

Matthew W Urban

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194
papers

3,492
citations

32
h-index

53
g-index

255
ext. papers

4,381
ext. citations

3.7
avg, IF

5.61
L-index

#	Paper	IF	Citations
194	Improved two-point frequency shift power method for measurement of shear wave attenuation.. <i>Ultrasonics</i> , 2022 , 124, 106735	3.5	0
193	Optical coherence viscometry. <i>Applied Physics Letters</i> , 2021 , 118, 164102	3.4	0
192	Multimodal guided wave inversion for arterial stiffness: methodology and validation in phantoms. <i>Physics in Medicine and Biology</i> , 2021 , 66,	3.8	3
191	Phase Velocity Estimation With Expanded Bandwidth in Viscoelastic Phantoms and Tissues. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 1352-1362	11.7	4
190	Plane wave elastography: a frequency-domain ultrasound shear wave elastography approach. <i>Physics in Medicine and Biology</i> , 2021 , 66,	3.8	1
189	Viscoelastic parameter estimation using simulated shear wave motion and convolutional neural networks. <i>Computers in Biology and Medicine</i> , 2021 , 133, 104382	7	2
188	Novel Uses of Ultrasound to Assess Kidney Mechanical Properties.. <i>Kidney360</i> , 2021 , 2, 1531-1539	1.8	1
187	Local Phase Velocity Based Imaging of Viscoelastic Phantoms and Tissues. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 389-405	3.2	8
186	Dispersion curve calculation in viscoelastic tissue-mimicking materials using non-parametric, parametric, and high-resolution methods. <i>Ultrasonics</i> , 2021 , 109, 106257	3.5	5
185	Characterizing thrombus with multiple red blood cell compositions by optical coherence tomography attenuation coefficient. <i>Journal of Biophotonics</i> , 2021 , 14, e202000364	3.1	4
184	Radiological Society of North America/Quantitative Imaging Biomarker Alliance Shear Wave Speed Bias Quantification in Elastic and Viscoelastic Phantoms. <i>Journal of Ultrasound in Medicine</i> , 2021 , 40, 569-581	2.9	8
183	125-Dihydroxyvitamin D Encapsulated in Nanoparticles Prevents Venous Neointimal Hyperplasia and Stenosis in Porcine Arteriovenous Fistulas. <i>Journal of the American Society of Nephrology: JASN</i> , 2021 ,	12.7	5
182	Two-dimensional (2D) dynamic vibration optical coherence elastography (DV-OCE) for evaluating mechanical properties: a potential application in tissue engineering. <i>Biomedical Optics Express</i> , 2021 , 12, 1217-1235	3.5	1
181	Time-Aligned Plane Wave Compounding Methods for High-Frame-Rate Shear Wave Elastography: Experimental Validation and Performance Assessment on Tissue Phantoms. <i>Ultrasound in Medicine and Biology</i> , 2021 , 47, 1931-1948	3.5	0
180	Evaluation of Robustness of Local Phase Velocity Imaging in Homogenous Tissue-Mimicking Phantoms. <i>Ultrasound in Medicine and Biology</i> , 2021 , 47, 3514-3528	3.5	0
179	Using Ultrasound Color Doppler Twinkling to Identify Biopsy Markers in the Breast and Axilla. <i>Ultrasound in Medicine and Biology</i> , 2021 , 47, 3122-3134	3.5	0
178	Characterizing blood clots using acoustic radiation force optical coherence elastography and ultrasound shear wave elastography. <i>Physics in Medicine and Biology</i> , 2021 , 66, 035013	3.8	9

