Matthew W Urban

List of Publications by Year
in descending order

215 papers	5,022 citations	101543 36 h-index	114465 63 g-index
255 all docs	255 docs citations	255 times ranked	2590 citing authors

#	Article	IF	Citations
1	Shearwave dispersion ultrasound vibrometry (SDUV) for measuring tissue elasticity and viscosity. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 55-62.	3.0	430
2	An Overview of Elastography-An Emerging Branch of Medical Imaging. Current Medical Imaging, 2011, 7, 255-282.	0.8	340
3	Comb-Push Ultrasound Shear Elastography (CUSE): A Novel Method for Two-Dimensional Shear Elasticity Imaging of Soft Tissues. IEEE Transactions on Medical Imaging, 2012, 31, 1821-1832.	8.9	182
4	Material property estimation for tubes and arteries using ultrasound radiation force and analysis of propagating modes. Journal of the Acoustical Society of America, 2011, 129, 1344-1354.	1.1	179
5	Acoustic Waves in Medical Imaging and Diagnostics. Ultrasound in Medicine and Biology, 2013, 39, 1133-1146.	1.5	163
6	Lamb wave dispersion ultrasound vibrometry (LDUV) method for quantifying mechanical properties of viscoelastic solids. Physics in Medicine and Biology, 2011, 56, 2245-2264.	3.0	162
7	Fast Shear Compounding Using Robust 2-D Shear Wave Speed Calculation and Multi-directional Filtering. Ultrasound in Medicine and Biology, 2014, 40, 1343-1355.	1.5	109
8	Viscoelastic Properties of Normal and Infarcted Myocardium Measured by a Multifrequency Shear Wave Method: Comparison with Pressure-Segment Length Method. Ultrasound in Medicine and Biology, 2014, 40, 1785-1795.	1.5	101
9	Phase velocities and attenuations of shear, Lamb, and Rayleigh waves in plate-like tissues submerged in a fluid (L). Journal of the Acoustical Society of America, 2011, 130, 3549-3552.	1.1	99
10	Arterial Stiffness Estimation by Shear Wave Elastography: Validation in Phantoms with Mechanical Testing. Ultrasound in Medicine and Biology, 2016, 42, 308-321.	1.5	99
11	Bias Observed in Time-of-Flight Shear Wave Speed Measurements Using Radiation Force of a Focused Ultrasound Beam. Ultrasound in Medicine and Biology, 2011, 37, 1884-1892.	1.5	88
12	Improved Shear Wave Motion Detection Using Pulse-Inversion Harmonic Imaging With a Phased Array Transducer. IEEE Transactions on Medical Imaging, 2013, 32, 2299-2310.	8.9	83
13	A Review of Shearwave Dispersion Ultrasound Vibrometry (SDUV) and its Applications. Current Medical Imaging, 2012, 8, 27-36.	0.8	82
14	Two-dimensional shear-wave elastography on conventional ultrasound scanners with time-aligned sequential tracking (TAST) and comb-push ultrasound shear elastography (CUSE). IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 290-302.	3.0	81
15	Attenuation measuring ultrasound shearwave elastography andin vivoapplication in post-transplant liver patients. Physics in Medicine and Biology, 2017, 62, 484-500.	3.0	73
16	Comb-Push Ultrasound Shear Elastography (CUSE) With Various Ultrasound Push Beams. IEEE Transactions on Medical Imaging, 2013, 32, 1435-1447.	8.9	72
17	Error in estimates of tissue material properties from shear wave dispersion ultrasound vibrometry. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 748-758.	3.0	68
18	On Lamb and Rayleigh wave convergence in viscoelastic tissues. Physics in Medicine and Biology, 2011, 56, 6723-6738.	3.0	67

