

# William D O brien Jr

## List of Publications by Citations

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109  
papers

2,452  
citations

28  
h-index

45  
g-index

121  
ext. papers

2,891  
ext. citations

3.4  
avg, IF

5.16  
L-index

#	Paper	IF	Citations
109	Ultrasound-biophysics mechanisms. <i>Progress in Biophysics and Molecular Biology</i> , <b>2007</b> , 93, 212-55	4.7	399
108	Noninvasive Diagnosis of Nonalcoholic Fatty Liver Disease and Quantification of Liver Fat Using a New Quantitative Ultrasound Technique. <i>Clinical Gastroenterology and Hepatology</i> , <b>2015</b> , 13, 1337-1345.	6.9	135
107	Interlaboratory comparison of ultrasonic backscatter coefficient measurements from 2 to 9 MHz. <i>Journal of Ultrasound in Medicine</i> , <b>2005</b> , 24, 1235-50	2.9	99
106	Ultrasonic contrast agent shell rupture detected by inertial cavitation and rebound signals. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2006</b> , 53, 126-36	3.2	77
105	Examination of inertial cavitation of Optison in producing sonoporation of chinese hamster ovary cells. <i>Ultrasound in Medicine and Biology</i> , <b>2008</b> , 34, 2009-18	3.5	75
104	A Pilot Comparative Study of Quantitative Ultrasound, Conventional Ultrasound, and MRI for Predicting Histology-Determined Steatosis Grade in Adult Nonalcoholic Fatty Liver Disease. <i>American Journal of Roentgenology</i> , <b>2017</b> , 208, W168-W177	5.4	67
103	Targeted Ultrasound-Assisted Cancer-Selective Chemical Labeling and Subsequent Cancer Imaging using Click Chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5452-6	16.4	58
102	The risk of exposure to diagnostic ultrasound in postnatal subjects: thermal effects. <i>Journal of Ultrasound in Medicine</i> , <b>2008</b> , 27, 517-35; quiz 537-40	2.9	58
101	Identifying ultrasonic scattering sites from three-dimensional impedance maps. <i>Journal of the Acoustical Society of America</i> , <b>2005</b> , 117, 413-23	2.2	57
100	Application of three scattering models to characterization of solid tumors in mice. <i>Ultrasonic Imaging</i> , <b>2006</b> , 28, 83-96	1.9	56
99	Measurement of Attenuation and Speed of Sound in Soils. <i>Soil Science Society of America Journal</i> , <b>2002</b> , 66, 788-796	2.5	48
98	Arrhythmias in rat hearts exposed to pulsed ultrasound after intravenous injection of a contrast agent. <i>Journal of Ultrasound in Medicine</i> , <b>2002</b> , 21, 1347-56; discussion 1343-45	2.9	44
97	Improvement of in vitro thrombolysis employing magnetically-guided microspheres. <i>Thrombosis Research</i> , <b>2008</b> , 121, 799-811	8.2	42
96	Comparison of ultrasound attenuation and backscatter estimates in layered tissue-mimicking phantoms among three clinical scanners. <i>Ultrasonic Imaging</i> , <b>2012</b> , 34, 209-21	1.9	40
95	Interlaboratory comparison of backscatter coefficient estimates for tissue-mimicking phantoms. <i>Ultrasonic Imaging</i> , <b>2010</b> , 32, 48-64	1.9	39
94	Inadequate dietary magnesium intake increases atherosclerotic plaque development in rabbits. <i>Nutrition Research</i> , <b>2009</b> , 29, 343-9	4	38
93	Parametric imaging of rat mammary tumors in vivo for the purposes of tissue characterization. <i>Journal of Ultrasound in Medicine</i> , <b>2002</b> , 21, 1201-10	2.9	36

