

# Timothy A Bigelow

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

1,018  
citations

393982

19  
h-index

433756

31  
g-index

50  
all docs

50  
docs citations

50  
times ranked

795  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diagnostic Ultrasound Safety Review for Point-of-Care Ultrasound Practitioners. <i>Journal of Ultrasound in Medicine</i> , 2020, 39, 1069-1084.	0.8	33
2	Scan Parameter Optimization for Histotripsy Treatment of <i>S. Aureus</i> Biofilms on Surgical Mesh. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020, 67, 341-349.	1.7	4
3	Detection of pores in additive manufactured parts by near field response of laser-induced ultrasound. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	5
4	Investigation of Nondestructive Testing Methods for Friction Stir Welding. <i>Metals</i> , 2019, 9, 624.	1.0	28
5	Impact of High-Intensity Ultrasound on Strength of Surgical Mesh When Treating Biofilm Infections. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2019, 66, 38-44.	1.7	10
6	Ensuring Clinical Efficacy and Patient Safety With Repaired Ultrasound Probes. <i>Journal of Ultrasound in Medicine</i> , 2018, 37, 315-328.	0.8	3
7	Histotripsy Treatment of <i>S. Aureus</i> Biofilms on Surgical Mesh Samples Under Varying Scan Parameters. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018, 65, 1017-1024.	1.7	14
8	Impact of step size on histotripsy treatment of staphylococcus aureus biofilms on surgical mesh. , 2017, , .		0
9	Histotripsy Treatment of <i>S. Aureus</i> Biofilms on Surgical Mesh Samples Under Varying Pulse Durations. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017, 64, 1420-1428.	1.7	18
10	Development of an Ultrasonic Method to Detect Cervical Remodeling in Vivo in Full-Term Pregnant Women. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 2533-2539.	0.7	23
11	Correlation of Hemorrhage Near Developing Opossum Skull With Pulsed Ultrasound Exposure Parameters. <i>Journal of Ultrasound in Medicine</i> , 2015, 34, 1351-1361.	0.8	2
12	Beyond Cervical Length: A Pilot Study of Ultrasonic Attenuation for Early Detection of Preterm Birth Risk. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 3023-3029.	0.7	28
13	Dependence of ablative ability of high-intensity focused ultrasound cavitation-based histotripsy on mechanical properties of agar. <i>Journal of the Acoustical Society of America</i> , 2014, 136, 3018-3027.	0.5	12
14	Flow rate and duty cycle effects in lysis of <i>Chlamydomonas reinhardtii</i> using high-energy pulsed focused ultrasound. <i>Journal of the Acoustical Society of America</i> , 2014, 135, 3632-3638.	0.5	7
15	Lysis of <i>Chlamydomonas reinhardtii</i> by high-intensity focused ultrasound as a function of exposure time. <i>Ultrasonics Sonochemistry</i> , 2014, 21, 1258-1264.	3.8	29
16	Effect of pulse repetition frequency and scan step size on the dimensions of the lesions formed in agar by HIFU histotripsy. <i>Ultrasonics</i> , 2013, 53, 889-896.	2.1	8
17	Precision control of lesions by high-intensity focused ultrasound cavitation-based histotripsy through varying pulse duration. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013, 60, 1401-1411.	1.7	10
18	Assessment of Ultrasound Histotripsy-Induced Damage to Ex Vivo Porcine Muscle. <i>Journal of Ultrasound in Medicine</i> , 2013, 32, 69-82.	0.8	8