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19	Shearwave dispersion ultrasound vibrometry (sduv) on swine kidney. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2608-2619.	3.0	65
20	Superficial ultrasound shear wave speed measurements in soft and hard elasticity phantoms: repeatability and reproducibility using two ultrasound systems. Pediatric Radiology, 2015, 45, 376-385.	2.0	65
21	Ultrasound bladder vibrometry method for measuring viscoelasticity of the bladder wall. Physics in Medicine and Biology, 2013, 58, 2675-2695.	3.0	61
22	A Review of Vibro-acoustography and its Applications in Medicine. Current Medical Imaging, 2011, 7, 350-359.	0.8	56
23	Guidelines for Finite-Element Modeling of Acoustic Radiation Force-Induced Shear Wave Propagation in Tissue-Mimicking Media. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 78-92.	3.0	56
24	Shear Elastic Modulus Estimation From Indentation and SDUV on Gelatin Phantoms. IEEE Transactions on Biomedical Engineering, 2011, 58, 1706-1714.	4.2	55
25	Measurement of Viscoelastic Properties of In Vivo Swine Myocardium Using Lamb Wave Dispersion Ultrasound Vibrometry (LDUV). IEEE Transactions on Medical Imaging, 2013, 32, 247-261.	8.9	55
26	Shear Wave Dispersion Ultrasonic Vibrometry for Measuring Prostate Shear Stiffness and Viscosity: An In Vitro Pilot Study. IEEE Transactions on Biomedical Engineering, 2011, 58, 235-242.	4.2	52
27	External Vibration Multi-Directional Ultrasound Shearwave Elastography (EVMUSE): Application in Liver Fibrosis Staging. IEEE Transactions on Medical Imaging, 2014, 33, 2140-2148.	8.9	51
28	Noninvasive ultrasound image guided surface wave method for measuring the wave speed and estimating the elasticity of lungs: A feasibility study. Ultrasonics, 2011, 51, 289-295.	3.9	49
29	Shear Wave Elastography Quantifies Stiffness in ExÂVivo Porcine Artery with Stiffened Arterial Region. Ultrasound in Medicine and Biology, 2016, 42, 2423-2435.	1.5	48
30	Loss tangent and complex modulus estimated by acoustic radiation force creep and shear wave dispersion. Physics in Medicine and Biology, 2012, 57, 1263-1282.	3.0	46
31	Quantitative Assessment of Left Ventricular Diastolic Stiffness Using Cardiac Shear Wave Elastography. Journal of Ultrasound in Medicine, 2016, 35, 1419-1427.	1.7	44
32	Implementation of vibro-acoustography on a clinical ultrasound system. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1169-1181.	3.0	43
33	Multifrequency vibro-acoustography. IEEE Transactions on Medical Imaging, 2006, 25, 1284-1295.	8.9	41
34	In Vivo Vibroacoustography of Large Peripheral Arteries. Investigative Radiology, 2008, 43, 243-252.	6.2	41
35	Local Phase Velocity Based Imaging: A New Technique Used for Ultrasound Shear Wave Elastography. IEEE Transactions on Medical Imaging, 2019, 38, 894-908.	8.9	41
36	Noninvasive Evaluation of Bladder Wall Mechanical Properties as a Function of Filling Volume: Potential Application in Bladder Compliance Assessment. PLoS ONE, 2016, 11, e0157818.	2.5	37