92	Ultrasonic attenuation and backscatter coefficient estimates of rodent-tumor-mimicking structures: comparison of results among clinical scanners. <i>Ultrasonic Imaging</i> , <b>2011</b> , 33, 233-50	1.9	35
91	Determination of postexcitation thresholds for single ultrasound contrast agent microbubbles using double passive cavitation detection. <i>Journal of the Acoustical Society of America</i> , <b>2010</b> , 127, 3449-55 <sup>2</sup>	2.2	34
90	Ultrasound-induced lung hemorrhage: role of acoustic boundary conditions at the pleural surface. <i>Journal of the Acoustical Society of America</i> , <b>2002</b> , 111, 1102-9	2.2	34
89	Noninvasive Diagnosis of Nonalcoholic Fatty Liver Disease and Quantification of Liver Fat with Radiofrequency Ultrasound Data Using One-dimensional Convolutional Neural Networks. <i>Radiology</i> , <b>2020</b> , 295, 342-350	20.5	33
88	Comparison between maximum radial expansion of ultrasound contrast agents and experimental postexcitation signal results. <i>Journal of the Acoustical Society of America</i> , <b>2011</b> , 129, 114-21	2.2	31
87	Superthreshold behavior and threshold estimation of ultrasound-induced lung hemorrhage in pigs: role of age dependency. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2003</b> , 50, 153-69	3.2	31
86	Attenuation coefficient and propagation speed estimates of rat and pig intercostal tissue as a function of temperature. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 1411-20	3.2	31
85	Repeatability and Reproducibility of the Ultrasonic Attenuation Coefficient and Backscatter Coefficient Measured in the Right Lobe of the Liver in Adults With Known or Suspected Nonalcoholic Fatty Liver Disease. <i>Journal of Ultrasound in Medicine</i> , <b>2018</b> , 37, 1913-1927	2.9	29
84	Frequency-dependent evaluation of the role of definity in producing sonoporation of Chinese hamster ovary cells. <i>Journal of Ultrasound in Medicine</i> , <b>2011</b> , 30, 61-9	2.9	29
83	Cross-imaging system comparison of backscatter coefficient estimates from a tissue-mimicking material. <i>Journal of the Acoustical Society of America</i> , <b>2012</b> , 132, 1319-24	2.2	29
82	Evaluation of the threshold for lung hemorrhage by diagnostic ultrasound and a proposed new safety index. <i>Ultrasound in Medicine and Biology</i> , <b>2007</b> , 33, 810-8	3.5	28
81	Threshold estimates and superthreshold behavior of ultrasound-induced lung hemorrhage in adult rats: role of pulse duration. <i>Ultrasound in Medicine and Biology</i> , <b>2003</b> , 29, 1625-34	3.5	25
80	Development of a theoretical model describing sonoporation activity of cells exposed to ultrasound in the presence of contrast agents. <i>Journal of the Acoustical Society of America</i> , <b>2012</b> , 131, 2723-9	2.2	24
79	Inter-sonographer reproducibility of quantitative ultrasound outcomes and shear wave speed measured in the right lobe of the liver in adults with known or suspected non-alcoholic fatty liver disease. <i>European Radiology</i> , <b>2018</b> , 28, 4992-5000	8	23
78	Threshold estimation of ultrasound-induced lung hemorrhage in adult rabbits and comparison of thresholds in mice, rats, rabbits and pigs. <i>Ultrasound in Medicine and Biology</i> , <b>2006</b> , 32, 1793-804	3.5	22
77	Behavioral teratologic effects of prenatal exposure to continuous-wave ultrasound in unanesthetized rats. <i>Teratology</i> , <b>1994</b> , 50, 238-49		21
76	Beyond Cervical Length: A Pilot Study of Ultrasonic Attenuation for Early Detection of Preterm Birth Risk. <i>Ultrasound in Medicine and Biology</i> , <b>2015</b> , 41, 3023-9	3.5	20
75	Ultrasonic backscatter coefficient quantitative estimates from high-concentration Chinese Hamster Ovary cell pellet biophantoms. <i>Journal of the Acoustical Society of America</i> , <b>2011</b> , 130, 4139-47	2.2	20