177	Fluid surface tension evaluation using capillary wave measurement with optical coherence tomography. <i>AIP Advances</i> , 2020 , 10, 055121	1.5	2
176	C-Elastography: In Vitro Feasibility Phantom Study. <i>Ultrasound in Medicine and Biology</i> , 2020 , 46, 1738-1754	3.5	1
175	Combined spatiotemporal and frequency-dependent shear wave elastography enables detection of vulnerable carotid plaques as validated by MRI. <i>Scientific Reports</i> , 2020 , 10, 403	4.9	5
174	Y-box binding protein-1 is crucial in acquired drug resistance development in metastatic clear-cell renal cell carcinoma. <i>Journal of Experimental and Clinical Cancer Research</i> , 2020 , 39, 33	12.8	10
173	Optical coherence tomography for evaluating capillary waves in blood and plasma. <i>Biomedical Optics Express</i> , 2020 , 11, 1092-1106	3.5	9
172	Four-dimensional (4D) phase velocity optical coherence elastography in heterogeneous materials and biological tissue. <i>Biomedical Optics Express</i> , 2020 , 11, 3795-3817	3.5	6
171	Abstract TP44: Evaluating Mechanical Properties of Human Blood Clot Analogues Using Ultrasound-mediated Optical Coherence Elastography. <i>Stroke</i> , 2020 , 51,	6.7	1
170	Fast Local Phase Velocity-Based Imaging: Shear Wave Particle Velocity and Displacement Motion Study. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020 , 67, 526-537	3.2	5
169	Acoustic radiation force optical coherence elastography for evaluating mechanical properties of soft condensed matters and its biological applications. <i>Journal of Biophotonics</i> , 2020 , 13, e201960134	3.1	6
168	Three-dimensional shear wave elastography on conventional ultrasound scanners with external vibration. <i>Physics in Medicine and Biology</i> , 2020 , 65, 215009	3.8	1
167	A parametric evaluation of shear wave speeds estimated with time-of-flight calculations in viscoelastic media. <i>Journal of the Acoustical Society of America</i> , 2020 , 148, 1349	2.2	
166	Two-Point Frequency Shift Method for Shear Wave Attenuation Measurement. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020 , 67, 483-496	3.2	10
165	Detecting Kidney Stones Using Twinkling Artifacts: Survey of Kidney Stones with Varying Composition and Size. <i>Ultrasound in Medicine and Biology</i> , 2020 , 46, 156-166	3.5	6
164	Two Point Method For Robust Shear Wave Phase Velocity Dispersion Estimation of Viscoelastic Materials. <i>Ultrasound in Medicine and Biology</i> , 2019 , 45, 2540-2553	3.5	16
163	Evaluation of materials used for vascular anastomoses using shear wave elastography. <i>Physics in Medicine and Biology</i> , 2019 , 64, 075001	3.8	2
162	Downstream vascular changes after flow-diverting device deployment in a rabbit model. <i>Journal of NeuroInterventional Surgery</i> , 2019 , 11, 523-527	7.8	5
161	Local Phase Velocity Based Imaging: A New Technique Used for Ultrasound Shear Wave Elastography. <i>IEEE Transactions on Medical Imaging</i> , 2019 , 38, 894-908	11.7	22
160	Evaluation of Reconstruction Parameters for 2-D Comb-Push Ultrasound Shear Wave Elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2019 , 66, 254-263	3.2	5

159	Robust Phase Velocity Dispersion Estimation of Viscoelastic Materials Used for Medical Applications Based on the Multiple Signal Classification Method. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 423-439	3.2	18
158	Probe Oscillation Shear Wave Elastography: Initial In Vivo Results in Liver. <i>IEEE Transactions on Medical Imaging</i> , 2018 , 37, 1214-1223	11.7	7
157	Open- and Closed-chest Measurements of Left-Ventricular Myocardial Viscoelasticity using Lamb wave Dispersion Ultrasound Vibrometry (LDUV): A Feasibility Study. <i>Biomedical Physics and Engineering Express</i> , 2018 , 4,	1.5	5
156	Acoustic Radiation Force-Induced Creep-Recovery (ARFICR): A Noninvasive Method to Characterize Tissue Viscoelasticity. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 3-13	3.2	11
155	Application of Acoustoelasticity to Evaluate Nonlinear Modulus in Ex Vivo Kidneys. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 188-200	3.2	18
154	Recent developments in spectral-based ultrasonic tissue characterization 2018 ,		2
153	Ultrasound Shear Wave Elastography as a Measure of Porcine Hepatic Disease in Right Heart Dysfunction: A Pilot Study. <i>Ultrasound in Medicine and Biology</i> , 2018 , 44, 2393-2399	3.5	4
152	Plaque characterization using shear wave elastography-evaluation of differentiability and accuracy using a combined ex vivo and in vitro setup. <i>Physics in Medicine and Biology</i> , 2018 , 63, 235008	3.8	5
151	Harmonic Shear Wave Elastography 2018 , 238-249		
150	Vibro-acoustography and its Medical Applications 2018 , 250-263		1
149	Theory of Ultrasound Physics and Imaging 2018 , 7-28		
148	Transient Elastography: From Research to Noninvasive Assessment of Liver Fibrosis Using Fibroscan [®] 2018 , 295-317		
147	Transverse Wave Propagation in Bounded Media 2018 , 90-104		
146	Wave Propagation in Viscoelastic Materials 2018 , 118-127		1
145	Current and Future Clinical Applications of Elasticity Imaging Techniques 2018 , 471-491		
144	Viscoelastic Creep Imaging 2018 , 171-188		3
143	Shear Wave Dispersion Ultrasound Vibrometry 2018 , 284-294		
142	Single Tracking Location Shear Wave Elastography 2018 , 368-387		