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37	Shear wave vibrometry evaluation in transverse isotropic tissue mimicking phantoms and skeletal muscle. Physics in Medicine and Biology, 2014, 59, 7735-7752.	3.0	36
38	Probe Oscillation Shear Elastography (PROSE): A High Frame-Rate Method for Two-Dimensional Ultrasound Shear Wave Elastography. IEEE Transactions on Medical Imaging, 2016, 35, 2098-2106.	8.9	36
39	Production of acoustic radiation force using ultrasound: methods and applications. Expert Review of Medical Devices, 2018, 15, 819-834.	2.8	36
40	Modulation of ultrasound to produce multifrequency radiation force. Journal of the Acoustical Society of America, 2010, 127, 1228-1238.	1.1	35
41	Coded excitation plane wave imaging for shear wave motion detection. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1356-1372.	3.0	34
42	RSNA QIBA ultrasound shear wave speed Phase II phantom study in viscoelastic media. , 2015, , .		33
43	Shearwave dispersion ultrasound vibrometry applied to in vivo myocardium. , 2009, 2009, 2891-4.		29
44	Shear Wave Speed Measurement Using an Unfocused UltrasoundÂBeam. Ultrasound in Medicine and Biology, 2012, 38, 1646-1655.	1.5	29
45	Performance of 2â€Đimensional Ultrasound Shear Wave Elastography in Liver Fibrosis Detection Using Magnetic Resonance Elastography as the Reference Standard. Journal of Ultrasound in Medicine, 2016, 35, 401-412.	1.7	29
46	Influence of wall thickness and diameter on arterial shear wave elastography: a phantom and finite element study. Physics in Medicine and Biology, 2017, 62, 2694-2718.	3.0	29
47	Generalized response of a sphere embedded in a viscoelastic medium excited by an ultrasonic radiation force. Journal of the Acoustical Society of America, 2011, 130, 1133-1141.	1.1	28
48	Breast vibro-acoustography: initial results show promise. Breast Cancer Research, 2012, 14, R128.	5.0	27
49	Application of Acoustoelasticity to Evaluate Nonlinear Modulus in <italic>Ex Vivo</italic> Kidneys. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 188-200.	3.0	27
50	Two Point Method For Robust Shear Wave Phase Velocity Dispersion Estimation of Viscoelastic Materials. Ultrasound in Medicine and Biology, 2019, 45, 2540-2553.	1.5	26
51	Harmonic pulsed excitation and motion detection of a vibrating reflective target. Journal of the Acoustical Society of America, 2008, 123, 519-533.	1.1	25
52	Harmonic motion detection in a vibrating scattering medium. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1956-1974.	3.0	25
53	Noninvasive Assessment of Liver Fibrosis Using Ultrasoundâ€Based Shear Wave Measurement and Comparison to Magnetic Resonance Elastography. Journal of Ultrasound in Medicine, 2014, 33, 1597-1604.	1.7	25
54	Radiological Society of North America/Quantitative Imaging Biomarker Alliance Shear Wave Speed Bias Quantification in Elastic and Viscoelastic Phantoms. Journal of Ultrasound in Medicine, 2021, 40, 569-581.	1.7	25

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55	Improved Shear Wave Group Velocity Estimation Method Based on Spatiotemporal Peak and Thresholding Motion Search. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 660-668.	3.0	22
56	Investigation of the effects of myocardial anisotropy for shear wave elastography using impulsive force and harmonic vibration. Physics in Medicine and Biology, 2016, 61, 365-382.	3.0	22
57	Robust Phase Velocity Dispersion Estimation of Viscoelastic Materials Used for Medical Applications Based on the Multiple Signal Classification Method. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 423-439.	3.0	21
58	Two-Point Frequency Shift Method for Shear Wave Attenuation Measurement. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 483-496.	3.0	21
59	Pediatric Cardiac Shear Wave Elastography for Quantitative Assessment of Myocardial Stiffness: A Pilot Study in Healthy Controls. Ultrasound in Medicine and Biology, 2016, 42, 1719-1729.	1.5	20
60	Application of Attenuation Measuring Ultrasound Shearwave Elastography in 8 post-transplant liver patients. , 2014, , .		19
61	Modeling transversely isotropic, viscoelastic, incompressible tissue-like materials with application in ultrasound shear wave elastography. Physics in Medicine and Biology, 2015, 60, 1289-1306.	3.0	19
62	Local Phase Velocity Based Imaging of Viscoelastic Phantoms and Tissues. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 389-405.	3.0	19
63	Y-box binding protein-1 is crucial in acquired drug resistance development in metastatic clear-cell renal cell carcinoma. Journal of Experimental and Clinical Cancer Research, 2020, 39, 33.	8.6	19
64	Phase aberration correction using ultrasound radiation force and vibrometry optimization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 1142-1153.	3.0	18
65	Characterization of transverse isotropy in compressed tissue-mimicking phantoms. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1036-1046.	3.0	18
66	Improvement of Shear Wave Motion Detection Using Harmonic Imaging in Healthy Human Liver. Ultrasound in Medicine and Biology, 2016, 42, 1031-1041.	1.5	18
67	Arterial waveguide model for shear wave elastography: implementation andin vitrovalidation. Physics in Medicine and Biology, 2017, 62, 5473-5494.	3.0	18
68	Characterizing blood clots using acoustic radiation force optical coherence elastography and ultrasound shear wave elastography. Physics in Medicine and Biology, 2021, 66, 035013.	3.0	18
69	Vibro-acoustography beam formation with reconfigurable arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1421-1431.	3.0	17
70	Combined spatiotemporal and frequency-dependent shear wave elastography enables detection of vulnerable carotid plaques as validated by MRI. Scientific Reports, 2020, 10, 403.	3.3	17
71	In vivo swine kidney viscoelasticity during acute gradual decrease in renal blood flow: pilot study. Revista De Ingenieria Biomedica, 2013, 7, 68-78.	0.1	17
72	Phase Velocity Estimation With Expanded Bandwidth in Viscoelastic Phantoms and Tissues. IEEE Transactions on Medical Imaging, 2021, 40, 1352-1362.	8.9	16