74	Lesions of ultrasound-induced lung hemorrhage are not consistent with thermal injury. <i>Ultrasound in Medicine and Biology</i> , <b>2006</b> , 32, 1763-70	3.5	20
73	Repeatability and Reproducibility of a Clinically Based QUS Phantom Study and Methodologies. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2017</b> , 64, 218-231	3.2	19
72	The measurement of ultrasound backscattering from cell pellet biophantoms and tumors ex vivo. <i>Journal of the Acoustical Society of America</i> , <b>2013</b> , 134, 686-93	2.2	19
71	Effect of pulse polarity and energy on ultrasound-induced lung hemorrhage in adult rats. <i>Journal of the Acoustical Society of America</i> , <b>2003</b> , 113, 2912-8	2.2	19
70	Evaluation of unscanned-mode soft-tissue thermal index for rectangular sources and proposed new indices. <i>Ultrasound in Medicine and Biology</i> , <b>2004</b> , 30, 965-72	3.5	18
69	Acoustic output upper limits proposition: should upper limits be retained?. <i>Journal of Ultrasound in Medicine</i> , <b>2002</b> , 21, 1335-41	2.9	18
68	A teratologic evaluation of continuous-wave, daily ultrasound exposure in unanesthetized pregnant rats. <i>Teratology</i> , <b>1991</b> , 44, 667-74		18
67	Measurement of Attenuation and Speed of Sound in Soils <b>2002</b> , 66, 788		18
66	Assessment of Hepatic Steatosis in Nonalcoholic Fatty Liver Disease by Using Quantitative US. <i>Radiology</i> , <b>2020</b> , 295, 106-113	20.5	17
65	Development of an ultrasonic method to detect cervical remodeling in vivo in full-term pregnant women. <i>Ultrasound in Medicine and Biology</i> , <b>2015</b> , 41, 2533-9	3.5	17
64	Ultrasonic Imaging of Micro-Leaks and Seal Contamination in Flexible Food Packages by the Pulse-Echo Technique. <i>Journal of Food Science</i> , <b>2006</b> , 63, 673-678	3.4	17
63	Effect of contrast agent on the incidence and magnitude of ultrasound-induced lung hemorrhage in rats. <i>Echocardiography</i> , <b>2004</b> , 21, 417-22	1.5	17
62	Structure function for high-concentration biophantoms of polydisperse scatterer sizes. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2015</b> , 62, 303-18	3.2	16
61	Techniques and evaluation from a cross-platform imaging comparison of quantitative ultrasound parameters in an in vivo rodent fibroadenoma model. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2013</b> , 60, 1386-400	3.2	16
60	Assessing the Risks for Modern Diagnostic Ultrasound Imaging. <i>Japanese Journal of Applied Physics</i> , <b>1998</b> , 37, 2781-2788	1.4	16
59	Vascular lesions and s-thrombomodulin concentrations from auricular arteries of rabbits infused with microbubble contrast agent and exposed to pulsed ultrasound. <i>Ultrasound in Medicine and Biology</i> , <b>2006</b> , 32, 1781-91	3.5	15
58	Cross-imaging platform comparison of ultrasonic backscatter coefficient measurements of live rat tumors. <i>Journal of Ultrasound in Medicine</i> , <b>2010</b> , 29, 1117-23	2.9	14
57	A temporal study of ultrasound contrast agent-induced changes in capillary density. <i>Journal of Ultrasound in Medicine</i> , <b>2010</b> , 29, 1267-75	2.9	14

56	Estimation of the acoustic impedance of lung versus level of inflation for different species and ages of animals. <i>Journal of the Acoustical Society of America</i> , <b>2008</b> , 124, 2340-52	2.2	14
55	Targeted Ultrasound-Assisted Cancer-Selective Chemical Labeling and Subsequent Cancer Imaging using Click Chemistry. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 5542-5546	3.6	14
54	Inter-platform reproducibility of ultrasonic attenuation and backscatter coefficients in assessing NAFLD. <i>European Radiology</i> , <b>2019</b> , 29, 4699-4708	8	14
53	Ultrasonic backscatter coefficients for weakly scattering, agar spheres in agar phantoms. <i>Journal of the Acoustical Society of America</i> , <b>2010</b> , 128, 903-8	2.2	13
52	Teratologic evaluation of rats prenatally exposed to pulsed-wave ultrasound. <i>Teratology</i> , <b>1994</b> , 49, 150-5		13
51	In situ exposimetry: the ovarian ultrasound examination. <i>Ultrasound in Medicine and Biology</i> , <b>1991</b> , 17, 257-63	3.5	12
50	Deletion of the Gene Results in a Vaccinia Virus That Is Less Pathogenic Due to Muted Innate Immune Responses, yet Still Elicits Protective Immunity. <i>Journal of Virology</i> , <b>2017</b> , 91,	6.6	11
49	Accurate diagnosis of nonalcoholic fatty liver disease in human participants via quantitative ultrasound <b>2014</b> ,		11
48	Quantitative Ultrasound Comparison of MAT and 4T1 Mammary Tumors in Mice and Rats Across Multiple Imaging Systems. <i>Journal of Ultrasound in Medicine</i> , <b>2015</b> , 34, 1373-83	2.9	10
47	Transthoracic cardiac ultrasonic stimulation induces a negative chronotropic effect. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2012</b> , 59, 2655-61	3.2	10
46	Hemorrhage near fetal rat bone exposed to pulsed ultrasound. <i>Ultrasound in Medicine and Biology</i> , <b>2007</b> , 33, 311-7	3.5	10
45	Superthreshold behavior of ultrasound-induced lung hemorrhage in adult rats: role of pulse repetition frequency and pulse duration. <i>Journal of Ultrasound in Medicine</i> , <b>2006</b> , 25, 873-82	2.9	9
44	Behavioral effects of prenatal exposure to pulsed-wave ultrasound in unanesthetized rats. <i>Teratology</i> , <b>1996</b> , 54, 65-72		9
43	Ultrasound contrast agents affect the angiogenic response. <i>Journal of Ultrasound in Medicine</i> , <b>2011</b> , 30, 933-41	2.9	8
42	Validated sandwich ELISA for the quantification of von Willebrand factor in rabbit plasma. <i>Biomarker Insights</i> , <b>2010</b> , 5, 119-27	3.5	8
41	Superthreshold behavior of ultrasound-induced lung hemorrhage in adult rats: role of pulse repetition frequency and exposure duration revisited. <i>Journal of Ultrasound in Medicine</i> , <b>2005</b> , 24, 339-48	2.9	8
40	Effects of Tomato and Soy Germ on Lipid Bioaccumulation and Atherosclerosis in ApoE <sup>-/-</sup> Mice. <i>Journal of Food Science</i> , <b>2015</b> , 80, H1918-25	3.4	7
39	Contrast ultrasound imaging of the aorta alters vascular morphology and circulating von Willebrand factor in hypercholesterolemic rabbits. <i>Journal of Ultrasound in Medicine</i> , <b>2012</b> , 31, 711-20	2.9	7

