2016</b> , 11, e0149804	3.7	22
125	Helmholtz-Type Regularization Method for Permittivity Reconstruction Using Experimental Phantom Data of Electrical Capacitance Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2010</b> , 59, 78-83	5.2	21
124	Compressive sensing based reconstruction in bioluminescence tomography improves image resolution and robustness to noise. <i>Biomedical Optics Express</i> , <b>2012</b> , 3, 2131-41	3.5	20
123	Image reconstruction in diffuse optical tomography based on simplified spherical harmonics approximation. <i>Optics Express</i> , <b>2009</b> , 17, 24208-23	3.3	20
122	Fast and efficient image reconstruction for high density diffuse optical imaging of the human brain. <i>Biomedical Optics Express</i> , <b>2015</b> , 6, 4567-84	3.5	19
121	Multi-modal molecular diffuse optical tomography system for small animal imaging. <i>Measurement Science and Technology</i> , <b>2013</b> , 24, 105405	2	19
120	Rapid measurement of intravoxel incoherent motion (IVIM) derived perfusion fraction for clinical magnetic resonance imaging. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , <b>2018</b> , 31, 269-283	2.8	18
119	Frequency-domain vs continuous-wave near-infrared spectroscopy devices: a comparison of clinically viable monitors in controlled hypoxia. <i>Journal of Clinical Monitoring and Computing</i> , <b>2017</b> , 31, 967-974	2	18
118	An automated system using spatial oversampling for optical mapping in murine atria. Development and validation with monophasic and transmembrane action potentials. <i>Progress in Biophysics and Molecular Biology</i> , <b>2014</b> , 115, 340-8	4.7	17
117	Application of spectral derivative data in visible and near-infrared spectroscopy. <i>Physics in Medicine and Biology</i> , <b>2010</b> , 55, 3381-99	3.8	17
116	Cerebral Oxygenation in Traumatic Brain Injury: Can a Non-Invasive Frequency Domain Near-Infrared Spectroscopy Device Detect Changes in Brain Tissue Oxygen Tension as Well as the Established Invasive Monitor?. <i>Journal of Neurotrauma</i> , <b>2019</b> , 36, 1175-1183	5.4	16
115	Imaging and analysis of individual cavitation microbubbles around dental ultrasonic scalers. <i>Ultrasonics</i> , <b>2017</b> , 81, 66-72	3.5	16
114	Imaging workflow and calibration for CT-guided time-domain fluorescence tomography. <i>Biomedical Optics Express</i> , <b>2011</b> , 2, 3021-36	3.5	16
113	Implementation of a computationally efficient least-squares algorithm for highly under-determined three-dimensional diffuse optical tomography problems. <i>Medical Physics</i> , <b>2008</b> , 35, 1682-97	4.4	16
112	CT contrast predicts pancreatic cancer treatment response to verteporfin-based photodynamic therapy. <i>Physics in Medicine and Biology</i> , <b>2014</b> , 59, 1911-21	3.8	15
111	An efficient Jacobian reduction method for diffuse optical image reconstruction. <i>Optics Express</i> , <b>2007</b> , 15, 15908-19	3.3	15

110	Video-rate near-infrared optical tomography using spectrally encoded parallel light delivery. <i>Optics Letters</i> , <b>2005</b> , 30, 2593-5	3	15
109	Influence of macromolecule baseline on H MR spectroscopic imaging reproducibility. <i>Magnetic Resonance in Medicine</i> , <b>2017</b> , 77, 34-43	4.4	14
108	Development of a multi-wavelength diffuse optical tomography system for early diagnosis of rheumatoid arthritis: simulation, phantoms and healthy human studies. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 4769-4786	3.5	14
107	Diffusion-weighted MRI and intravoxel incoherent motion model for diagnosis of pediatric solid abdominal tumors. <i>Journal of Magnetic Resonance Imaging</i> , <b>2018</b> , 47, 1475-1486	5.6	14
106	Multiple-gate time domain diffuse fluorescence tomography allows more sparse tissue sampling without compromising image quality. <i>Optics Letters</i> , <b>2012</b> , 37, 2559-61	3	13
105	Effects of refractive index on near-infrared tomography of the breast. <i>Applied Optics</i> , <b>2005</b> , 44, 1870-8	1.7	13
104	Spectral derivative based image reconstruction provides inherent insensitivity to coupling and geometric errors. <i>Optics Letters</i> , <b>2005</b> , 30, 2912-4	3	13
103	Toward real-time diffuse optical tomography: accelerating light propagation modeling employing parallel computing on GPU and CPU. <i>Journal of Biomedical Optics</i> , <b>2017</b> , 22, 1-11	3.5	13
102	Broadband (550-1350 nm) diffuse optical characterization of thyroid chromophores. <i>Scientific Reports</i> , <b>2018</b> , 8, 10015	4.9	12