141 Anisotropic Shear Wave Elastography **2018**, 399-421

140 Application of Guided Waves for Quantifying Elasticity and Viscoelasticity of Boundary Sensitive Organs **2018**, 422-441

139 Model-free Techniques for Estimating Tissue Viscoelasticity **2018**, 442-450

138 Acoustic Radiation Force-based Ultrasound Elastography for Cardiac Imaging Applications **2018**, 504-519

137 Cardiovascular Application of Shear Wave Elastography **2018**, 520-533

136 Historical Growth of Ultrasound Elastography and Directions for the Future **2018**, 567-579

135 Production of acoustic radiation force using ultrasound: methods and applications. *Expert Review of Medical Devices*, **2018**, 15, 819-834 3.5 15

134 GPU-based Green'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 3.8 1

133 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 3.1 1

132 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 3.2 16

131 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 3.8 18

130 Arterial waveguide model for shear wave elastography: implementation and in vitro validation. *Physics in Medicine and Biology*, **2017**, 62, 5473-5494 3.8 9

129 Attenuation measuring ultrasound shearwave elastography and in vivo application in post-transplant liver patients. *Physics in Medicine and Biology*, **2017**, 62, 484-500 3.8 47

128 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 3.2 35

127 Comparison of shear velocity dispersion in viscoelastic phantoms measured by ultrasound-based shear wave elastography and magnetic resonance elastography **2017**, 2

126 Automated Compression Device for Viscoelasticity Imaging. *IEEE Transactions on Biomedical Engineering*, **2017**, 64, 1535-1546 5 11

125 Comparison of shear velocity dispersion in viscoelastic phantoms measured by ultrasound-based shear wave elastography and magnetic resonance elastography **2017**, 2

