Wei Ning Lee

List of Publications by Year
in descending order

64	1,381	430442	360668
papers	citations	18 h-index	35 g-index

67	67	67	1117
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reduced thoracolumbar fascia shear strain in human chronic low back pain. BMC Musculoskeletal Disorders, 2011, 12, 203.	0.8	220
2	Mapping Myocardial Fiber Orientation Using Echocardiography-Based Shear Wave Imaging. IEEE Transactions on Medical Imaging, 2012, 31, 554-562.	5.4	144
3	Theoretical Quality Assessment of Myocardial Elastography with In Vivo Validation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 2233-2245.	1.7	104
4	A composite high-frame-rate system for clinical cardiovascular imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2221-2233.	1.7	93
5	Ultrasound elastic tensor imaging: comparison with MR diffusion tensor imaging in the myocardium. Physics in Medicine and Biology, 2012, 57, 5075-5095.	1.6	77
6	Electromechanical Wave Imaging of Normal and Ischemic HeartsIn Vivo. IEEE Transactions on Medical Imaging, 2010, 29, 625-635.	5.4	73
7	Imaging the electromechanical activity of the heart in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8565-8570.	3.3	71
8	A novel, view-independent method for strain mapping in myocardial elastography: eliminating angle and centroid dependence. Physics in Medicine and Biology, 2007, 52, 4063-4080.	1.6	61
9	Shear Wave Imaging of Passive DiastolicÂMyocardial Stiffness. JACC: Cardiovascular Imaging, 2016, 9, 1023-1030.	2.3	59
10	In vivostudy of myocardial elastography under graded ischemia conditions. Physics in Medicine and Biology, 2011, 56, 1155-1172.	1.6	56
11	Preliminary Validation of Angle-Independent Myocardial Elastography Using MR Tagging in a Clinical Setting. Ultrasound in Medicine and Biology, 2008, 34, 1980-1997.	0.7	47
12	Physiologic Cardiovascular Strain and Intrinsic Wave Imaging. Annual Review of Biomedical Engineering, 2011, 13, 477-505.	5.7	38
13	Carpal Tunnel Syndrome: US Strain Imaging for Diagnosis. Radiology, 2015, 275, 205-214.	3.6	36
14	Systematic Performance Evaluation of a Cross-Correlation-Based Ultrasound Strain Imaging Method. Ultrasound in Medicine and Biology, 2016, 42, 2436-2456.	0.7	28
15	An Efficient Speckle Tracking Algorithm for Ultrasonic Imaging. Ultrasonic Imaging, 2002, 24, 215-228.	1.4	27
16	Fundamental performance assessment of 2-D myocardial elastography in a phased-array configuration. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 2320-2327.	1.7	26
17	Beamforming effects on generalized Nakagami imaging. Physics in Medicine and Biology, 2015, 60, 7513-7531.	1.6	23
18	Angle-independent and multi-dimensional myocardial elastography â€“ From theory to clinical validation. Ultrasonics, 2008, 48, 563-567.	2.1	21

#	Article	IF	Citations
19	Ultrafast Ultrasound Imaging Using Combined Transmissions With Cross-Coherence-Based Reconstruction. IEEE Transactions on Medical Imaging, 2018, 37, 337-348.	5.4	17
20	Role of Ultrasound in Low Back Pain: A Review. Ultrasound in Medicine and Biology, 2020, 46, 1344-1358.	0.7	16
21	Ultrafast Ultrasound Imaging With Cascaded Dual-Polarity Waves. IEEE Transactions on Medical Imaging, 2018, 37, 906-917.	5.4	13
22	Transmural transverse stiffness estimation in vascular shear wave imaging: A simulation and phantom study. Applied Physics Letters, 2017, 110, .	1.5	12
23	Angle-independent strain mapping in myocardial elastography 2D strain tensor characterization and principal component imaging. , 0, , .		11
24	Multidirectional Estimation of Arterial Stiffness Using Vascular Guided Wave Imaging with Geometry Correction. Ultrasound in Medicine and Biology, 2018, 44, 884-896.	0.7	10
25	Walled vessel-mimicking phantom for ultrasound imaging using 3D printing with a water-soluble filament: design principle, fluid-structure interaction (FSI) simulation, and experimental validation. Physics in Medicine and Biology, 2020, 65, 085006.	1.6	9
26	MEMS pressure sensor array wearable for Traditional Chinese Medicine pulse-taking. , 2017, , .		9
27	10B-6 A Composite Imaging Technique for High Frame-Rate and Full-View Cardiovascular Ultrasound and Elasticity Imaging. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	7
28	Evaluation of local arterial stiffness using ultrafast imaging: A comparative study using local arterial pulse wave velocity estimation and shear wave imaging. , 2010, , .		7
29	Imaging Heart Dynamics With Ultrafast Cascaded-Wave Ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1465-1479.	1.7	7
30	P4A-2 An In-Vivo Study of Frame Rate Optimization for Myocardial Elastography. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	6
31	Experimental Investigation of Guided Wave Imaging in Thin Soft Media under Various Coupling Conditions. Ultrasound in Medicine and Biology, 2018, 44, 2821-2837.	0.7	6
32	Ultrasound Myocardial Elastography and Registered 3D Tagged MRI: Quantitative Strain Comparison. , 2007, 10, 800-808.		6
33	Noninvasive assessment of myocardial anisotropy in vitro and in vivo using Supersonic Shear Wave Imaging. , 2010, , .		5
34	Bidirectional Ultrasound Elastographic Imaging Framework for Non-invasive Assessment of the Non-linear Behavior of a Physiologically Pressurized Artery. Ultrasound in Medicine and Biology, 2019, 45, 1184-1196.	0.7	5
35	Effects of tissue mechanical and acoustic anisotropies on the performance of a cross-correlation-based ultrasound strain imaging method. Physics in Medicine and Biology, 2017, 62, 1456-1479.	1.6	4
36	A Theoretical Performance Assessment Tool for Myocardial Elastography. , 2005, 2006, 985-8.		3