101	Simultaneous multiple view high resolution surface geometry acquisition using structured light and mirrors. <i>Optics Express</i> , <b>2013</b> , 21, 7222-39	3.3	12
100	Computed tomography-guided time-domain diffuse fluorescence tomography in small animals for localization of cancer biomarkers. <i>Journal of Visualized Experiments</i> , <b>2012</b> , e4050	1.6	12
99	Multispectral, non-contact diffuse optical tomography of healthy human finger joints. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 1445-1460	3.5	11
98	Quantitative bioluminescence tomography using spectral derivative data. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 4163-4174	3.5	11
97	Real-time Cherenkov emission portal imaging during CyberKnife <sup>®</sup> radiotherapy. <i>Physics in Medicine and Biology</i> , <b>2015</b> , 60, N419-25	3.8	11
96	Quantitative surface radiance mapping using multiview images of light-emitting turbid media. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2013</b> , 30, 2572-84	1.8	11
95	Instrumentation for video-rate near-infrared diffuse optical tomography. <i>Review of Scientific Instruments</i> , <b>2005</b> , 76, 124301	1.7	11
94	Time resolved diffuse optical spectroscopy with geometrically accurate models for bulk parameter recovery. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 3784-3794	3.5	11
93	Modeling the steady-state deformation of the solid phase of articular cartilage. <i>Biomaterials</i> , <b>2009</b> , 30, 6394-401	15.6	9



92	Wavelength dependence of sensitivity in spectral diffuse optical imaging: effect of normalization on image reconstruction. <i>Optics Express</i> , <b>2008</b> , 16, 17780-91	3.3	9
91	Numerical modelling errors in electrical impedance tomography. <i>Physiological Measurement</i> , <b>2007</b> , 28, S45-55	2.9	9
90	Data subset algorithm for computationally efficient reconstruction of 3-D spectral imaging in diffuse optical tomography. <i>Optics Express</i> , <b>2006</b> , 14, 5394-410	3.3	9
89	Validation of a dose warping algorithm using clinically realistic scenarios. <i>British Journal of Radiology</i> , <b>2015</b> , 88, 20140691	3.4	8
88	Time-resolved near infrared light propagation using frequency domain superposition. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 41-54	3.5	8
87	Direct-current-based image reconstruction versus direct-current included or excluded frequency-domain reconstruction in diffuse optical tomography. <i>Applied Optics</i> , <b>2010</b> , 49, 3059-70	0.2	8
86	Spectral distortion in diffuse molecular luminescence tomography in turbid media. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 102024	2.5	8
85	Tissue drug concentration determines whether fluorescence or absorption measurements are more sensitive in diffuse optical tomography of exogenous contrast agents. <i>Applied Optics</i> , <b>2009</b> , 48, D262-72	0.2	8
84	Evaluation of rigid registration methods for whole head imaging in diffuse optical tomography. <i>Neurophotonics</i> , <b>2015</b> , 2, 035002	3.9	7
83	Lightweight sCMOS-based high-density diffuse optical tomography. <i>Neurophotonics</i> , <b>2018</b> , 5, 035006	3.9	7
82	Single pixel hyperspectral bioluminescence tomography based on compressive sensing. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 5549-5564	3.5	7
81	Singular value decomposition based regularization prior to spectral mixing improves crosstalk in dynamic imaging using spectral diffuse optical tomography. <i>Biomedical Optics Express</i> , <b>2012</b> , 3, 2036-49	3.5	6
80	Absorption and scattering imaging of tissue with steady-state second-differential spectral-analysis tomography. <i>Optics Letters</i> , <b>2004</b> , 29, 2043-5	3	6
79	Self-calibrating time-resolved near infrared spectroscopy. <i>Biomedical Optics Express</i> , <b>2019</b> , 10, 2657-2669	3.5	6
78	Automatic exposure control and estimation of effective system noise in diffuse fluorescence tomography. <i>Optics Express</i> , <b>2009</b> , 17, 23272-83	3.3	5
77	Validation of hemoglobin and water molar absorption spectra in near-infrared diffuse optical tomography <b>2003</b> ,		5
76	Recipes for diffuse correlation spectroscopy instrument design using commonly utilized hardware based on targets for signal-to-noise ratio and precision. <i>Biomedical Optics Express</i> , <b>2021</b> , 12, 3265-3281	3.5	5