124 Application of acoustoelasticity to evaluate non-linear modulus in ex vivo kidneys **2016**, 2

123	Introduction to the Special Issue on Quantitative Ultrasound-Based Tissue Characterization. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016 , 63, 1231-1233	3.2	
122	Simultaneous estimation of shear elastic modulus and backscatter coefficient: Phantom and in human liver in vivo study 2016 ,		2
121	Improvement of Shear Wave Motion Detection Using Harmonic Imaging in Healthy Human Liver. <i>Ultrasound in Medicine and Biology</i> , 2016 , 42, 1031-41	3.5	13
120	Performance of 2-Dimensional Ultrasound Shear Wave Elastography in Liver Fibrosis Detection Using Magnetic Resonance Elastography as the Reference Standard: A Pilot Study. <i>Journal of Ultrasound in Medicine</i> , 2016 , 35, 401-12	2.9	27
119	Phase Aberration and Attenuation Effects on Acoustic Radiation Force-Based Shear Wave Generation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016 , 63, 222-32	3.2	8
118	Arterial Stiffness Estimation by Shear Wave Elastography: Validation in Phantoms with Mechanical Testing. <i>Ultrasound in Medicine and Biology</i> , 2016 , 42, 308-21	3.5	53
117	Noninvasive Evaluation of Bladder Wall Mechanical Properties as a Function of Filling Volume: Potential Application in Bladder Compliance Assessment. <i>PLoS ONE</i> , 2016 , 11, e0157818	3.7	27
116	Investigation of the effects of myocardial anisotropy for shear wave elastography using impulsive force and harmonic vibration. <i>Physics in Medicine and Biology</i> , 2016 , 61, 365-82	3.8	12
115	Quantitative Assessment of Left Ventricular Diastolic Stiffness Using Cardiac Shear Wave Elastography: A Pilot Study. <i>Journal of Ultrasound in Medicine</i> , 2016 , 35, 1419-27	2.9	31
114	Ultrasonic method to characterize shear wave propagation in micellar fluids. <i>Journal of the Acoustical Society of America</i> , 2016 , 140, 1719	2.2	4
113	Tissue characterization using simultaneous estimation of backscatter coefficient and elastic shear modulus. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2016 , 2016, 2881-2884	0.9	1
112	Pediatric Cardiac Shear Wave Elastography for Quantitative Assessment of Myocardial Stiffness: A Pilot Study in Healthy Controls. <i>Ultrasound in Medicine and Biology</i> , 2016 , 42, 1719-29	3.5	12
111	Probe Oscillation Shear Elastography (PROSE): A High Frame-Rate Method for Two-Dimensional Ultrasound Shear Wave Elastography. <i>IEEE Transactions on Medical Imaging</i> , 2016 , 35, 2098-106	11.7	22
110	Shear Wave Elastography Quantifies Stiffness in Ex Vivo Porcine Artery with Stiffened Arterial Region. <i>Ultrasound in Medicine and Biology</i> , 2016 , 42, 2423-35	3.5	33
109	Nondestructive measurement of esophageal biaxial mechanical properties utilizing sonometry. <i>Physics in Medicine and Biology</i> , 2016 , 61, 4781-95	3.8	1
108	Superficial ultrasound shear wave speed measurements in soft and hard elasticity phantoms: repeatability and reproducibility using two ultrasound systems. <i>Pediatric Radiology</i> , 2015 , 45, 376-85	2.8	51
107	Two-dimensional shear-wave elastography on conventional ultrasound scanners with time-aligned sequential tracking (TAST) and comb-push ultrasound shear elastography (CUSE). <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 290-302	3.2	61
106	Coded excitation plane wave imaging for shear wave motion detection. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 1356-72	3.2	29

105	Characterization of transverse isotropy in compressed tissue-mimicking phantoms. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 1036-1046	3.2	8
104	Simultaneous identification of elastic properties, thickness, and diameter of arteries excited with ultrasound radiation force. <i>Physics in Medicine and Biology</i> , 2015 , 60, 5279-96	3.8	9
103	The sixth sense of ultrasound: probing nonlinear elasticity with acoustic radiation force. <i>Physics in Medicine and Biology</i> , 2015 , 60, 3775-94	3.8	4
102	Multi-source and multi-directional shear wave generation with intersecting steered ultrasound push beams. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 647-62	3.2	13
101	Complex background suppression for vibro-acoustography images. <i>Ultrasonics</i> , 2015 , 56, 456-72	3.5	1
100	Characterization of transverse isotropy in compressed tissue-mimicking phantoms. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 1036-46	3.2	4
99	Characterization of material properties of soft solid thin layers with acoustic radiation force and wave propagation. <i>Journal of the Acoustical Society of America</i> , 2015 , 138, 2499-507	2.2	9
98	Special issue on Quantitative Ultrasound-Based Tissue Characterization - Call for Papers. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, c5-c5	3.2	
97	RSNA QIBA ultrasound shear wave speed Phase II phantom study in viscoelastic media 2015 ,		28
96	A high frame-rate and low-cost Elastography system by generating shear waves through continuous vibration of the ultrasound transducer 2015 ,		1
95	In vivo liver shear wave motion detection and shear wave speed comparison between fundamental and harmonic imaging 2015 ,		1
94	In-plane anisotropy method for the characterization of the elastic properties of anisotropic materials 2015 ,		1
93	Implementation of shear wave elastography on pediatric cardiac transducers with pulse-inversion harmonic imaging and time-aligned sequential tracking 2015 ,		2
92	Investigation of the effects of myocardial anisotropy for shear wave elastography using acoustic radiation force and harmonic vibration 2015 ,		2
91	Viscoelastic tissue mimicking phantom validation study with shear wave elasticity imaging and viscoelastic spectroscopy 2015 ,		4
90	Modeling transversely isotropic, viscoelastic, incompressible tissue-like materials with application in ultrasound shear wave elastography. <i>Physics in Medicine and Biology</i> , 2015 , 60, 1289-306	3.8	14
89	Viscoelastic characterization of transverse isotropic tissue mimicking phantoms and muscle 2014 ,		1
88	Recovering shear wave velocity in boundary sensitive media with two-dimensional motion tracking 2014 ,		1