38	Three-dimensional impedance map analysis of rabbit liver. <i>Journal of the Acoustical Society of America</i> , <b>2011</b> , 130, EL334-8	2.2	7
37	Attenuation coefficient and propagation speed estimates of intercostal tissue as a function of pig age. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2002</b> , 49, 1421-9	3.2	6
36	The role of the duty factor in ultrasound-mediated cardiac stimulation. <i>Journal of the Acoustical Society of America</i> , <b>2014</b> , 136, EL231	2.2	5
35	Excess risk thresholds in ultrasound safety studies: statistical methods for data on occurrence and size of lesions. <i>Ultrasound in Medicine and Biology</i> , <b>2004</b> , 30, 1289-95	3.5	5
34	Diagnostic ultrasound should be performed without upper intensity limits. <i>Medical Physics</i> , <b>2001</b> , 28, 1-3	4.4	5
33	Ultrasonic bioeffects: a view of experimental studies. <i>Birth</i> , <b>1984</b> , 11, 149-57	3.1	5
32	Liver Fat Assessment in Multiview Sonography Using Transfer Learning With Convolutional Neural Networks. <i>Journal of Ultrasound in Medicine</i> , <b>2021</b> ,	2.9	5
31	The angiogenic response is dependent on ultrasound contrast agent concentration. <i>Vascular Cell</i> , <b>2012</b> , 4, 10	1	4
30	Estimating concentration of ultrasound contrast agents with backscatter coefficients: experimental and theoretical aspects. <i>Journal of the Acoustical Society of America</i> , <b>2012</b> , 131, 2295-305	2.2	4
29	Quantitative ultrasound from single cells to biophantoms to tumors. <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>2012</b> , 2012, 1118-20	0.9	4
28	Structure Function Estimated From Histological Tissue Sections. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2016</b> , 63, 1296-305	3.2	4
27	Contrast Ultrasound Imaging of the Aorta Does Not Affect Progression of Atherosclerosis or Cardiovascular Biomarkers in ApoE <sup>-/-</sup> Mice. <i>Journal of Ultrasound in Medicine</i> , <b>2015</b> , 34, 1115-22	2.9	3
26	Quantitative analysis of ultrasound contrast agent postexcitation collapse. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2014</b> , 61, 1237-41	3.2	3
25	Optimization of a Low Magnesium, Cholesterol-Containing Diet for the Development of Atherosclerosis in Rabbits. <i>Journal of Food Research</i> , <b>2013</b> , 2, 168-178	1.3	3
24	The Negative Chronotropic Effect in Rat Heart Stimulated by Ultrasonic Pulses: Role of Sex and Age. <i>Journal of Ultrasound in Medicine</i> , <b>2017</b> , 36, 799-808	2.9	2
23	Design of Albumin-Coated Microbubbles Loaded With Polylactide Nanoparticles. <i>Journal of Ultrasound in Medicine</i> , <b>2015</b> , 34, 1363-72	2.9	2
22	Analysis of Two Quantitative Ultrasound Approaches. <i>Ultrasonic Imaging</i> , <b>2018</b> , 40, 84-96	1.9	2
21	Limitations on estimation of effective scatterer diameters. <i>Journal of the Acoustical Society of America</i> , <b>2017</b> , 142, 3677	2.2	2