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37	Angle-independent myocardial elastography: theoretical analysis and clinical validation. , 2007, , .		3
38	Fundamental performance assessment of 2-D myocardial elastography in a phased array configuration. , 2008, , .		3
39	Characterization of the heart muscle aniosotropy using ultrasound Nakagami imaging. , 2014, , .		3
40	Validation of myocardial elastography using MR tagging in normal and abnormal human hearts in vivo. , 2007, , .		2
41	Notice of Removal: Experimental investigation of shear wave imaging in thin soft media in various coupling conditions. , 2017, , .		2
42	Non-Invasive Estimation of Localized Dynamic Luminal Pressure Change by Ultrasound Elastography in Arteries With Normal and Abnormal Geometries. IEEE Transactions on Biomedical Engineering, 2021, 68, 1627-1637.	2.5	2
43	Design of a Barometer-Based Pulse-Taking Device With In Vivo Validation Against High-Frequency Ultrasound Pulse Wave Imaging. IEEE Sensors Journal, 2022, 22, 7219-7230.	2.4	2
44	9A-1 Experimental Assessment of Angle-Independent Myocardial Elastography Performance Using a Left-Ventricular Phantom Undergoing Physiologic Motion. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	1
45	Electromechanical Wave Imaging for non-invasive localization and quantification of partially ischemic regions in vivo. , 2010, , .		1
46	Assessment of median nerve mobility by ultrasound dynamic imaging in carpal tunnel syndrome diagnosis. , 2013, , .		1
47	On the feasibility of speckle reduction in echocardiography using strain compounding. , 2014, , .		1
48	Ultrafast imaging using combined transmissions with coherence-based reconstruction. , 2016, , .		1
49	Noninvasive Assessment of In Vivo Passive Skeletal Muscle Mechanics as a Composite Material Using Biomedical Ultrasound. IEEE Transactions on Biomedical Engineering, 2022, 69, 1162-1172.	2.5	1
50	Microcirculatory Responses to Muscle and Tendon Exercises in Individuals With and Without Type 2 Diabetes Mellitus and the Association Between Microcirculatory and Exercise Performance. Metabolic Syndrome and Related Disorders, 2021, 19, 325-331.	0.5	1
51	9A-3 Clinical Validation of Angle-Independent Myocardial Elastography Using MRI Tagging. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	0
52	Pulse wave imaging of human abdominal aortas in vivo. , 2008, , .		0
53	In vivo validation of 2D myocardial elastography at variable levels of ischemia. , 2008, , .		0
54	Non-invasive localization and quantification of graded ischemia using Electromechanical Wave Imaging in vivo. , 2009, , .		0

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55	In vivo validation of Myocardial Elastography under graded ischemia conditions. , 2010, , .		0
56	Monitoring the lesion formation during histotripsy treatment using shear wave imaging. , 2012, , .		0
57	The effect of tissue anisotropy on ultrasound strain imaging (USI): A preliminary study. , 2015, , .		0
58	Shear wave elastography for the characterization of arterial wall stiffness: A thin-plate phantom and ex vivo aorta study. , 2017, , .		0
59	Notice of Removal: In vivo mapping of transverse shear and principal strains in interventricular septum using coherent diverging wave compounding. , 2017, , .		0
60	Notice of Removal: A new method for shear wave speed estimation in anisotropic tissues using wavelet transform and dynamic programming. , 2017, , .		0
61	Notice of Removal: Estimation of arterial transverse stiffness using vascular guided wave imaging (VGWI) in comparison with pulse wave imaging (PWI). , 2017, , .		0
62	Notice of Removal: Multi-plane estimation of the third- and fourth-order elastic constants of soft material. , 2017, , .		0
63	Spontaneous extension wave for in vivo assessment of arterial wall anisotropy. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H2429-H2437.	1.5	0
64	Registered 3D Tagged MRI and Ultrasound Myocardial Elastography: Quantitative Strain Comparison. , 2011, , 281-307.		0