87	Noninvasive assessment of liver fibrosis using ultrasound-based shear wave measurement and comparison to magnetic resonance elastography. <i>Journal of Ultrasound in Medicine</i> , 2014 , 33, 1597-604	2.9	22
86	Shear wave elastography on the GE LOGIQ E9 with Comb-push Ultrasound Shear Elastography (CUSE) and time aligned sequential tracking (TAST) 2014 ,		4
85	Viscoelastic properties of normal and infarcted myocardium measured by a multifrequency shear wave method: comparison with pressure-segment length method. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 1785-95	3.5	52
84	Optimized shear wave generation using hybrid beamforming methods. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 188-99	3.5	9
83	Shear waves generated with magnetomotive force on an embedded sphere 2014 ,		2
82	Application of Attenuation Measuring Ultrasound Shearwave Elastography in 8 post-transplant liver patients 2014 ,		14
81	In vivo transthoracic measurement of end-diastolic left ventricular stiffness with ultrasound shear wave elastography: A pilot study 2014 ,		6
80	Liver elasticity imaging using external Vibration Multi-directional Ultrasound Shearwave Elastography (EVMUSE) 2014 ,		1
79	Shear wave vibrometry evaluation in transverse isotropic tissue mimicking phantoms and skeletal muscle. <i>Physics in Medicine and Biology</i> , 2014 , 59, 7735-52	3.8	29
78	External vibration multi-directional ultrasound shearwave elastography (EVMUSE): application in liver fibrosis staging. <i>IEEE Transactions on Medical Imaging</i> , 2014 , 33, 2140-8	11.7	32
77	Feasibility of shear wave elastography for plaque characterization 2014 ,		1
76	Fast shear compounding using robust 2-D shear wave speed calculation and multi-directional filtering. <i>Ultrasound in Medicine and Biology</i> , 2014 , 40, 1343-55	3.5	71
75	In vivo thyroid vibro-acoustography: a pilot study. <i>BMC Medical Imaging</i> , 2013 , 13, 12	2.9	5
74	Two-dimensional shear elasticity imaging using external mechanical vibration 2013 ,		1
73	Measurement of viscoelastic properties of in vivo swine myocardium using lamb wave dispersion ultrasound vibrometry (LDUV). <i>IEEE Transactions on Medical Imaging</i> , 2013 , 32, 247-61	11.7	39
72	In vivo measurement of renal transplant viscoelasticity 2013 ,		3
71	Deconvolution of vibroacoustic images using a simulation model based on a three dimensional point spread function. <i>Ultrasonics</i> , 2013 , 53, 36-44	3.5	4
70	Discrepancies in Reporting Tissue Material Properties. <i>Journal of Ultrasound in Medicine</i> , 2013 , 32, 886-888		6