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19	Cross-imaging system comparison of backscatter coefficient estimates from a tissue-mimicking material. <i>Journal of the Acoustical Society of America</i> , 2012, 132, 1319-1324.	0.5	38
20	Impact of Preconditioning Pulse on Lesion Formation During High-Intensity Focused Ultrasound Histotripsy. <i>Ultrasound in Medicine and Biology</i> , 2012, 38, 1918-1929.	0.7	15
21	Optimization of the algorithms for estimating the ultrasonic attenuation along the propagation path. <i>Ultrasonics</i> , 2012, 52, 720-729.	2.1	3
22	Minimization of treatment time for in vitro 1.1MHz destruction of <i>Pseudomonas aeruginosa</i> biofilms by high-intensity focused ultrasound. <i>Ultrasonics</i> , 2012, 52, 668-675.	2.1	37
23	Experimental Investigation of the Effect of Stiffness, Exposure Time and Scan Direction on the Dimension of Ultrasound Histotripsy Lesions. <i>Ultrasound in Medicine and Biology</i> , 2011, 37, 1865-1873.	0.7	31
24	Ultrasonic Attenuation and Backscatter Coefficient Estimates of Rodent-Tumor-Mimicking Structures: Comparison of Results among Clinical Scanners. <i>Ultrasonic Imaging</i> , 2011, 33, 233-250.	1.4	45
25	The Thermal Index. <i>Journal of Ultrasound in Medicine</i> , 2011, 30, 714-734.	0.8	62
26	Estimate of the attenuation coefficient using a clinical array transducer for the detection of cervical ripening in human pregnancy. <i>Ultrasonics</i> , 2011, 51, 34-39.	2.1	45
27	Dependence of optimal seed bubble size on pressure amplitude at therapeutic pressure levels. <i>Ultrasonics</i> , 2011, 51, 115-122.	2.1	19
28	A theoretical comparison of attenuation measurement techniques from backscattered ultrasound echoes. <i>Journal of the Acoustical Society of America</i> , 2011, 129, 2316-2324.	0.5	87
29	Comparison of algorithms for estimating ultrasound attenuation when predicting cervical remodeling in a rat model. , 2011, , .		2
30	Cross-Imaging Platform Comparison of Ultrasonic Backscatter Coefficient Measurements of Live Rat Tumors. <i>Journal of Ultrasound in Medicine</i> , 2010, 29, 1117-1123.	0.8	20
31	Improved algorithm for estimation of attenuation along propagation path using backscattered echoes from multiple sources. <i>Ultrasonics</i> , 2010, 50, 496-501.	2.1	12
32	Estimating the total ultrasound attenuation along the propagation path by applying multiple filters to backscattered echoes from a single spherically focused source. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2010, 57, 900-907.	1.7	15
33	Estimating the total ultrasound attenuation along the propagation path by using a reference phantom. <i>Journal of the Acoustical Society of America</i> , 2010, 128, 3232-3238.	0.5	24
34	Estimation of ultrasound tissue attenuation along the propagation path by applying multiple filters to the backscattered echoes. , 2009, , .		1
35	Dependence of Cavitation Bubble Size on Pressure Amplitude at Therapeutic Levels. , 2009, , .		0
36	The Destruction of <i>Escherichia Coli</i> Biofilms Using High-Intensity Focused Ultrasound. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, 1026-1031.	0.7	57

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37	<i>In vivo</i> ultrasonic attenuation slope estimates for detecting cervical ripening in rats: Preliminary results. Journal of the Acoustical Society of America, 2008, 123, 1794-1800.	0.5	61
38	Ultrasound attenuation estimation using backscattered echoes from multiple sources. Journal of the Acoustical Society of America, 2008, 124, 1367-1373.	0.5	16
39	Hemorrhage near fetal rat bone exposed to pulsed ultrasound. Ultrasound in Medicine and Biology, 2007, 33, 311-317.	0.7	13
40	Hemorrhage Near Fetal Rat Bone: Preliminary Results. AIP Conference Proceedings, 2006, , .	0.3	0
41	Impact of local attenuation approximations when estimating correlation length from backscattered ultrasound echoes. Journal of the Acoustical Society of America, 2006, 120, 546-553.	0.5	28
42	Estimation of total attenuation and scatterer size from backscattered ultrasound waveforms. Journal of the Acoustical Society of America, 2005, 117, 1431-1439.	0.5	59
43	Signal processing strategies that improve performance and understanding of the quantitative ultrasound SPECTRAL FIT algorithm. Journal of the Acoustical Society of America, 2005, 118, 1808-1819.	0.5	14
44	A model for estimating ultrasound attenuation along the propagation path to the fetus from backscattered waveforms. Journal of the Acoustical Society of America, 2005, 118, 1210-1220.	0.5	6
45	Scatterer size estimation in pulse-echo ultrasound using focused sources: Theoretical approximations and simulation analysis. Journal of the Acoustical Society of America, 2004, 116, 578-593.	0.5	28
46	Scatterer size estimation in pulse-echo ultrasound using focused sources: Calibration measurements and phantom experiments. Journal of the Acoustical Society of America, 2004, 116, 594-602.	0.5	24
47	Experimental evaluation of indicators of nonlinearity for use in ultrasound transducer characterizations. Ultrasound in Medicine and Biology, 2002, 28, 1509-1520.	0.7	13