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73	Optical coherence tomography for evaluating capillary waves in blood and plasma. Biomedical Optics Express, 2020, 11, 1092.	2.9	16
74	Thermal Safety of Vibro-Acoustography Using a Confocal Transducer. Ultrasound in Medicine and Biology, 2010, 36, 343-349.	1.5	15
75	Multi-source and multi-directional shear wave generation with intersecting steered ultrasound push beams. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 647-662.	3.0	15
76	Phase Aberration and Attenuation Effects on Acoustic Radiation Force-Based Shear Wave Generation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 222-232.	3.0	15
77	Acoustic Radiation Force-Induced Creepâ€"Recovery (ARFICR): A Noninvasive Method to Characterize Tissue Viscoelasticity. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 3-13.	3.0	15
78	Dispersion curve calculation in viscoelastic tissue-mimicking materials using non-parametric, parametric, and high-resolution methods. Ultrasonics, 2021, 109, 106257.	3.9	15
79	Automated Compression Device for Viscoelasticity Imaging. IEEE Transactions on Biomedical Engineering, 2017, 64, 1535-1546.	4.2	14
80	A beamforming study for implementation of vibro-acoustography with a 1.75-D array transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 535-551.	3.0	13
81	Simultaneous identification of elastic properties, thickness, and diameter of arteries excited with ultrasound radiation force. Physics in Medicine and Biology, 2015, 60, 5279-5296.	3.0	13
82	1Î±,25-Dihydroxyvitamin D3 Encapsulated in Nanoparticles Prevents Venous Neointimal Hyperplasia and Stenosis in Porcine Arteriovenous Fistulas. Journal of the American Society of Nephrology: JASN, 2021, 32, 866-885.	6.1	13
83	Multimodal guided wave inversion for arterial stiffness: methodology and validation in phantoms. Physics in Medicine and Biology, 2021, 66, 115020.	3.0	13
84	Discrepancies in Reporting Tissue Material Properties. Journal of Ultrasound in Medicine, 2013, 32, 886-888.	1.7	13
85	Multifrequency radiation force of acoustic waves in fluids. Physica D: Nonlinear Phenomena, 2007, 232, 48-53.	2.8	12
86	Measurement of biaxial mechanical properties of soft tubes and arteries using piezoelectric elements and sonometry. Physics in Medicine and Biology, 2011, 56, 3371-3386.	3.0	12
87	Optimized Shear Wave Generation Using Hybrid Beamforming Methods. Ultrasound in Medicine and Biology, 2014, 40, 188-199.	1.5	12
88	Detecting Kidney Stones Using Twinkling Artifacts: Survey of Kidney Stones with Varying Composition and Size. Ultrasound in Medicine and Biology, 2020, 46, 156-166.	1.5	12
89	Time-Aligned Plane Wave Compounding Methods for High-Frame-Rate Shear Wave Elastography: Experimental Validation and Performance Assessment on Tissue Phantoms. Ultrasound in Medicine and Biology, 2021, 47, 1931-1948.	1.5	12
90	Measuring the phase of vibration of spheres in a viscoelastic medium as an image contrast modality. Journal of the Acoustical Society of America, 2005, 118, 3465-3472.	1.1	11