20	Evaluation of the temporal stability of Definity using double passive cavitation detection. <i>Journal of Ultrasound in Medicine</i> , <b>2013</b> , 32, 1535-7	2.9	2
19	Threshold estimation and superthreshold behavior of ultrasound-induced lung hemorrhage in rats: role of age dependency. <i>Ultrasound in Medicine and Biology</i> , <b>2009</b> , 35, 129-35	3.5	2
18	Comparison of algorithms for estimating ultrasound attenuation when predicting cervical remodeling in a rat model <b>2011</b> ,		2
17	Ultrasonic Pulse-Echo Subwavelength Defect Detection Mechanism: Experiment and Simulation. <i>Journal of Nondestructive Evaluation</i> , <b>2003</b> , 22, 103-115	2.1	2
16	Quantitative Ultrasound and the Pancreas: Demonstration of Early Detection Capability. <i>Journal of Ultrasound in Medicine</i> , <b>2019</b> , 38, 2093-2102	2.9	2
15	Low fat but not soy protein isolate was an effective intervention to reduce nonalcoholic fatty liver disease progression in C57BL/6J mice: monitored by a novel quantitative ultrasound (QUS) method. <i>Nutrition Research</i> , <b>2019</b> , 63, 95-105	4	2
14	A Phantom-Based Assessment of Repeatability and Reproducibility of Transvaginal Quantitative Ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , <b>2019</b> , 66, 1413-1421	3.2	1
13	Using passive cavitation detection to observe postexcitation response of ultrasound contrast agents <b>2009</b> ,		1
12	<b>2009</b> ,		1
11	Dietary Tomato Reduces Castration-Resistant Prostate Cancer Burden in the TRAMP Model. <i>FASEB Journal</i> , <b>2016</b> , 30, 147.1	0.9	1
10	Improved Assessment of Hepatic Steatosis in Humans Using Multi-Parametric Quantitative Ultrasound <b>2019</b> ,		1
9	Therapeutic Ultrasound in Cardiovascular Medicine. <i>Journal of Ultrasound in Medicine</i> , <b>2020</b> , 40, 1061	2.9	1
8	Direct Comparison of Quantitative US versus Controlled Attenuation Parameter for Liver Fat Assessment Using MRI Proton Density Fat Fraction as the Reference Standard in Patients Suspected of Having NAFLD.. <i>Radiology</i> , <b>2022</b> , 211131	20.5	0
7	Contrast Ultrasound Imaging Does Not Affect Heat Shock Protein 70 Expression in Cholesterol-Fed Rabbit Aorta. <i>Journal of Ultrasound in Medicine</i> , <b>2015</b> , 34, 1209-16	2.9	
6	Reasons Why Pregnant Women Participate in Ultrasound Research Involving Transvaginal Scans. <i>Journal of Ultrasound in Medicine</i> , <b>2020</b> , 39, 1581-1587	2.9	
5	Dietary Magnesium Intake, Inflammation, and Atherosclerotic Plaque Development in Rabbits. <i>FASEB Journal</i> , <b>2007</b> , 21, A359	0.9	
4	Contrast ultrasound imaging does not affect Hsp70 expression in cholesterol-fed rabbit aorta. <i>FASEB Journal</i> , <b>2012</b> , 26, 637.10	0.9	
3	Contrast ultrasound imaging of the aorta does not affect progression of atherosclerosis in ApoE <sup>-/-</sup> mice. <i>FASEB Journal</i> , <b>2013</b> , 27, 1073.1	0.9	

- 2      Ultrasound imaging to monitor prostate tumor progression and metastases in TRAMP mice. *FASEB Journal*, **2013**, 27, 638.5      0.9
- 1      Positive chronotropic effect caused by transthoracic ultrasound in heart of rats. *JASA Express Letters*, **2021**, 1, 082001