75	Functional near infrared spectroscopy using spatially resolved data to account for tissue scattering: A numerical study and arm-cuff experiment. <i>Journal of Biophotonics</i> , <b>2019</b> , 12, e201900064	3.1	4



74	Accounting for filter bandwidth improves the quantitative accuracy of bioluminescence tomography. <i>Journal of Biomedical Optics</i> , <b>2015</b> , 20, 096001	3.5	4
73	Receiver operating characteristic and location analysis of simulated near-infrared tomography images. <i>Journal of Biomedical Optics</i> , <b>2007</b> , 12, 054013	3.5	4
72	Challenges in sub-surface fluorescence diffuse optical imaging <b>2007</b> ,		4
71	Differential imaging in heterogeneous media: limitations of linearization assumptions in optical tomography <b>2001</b> ,		4
70	Detecting inflammation in rheumatoid arthritis using Fourier transform analysis of dorsal optical transmission images from a pilot study. <i>Journal of Biomedical Optics</i> , <b>2019</b> , 24, 1-12	3.5	4
69	Machine learning utilising spectral derivative data improves cellular health classification through hyperspectral infra-red spectroscopy. <i>PLoS ONE</i> , <b>2020</b> , 15, e0238647	3.7	4
68	Quantitative evaluation of frequency domain measurements in high density diffuse optical tomography. <i>Journal of Biomedical Optics</i> , <b>2021</b> , 26,	3.5	4
67	A method for three-dimensional time-resolved optical tomography <b>2000</b> , 11, 2		4
66	Incorporation of an ultrasound and model guided permissible region improves quantitative source recovery in bioluminescence tomography. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 1360-1374	3.5	3
65	Ultrasound-mediation of self-illuminating reporters improves imaging resolution in optically scattering media. <i>Biomedical Optics Express</i> , <b>2018</b> , 9, 1664-1679	3.5	3
64	Hyper-spectral Recovery of Cerebral and Extra-Cerebral Tissue Properties Using Continuous Wave Near-Infrared Spectroscopic Data. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 2836	2.6	3
63	Imaging protoporphyrin IX fluorescence with a time-domain FMT/microCT system <b>2009</b> ,		3
62	Near-infrared optical tomography: endoscopic imaging approach <b>2007</b> ,		3
61	Computational aspects of endoscopic (trans-rectal) near-infrared optical tomography: initial investigations <b>2007</b> ,		3
60	Diffuse Optical Tomography for Mapping Human Brain Function <b>2006</b> ,		3
59	Radiosity diffusion model in 3D <b>2001</b> ,		3
58	Deep-learning based image reconstruction for MRI-guided near-infrared spectral tomography.. <i>Optica</i> , <b>2022</b> , 9, 264-267	8.6	3
57	Near-infrared scattering spectrum differences between benign and malignant breast tumors measured in vivo with diffuse tomography <b>2004</b> ,		3

56	Improving the quantitative accuracy of cerebral oxygen saturation in monitoring the injured brain using atlas based Near Infrared Spectroscopy models. <i>Journal of Biophotonics</i> , <b>2016</b> , 9, 812-26	3.1	3
55	Image-based Registration for a Neurosurgical Robot: Comparison Using Iterative Closest Point and Coherent Point Drift Algorithms. <i>Procedia Computer Science</i> , <b>2016</b> , 90, 28-34	1.6	3
54	Auto-Regressive Discrete Acquisition Points Transformation for Diffusion Weighted MRI Data. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2019</b> , 66, 2617-2628	5	3
53	Development of a multi-view multi-spectral bioluminescence tomography small animal imaging system <b>2011</b> ,		2
52	The utility of direct-current as compared to frequency domain measurements in spectrally-constrained diffuse optical tomography toward cancer imaging. <i>Technology in Cancer Research and Treatment</i> , <b>2011</b> , 10, 403-16	2.7	2
51	COMPUTER MODELLING IN ELECTRICAL IMPEDANCE TOMOGRAPHY. <i>Nondestructive Testing and Evaluation</i> , <b>1998</b> , 14, 163-172	2	2
50	Sub-surface fluorescence imaging of Protoporphyrin IX with B-Scan mode tomography <b>2006</b> ,		2
49	Comparing two regularization techniques for diffuse optical tomography <b>2007</b> ,		2
48	Electrical Impedance Spectroscopy: Theory <b>2005</b> , 85-105		2
47	Feasibility of NIR tomographic reconstruction with multispectral continuous wave data by mapping into frequency domain data <b>2003</b> ,		2
46	Deep neural networks improve diagnostic accuracy of rheumatoid arthritis using diffuse optical tomography <b>2019</b> ,		2
45	3D MR guided NIRS: Optimization of Computation and Breast Interface for In vivo Imaging <b>2008</b> ,		2
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