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91	In vitro renal cortex elasticity and viscosity measurements with shearwave dispersion ultrasound vibrometry (SDUV) on swine kidney. , 2009, 2009, 4428-31.		11
92	Shear wave Dispersion Ultrasound Vibrometry (SDUV) on an ultrasound system: In vivo measurement of liver viscoelasticity in healthy animals. , 2010, , .		11
93	Fast Local Phase Velocity-Based Imaging: Shear Wave Particle Velocity and Displacement Motion Study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 526-537.	3.0	11
94	Acoustic radiation force optical coherence elastography for evaluating mechanical properties of soft condensed matters and its biological applications. Journal of Biophotonics, 2020, 13, e201960134.	2.3	11
95	Fluid surface tension evaluation using capillary wave measurement with optical coherence tomography. AIP Advances, 2020, 10, 055121.	1.3	11
96	Four-dimensional (4D) phase velocity optical coherence elastography in heterogeneous materials and biological tissue. Biomedical Optics Express, 2020, 11, 3795.	2.9	11
97	Quantification of liver stiffness and viscosity with SDUV: In vivo animal study. , 2008, , .		10
98	Characterization of material properties of soft solid thin layers with acoustic radiation force and wave propagation. Journal of the Acoustical Society of America, 2015, 138, 2499-2507.	1.1	10
99	Plaque characterization using shear wave elastographyâ€"evaluation of differentiability and accuracy using a combined ex vivo and in vitro setup. Physics in Medicine and Biology, 2018, 63, 235008.	3.0	10
100	Evaluation of Reconstruction Parameters for 2-D Comb-Push Ultrasound Shear Wave Elastography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 254-263.	3.0	10
101	Ex Vivo measurements of myocardial viscoelasticity using Shearwave Dispersion Ultrasound Vibrometry (SDUV). , 2009, 2009, 2895-8.		9
102	In vivo thyroid vibro-acoustography: a pilot study. BMC Medical Imaging, 2013, 13, 12.	2.7	9
103	In vivo transthoracic measurement of end-diastolic left ventricular stiffness with ultrasound shear wave elastography: A pilot study. , 2014, , .		9
104	Probe Oscillation Shear Wave Elastography: Initial <italic>In Vivo</italic> Results in Liver. IEEE Transactions on Medical Imaging, 2018, 37, 1214-1223.	8.9	9
105	In vivo open- and closed-chest measurements of left-ventricular myocardial viscoelasticity using lamb wave dispersion ultrasound vibrometry (LDUV): a feasibility study. Biomedical Physics and Engineering Express, 2018, 4, 047001.	1.2	9
106	Three-dimensional shear wave elastography on conventional ultrasound scanners with external vibration. Physics in Medicine and Biology, 2020, 65, 215009.	3.0	9
107	Using Ultrasound Color Doppler Twinkling to Identify Biopsy Markers in the Breast and Axilla. Ultrasound in Medicine and Biology, 2021, 47, 3122-3134.	1.5	9
108	Measurements of swine renal cortex shear elasticity and viscosity with Shearwave Dispersion Ultrasound Vibrometry (SDUV). , 2009, , .		8

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109	Vibro-acoustography and multifrequency image compounding. Ultrasonics, 2011, 51, 689-696.	3.9	8
110	Comb-push Ultrasound Shear Elastography (CUSE): A novel and fast technique for shear elasticity imaging. , 2012, , .		8
111	Velocity measurement by vibro-acoustic Doppler. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 752-765.	3.0	8
112	Ultrasound vibrometry using orthogonal- frequency-based vibration pulses. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 2359-2370.	3.0	8
113	Viscoelastic parameter estimation using simulated shear wave motion and convolutional neural networks. Computers in Biology and Medicine, 2021, 133, 104382.	7.0	8
114	Novel Uses of Ultrasound to Assess Kidney Mechanical Properties. Kidney360, 2021, 2, 1531-1539.	2.1	8
115	Measurement of longitudinal and circumferential waves in tubes and artery excited with ultrasound radiation force. , 2013, , .		7
116	Discrepancies in Reporting Tissue Material Properties. Journal of Ultrasound in Medicine, 2013, 32, 886-888.	1.7	7
117	Characterization of transverse isotropy in compressed tissue mimicking phantoms. , 2014, 62, 1036-46.		7
118	Shear wave elastography on the GE LOGIQ E9 with Comb-push Ultrasound Shear Elastography (CUSE) and time aligned sequential tracking (TAST). , 2014, , .		7
119	Ultrasonic method to characterize shear wave propagation in micellar fluids. Journal of the Acoustical Society of America, 2016, 140, 1719-1726.	1.1	7
120	Ex vivo measurements of mechanical properties of myocardium using Lamb and Rayleigh wave dispersion velocities. , 2009, , .		6
121	Modal analysis of ultrasound radiation force generated shear waves on arteries. , 2010, 2010, 2585-8.		6
122	Composed vibration pulses for ultrasound vibrometry. , 2010, , .		6
123	Deconvolution of vibroacoustic images using a simulation model based on a three dimensional point spread function. Ultrasonics, 2013, 53, 36-44.	3.9	6
124	Viscoelastic tissue mimicking phantom validation study with shear wave elasticity imaging and viscoelastic spectroscopy. , 2015, , .		6
125	GPU-based Greenâ€™s function simulations of shear waves generated by an applied acoustic radiation force in elastic and viscoelastic models. Physics in Medicine and Biology, 2018, 63, 10NT01.	3.0	6
126	Ultrasound Shear Wave Elastography as a Measure of Porcine Hepatic Disease in Right Heart Dysfunction: A Pilot Study. Ultrasound in Medicine and Biology, 2018, 44, 2393-2399.	1.5	6