69	Acoustic waves in medical imaging and diagnostics. <i>Ultrasound in Medicine and Biology</i> , 2013 , 39, 1133-46,	5	114
68	Ultrasound vibrometry using orthogonal- frequency-based vibration pulses. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013 , 60, 2359-70	3.2	4
67	Improved Shear Wave Motion Detection Using Pulse-Inversion Harmonic Imaging With a Phased Array Transducer. <i>IEEE Transactions on Medical Imaging</i> , 2013 , 32, 2299-310	11.7	65
66	Ultrasound bladder vibrometry method for measuring viscoelasticity of the bladder wall. <i>Physics in Medicine and Biology</i> , 2013 , 58, 2675-95	3.8	46
65	Comb-push ultrasound shear elastography (CUSE) with various ultrasound push beams. <i>IEEE Transactions on Medical Imaging</i> , 2013 , 32, 1435-47	11.7	55
64	A beamforming study for implementation of vibro-acoustography with a 1.75-D array transducer. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013 , 60, 535-51	3.2	11
63	Acoustic radiation force creep-recovery: Theory and finite element modeling 2013 ,		1
62	In vivo patient measurements of bladder elasticity using Ultrasound Bladder Vibrometry (UBV). <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2013 , 2013, 113-6	0.9	3
61	Measurement of longitudinal and circumferential waves in tubes and artery excited with ultrasound radiation force 2013 ,		4
60	In vivo swine kidney viscoelasticity during acute gradual decrease in renal blood flow: pilot study 2013 , 7, 68-78		17
59	Discrepancies in reporting tissue material properties. <i>Journal of Ultrasound in Medicine</i> , 2013 , 32, 886-8	2.9	9
58	Velocity measurement by vibro-acoustic Doppler. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 752-65	3.2	5
57	Shear wave speed measurement using an unfocused ultrasound beam. <i>Ultrasound in Medicine and Biology</i> , 2012 , 38, 1646-55	3.5	22
56	Comb-push ultrasound shear elastography (CUSE): a novel method for two-dimensional shear elasticity imaging of soft tissues. <i>IEEE Transactions on Medical Imaging</i> , 2012 , 31, 1821-32	11.7	123
55	Breast vibro-acoustography: initial results show promise. <i>Breast Cancer Research</i> , 2012 , 14, R128	8.3	20
54	Vibro-acoustography beam formation with reconfigurable arrays. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 1421-31	3.2	14
53	Measure elasticity and viscosity using the out-of-plane shear wave 2012 ,		1
52	Complex shear modulus quantification from acoustic radiation force creep-recovery and shear wave propagation 2012 ,		3

51	Loss tangent and complex modulus estimated by acoustic radiation force creep and shear wave dispersion. <i>Physics in Medicine and Biology</i> , 2012 , 57, 1263-82	3.8	36
50	Measuring bladder viscoelasticity using ultrasound 2012 ,		1
49	Comb-push Ultrasound Shear Elastography (CUSE): A novel and fast technique for shear elasticity imaging 2012 ,		4
48	A Review of Shearwave Dispersion Ultrasound Vibrometry (SDUV) and its Applications. <i>Current Medical Imaging</i> , 2012 , 8, 27-36	1.2	62
47	On Lamb and Rayleigh wave convergence in viscoelastic tissues. <i>Physics in Medicine and Biology</i> , 2011 , 56, 6723-38	3.8	49
46	Implementation of vibro-acoustography on a clinical ultrasound system. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 1169-81	3.2	35
45	Shearwave dispersion ultrasound vibrometry (SDUV) on swine kidney. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 2608-19	3.2	49
44	Phase velocities and attenuations of shear, Lamb, and Rayleigh waves in plate-like tissues submerged in a fluid (L). <i>Journal of the Acoustical Society of America</i> , 2011 , 130, 3549-52	2.2	62
43	Bias observed in time-of-flight shear wave speed measurements using radiation force of a focused ultrasound beam. <i>Ultrasound in Medicine and Biology</i> , 2011 , 37, 1884-92	3.5	66
42	AN OVERVIEW OF ELASTOGRAPHY - AN EMERGING BRANCH OF MEDICAL IMAGING. <i>Current Medical Imaging</i> , 2011 , 7, 255-282	1.2	269
41	A Review of Vibro-acoustography and its Applications in Medicine. <i>Current Medical Imaging</i> , 2011 , 7, 350-359		42
40	Shear wave dispersion ultrasonic vibrometry for measuring prostate shear stiffness and viscosity: an in vitro pilot study. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 235-42	5	42
39	Shear elastic modulus estimation from indentation and SDUV on gelatin phantoms. <i>IEEE Transactions on Biomedical Engineering</i> , 2011 , 58, 1706-14	5	49
38	Noninvasive ultrasound image guided surface wave method for measuring the wave speed and estimating the elasticity of lungs: A feasibility study. <i>Ultrasonics</i> , 2011 , 51, 289-95	3.5	39
37	Vibro-acoustography and multifrequency image compounding. <i>Ultrasonics</i> , 2011 , 51, 689-96	3.5	5
36	Measurement of biaxial mechanical properties of soft tubes and arteries using piezoelectric elements and sonometry. <i>Physics in Medicine and Biology</i> , 2011 , 56, 3371-86	3.8	10
35	In vivo assessment of renal tissue viscoelasticity during acute and gradual renal ischemia 2011 ,		3
34	Robust shear wave speed measurement using comb-push Ultrasound Radiation Force 2011 ,		1