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127	Downstream vascular changes after flow-diverting device deployment in a rabbit model. Journal of NeuroInterventional Surgery, 2019, 11, 523-527.	3.3	6
128	Two-dimensional (2D) dynamic vibration optical coherence elastography (DV-OCE) for evaluating mechanical properties: a potential application in tissue engineering. Biomedical Optics Express, 2021, 12, 1217.	2.9	6
129	Estimation of mechanical properties of arteries and soft tubes using shear wave speeds. , 2009, , .		5
130	Lamb wave Shearwave Dispersion Ultrasound Vibrometry (SDUV) validation study. , 2010, 2010, 45-8.		5
131	In vivo open and closed chest measurements of myocardial viscoelasticity through a heart cycle using Lamb wave Dispersion Ultrasound Vibrometry (LDUV). , 2011, , .		5
132	In vivo patient measurements of bladder elasticity using Ultrasound Bladder Vibrometry (UBV). , 2013, 2013, 113-6.		5
133	The â€˜sixth senseâ€™ of ultrasound: probing nonlinear elasticity with acoustic radiation force. Physics in Medicine and Biology, 2015, 60, 3775-3794.	3.0	5
134	Characterizing thrombus with multiple red blood cell compositions by optical coherence tomography attenuation coefficient. Journal of Biophotonics, 2021, 14, e202000364.	2.3	5
135	Elasticity and viscosity estimation from shear wave velocity and attenuation: A simulation study. , 2010, , .		4
136	Phase aberration in Shear Wave Dispersion Ultrasound Vibrometry. , 2011, , .		4
137	Fast shear compounding using directional filtering and two-dimensional shear wave speed calculation. , 2013, , .		4
138	Effects of phase aberration on acoustic radiation force-based shear wave generation. , 2013, , .		4
139	Feasibility of shear wave elastography for plaque characterization. , 2014, , .		4
140	Application of acoustoelasticity to evaluate non-linear modulus in ex vivo kidneys. , 2016, , .		4
141	A parametric evaluation of shear wave speeds estimated with time-of-flight calculations in viscoelastic media. Journal of the Acoustical Society of America, 2020, 148, 1349-1371.	1.1	4
142	Plane wave elastography: a frequency-domain ultrasound shear wave elastography approach. Physics in Medicine and Biology, 2021, 66, 125017.	3.0	4
143	In vivo assessment of renal tissue viscoelasticity during acute and gradual renal ischemia. , 2011, , .		3
144	Complex shear modulus quantification from acoustic radiation force creep-recovery and shear wave propagation. , 2012, , .		3