33	Material property estimation for tubes and arteries using ultrasound radiation force and analysis of propagating modes. <i>Journal of the Acoustical Society of America</i> , 2011 , 129, 1344-54	2.2	127
32	Lamb wave dispersion ultrasound vibrometry (LDUV) method for quantifying mechanical properties of viscoelastic solids. <i>Physics in Medicine and Biology</i> , 2011 , 56, 2245-64	3.8	109
31	In vivo open and closed chest measurements of myocardial viscoelasticity through a heart cycle using Lamb wave Dispersion Ultrasound Vibrometry (LDUV) 2011 ,		5
30	Generalized response of a sphere embedded in a viscoelastic medium excited by an ultrasonic radiation force. <i>Journal of the Acoustical Society of America</i> , 2011 , 130, 1133-41	2.2	21
29	Thermal safety of vibro-acoustography using a confocal transducer. <i>Ultrasound in Medicine and Biology</i> , 2010 , 36, 343-9	3.5	11
28	Modal analysis of ultrasound radiation force generated shear waves on arteries. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 2585-8	0.9	4
27	Viscoelastic measurements on perfused and non-perfused swine renal cortex in vivo 2010 ,		2
26	Inversion of Lamb waves in Shearwave Dispersion Ultrasound Vibrometry (SDUV) 2010 ,		2
25	Modulation of ultrasound to produce multifrequency radiation force. <i>Journal of the Acoustical Society of America</i> , 2010 , 127, 1228-38	2.2	30
24	Composed vibration pulses for ultrasound vibrometry 2010 ,		5
23	Elasticity and viscosity estimation from shear wave velocity and attenuation: A simulation study 2010 ,		3
22	In vivo measurements of viscoelasticity of the swine heart using Shearwave Dispersionc Ultrasound Vibrometry (SDUV) 2010 ,		2
21	2010 ,		6
20	Implementation of vibro-acoustography on a clinical ultrasound system 2010 ,		1
19	Lamb wave Shearwave dispersion ultrasound Vibrometry (SDUV) validation study. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2010 , 2010, 45-8	0.9	4
18	Orthogonal Frequency Ultrasound Vibrometry 2010 ,		1
17	Measurements of swine renal cortex shear elasticity and viscosity with Shearwave Dispersion Ultrasound Vibrometry (SDUV) 2009 ,		6
16	Ex vivo measurements of mechanical properties of myocardium using Lamb and Rayleigh wave dispersion velocities 2009 ,		4

15	Estimation of mechanical properties of arteries and soft tubes using shear wave speeds 2009 ,		3
14	Shearwave dispersion ultrasound vibrometry applied to in vivo myocardium. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 2891-4	0.9	22
13	In vitro renal cortex elasticity and viscosity measurements with Shearwave Dispersion Ultrasound Vibrometry (SDUV) on swine kidney. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 2828-31	0.9	7
12	Ex Vivo measurements of myocardial viscoelasticity using Shearwave Dispersion Ultrasound Vibrometry (SDUV). <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2009 , 2009, 2895-8	0.9	8
11	Error in estimates of tissue material properties from shear wave dispersion ultrasound vibrometry. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 748-58	3.2	55
10	Shearwave dispersion ultrasound vibrometry (SDUV) for measuring tissue elasticity and viscosity. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 55-62	3.2	33 ^o
9	Harmonic pulsed excitation and motion detection of a vibrating reflective target. <i>Journal of the Acoustical Society of America</i> , 2008 , 123, 519-33	2.2	22
8	Harmonic motion detection in a vibrating scattering medium. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2008 , 55, 1956-74	3.2	21
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6	In vivo vibroacoustography of large peripheral arteries. <i>Investigative Radiology</i> , 2008 , 43, 243-52	10.1	35
5	Multifrequency ultrasound radiation force excitation and motion detection of harmonically vibrating scatterers. <i>Journal of the Acoustical Society of America</i> , 2008 , 123, 581-581	2.2	
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