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145	In vivo measurement of renal transplant viscoelasticity. , 2013, , .		3
146	Shear waves generated with magnetomotive force on an embedded sphere. , 2014, , .		3
147	Investigation of the effects of myocardial anisotropy for shear wave elastography using acoustic radiation force and harmonic vibration. , 2015, , .		3
148	Tissue characterization using simultaneous estimation of backscatter coefficient and elastic shear modulus. , 2016, 2016, 2881-2884.		3
149	Nondestructive measurement of esophageal biaxial mechanical properties utilizing sonometry. Physics in Medicine and Biology, 2016, 61, 4781-4795.	3.0	3
150	Optical coherence viscometry. Applied Physics Letters, 2021, 118, 164102.	3.3	3
151	Toward improved accuracy in shear wave elastography of arteries through controlling the arterial response to ultrasound perturbation in-silico and in phantoms. Physics in Medicine and Biology, 2021, 66, 235008.	3.0	3
152	A Non-invasive Method to Estimate the Stressâ€“Strain Curve of Soft Tissue Using Ultrasound Elastography. Ultrasound in Medicine and Biology, 2022, 48, 786-807.	1.5	3
153	Orthogonal Frequency Ultrasound Vibrometry. , 2010, , .		2
154	Viscoelastic measurements on perfused and non-perfused swine renal cortex in vivo. , 2010, , .		2
155	Inversion of Lamb waves in Shearwave Dispersion Ultrasound Vibrometry (SDUV). , 2010, , .		2
156	Effect of prestretch on modes of shear wave propagation on arteries. , 2010, , .		2
157	In vivo measurements of viscoelasticity of the swine heart using Shearwave Dispersionc Ultrasound Vibrometry (SDUV). , 2010, , .		2
158	Two-dimensional shear elasticity imaging using external mechanical vibration. , 2013, , .		2
159	Acoustic radiation force creep-recovery: Theory and finite element modeling. , 2013, , .		2
160	Recovering shear wave velocity in boundary sensitive media with two-dimensional motion tracking. , 2014, , .		2
161	Effects of phase aberration on acoustic radiation force-based shear wave generation. , 2014, , .		2
162	Implementation of shear wave elastography on pediatric cardiac transducers with pulse-inversion harmonic imaging and time-aligned sequential tracking. , 2015, , .		2

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163	Complex background suppression for vibro-acoustography images. Ultrasonics, 2015, 56, 456-472.	3.9	2
164	Shear Wave Elastography Applied for the Investigation of Tendon Material Properties. Academic Radiology, 2016, 23, 1201-1203.	2.5	2
165	Simultaneous estimation of shear elastic modulus and backscatter coefficient: Phantom and in human liver in vivo study. , 2016, , .		2
166	Use of shear wave ultrasound vibrometry for detection of simulated esophageal malignancy inex vivoporcine esophagi. Biomedical Physics and Engineering Express, 2016, 2, 065002.	1.2	2
167	Mapped Chebyshev pseudo-spectral method for simulating the shear wave propagation in the plane of symmetry of a transversely isotropic viscoelastic medium. Medical and Biological Engineering and Computing, 2017, 55, 389-401.	2.8	2
168	Comparison of shear velocity dispersion in viscoelastic phantoms measured by ultrasound-based shear wave elastography and magnetic resonance elastography. , 2017, , .		2
169	Comparison of shear velocity dispersion in viscoelastic phantoms measured by ultrasound-based shear wave elastography and magnetic resonance elastography. , 2017, , .		2
170	Recent developments in spectral-based ultrasonic tissue characterization. , 2018, , .		2
171	Evaluation of materials used for vascular anastomoses using shear wave elastography. Physics in Medicine and Biology, 2019, 64, 075001.	3.0	2
172	Evaluation of Robustness of Local Phase Velocity Imaging in Homogenous Tissue-Mimicking Phantoms. Ultrasound in Medicine and Biology, 2021, 47, 3514-3528.	1.5	2
173	The influence of acoustic radiation force beam shape and location on wave spectral content for arterial dispersion ultrasound vibrometry. Physics in Medicine and Biology, 2022, 67, 135002.	3.0	2
174	Safety of arterial shear wave elastographyâ€"exâ€"vivo assessment of induced strain and strain rates. Biomedical Physics and Engineering Express, 0, , .	1.2	2
175	Implementation of vibro-acoustography on a clinical ultrasound system. , 2010, , .		1
176	Shear wave speed measurements using ultrasound radiation force can be depth dependent. , 2011, , .		1
177	Robust shear wave speed measurement using comb-push Ultrasound Radiation Force. , 2011, , .		1
178	Measuring bladder viscoelasticity using ultrasound. , 2012, , .		1
179	Measure elasticity and viscosity using the out-of-plane shear wave. , 2012, , .		1
180	Liver elasticity imaging using external Vibration Multi-directional Ultrasound Shearwave Elastography (EVMUSE). , 2014, , .		1

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181	A two-dimensional finite difference model of shear wave propagation in anisotropic soft tissue. , 2014, , .		1
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