Elisa E Konofagou

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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.

243 papers	7,859 citations	54 h-index	80 g-index
324 ext. papers	9,815 ext. citations	4.4 avg, IF	6.37 L-index

#	Paper	IF	Citations
243	A new elastographic method for estimation and imaging of lateral displacements, lateral strains, corrected axial strains and Poisson's ratios in tissues. *Ultrasound in Medicine and Biology*, **1998**, 24, 1183-99	3.5	345
242	Noninvasive, transcranial and localized opening of the blood-brain barrier using focused ultrasound in mice. *Ultrasound in Medicine and Biology*, **2007**, 33, 95-104	3.5	249
241	Elastography: Imaging the elastic properties of soft tissues with ultrasound. *Journal of Medical Ultrasonics (2001)*, **2002**, 29, 155	1.4	225
240	A fast normalized cross-correlation calculation method for motion estimation. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2010**, 57, 1347-57	3.2	215
239	Myocardial elastography--a feasibility study in vivo. *Ultrasound in Medicine and Biology*, **2002**, 28, 475-82	3.5	187
238	Microbubble-size dependence of focused ultrasound-induced blood-brain barrier opening in mice in vivo. *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 145-54	5	177
237	In vivo transcranial cavitation threshold detection during ultrasound-induced blood-brain barrier opening in mice. *Physics in Medicine and Biology*, **2010**, 55, 6141-55	3.8	162
236	Two-dimensional ultrasonic strain rate measurement of the human heart in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2002**, 49, 281-6	3.2	143
235	Localized harmonic motion imaging: theory, simulations and experiments. *Ultrasound in Medicine and Biology*, **2003**, 29, 1405-13	3.5	133
234	The size of blood-brain barrier opening induced by focused ultrasound is dictated by the acoustic pressure. *Journal of Cerebral Blood Flow and Metabolism*, **2014**, 34, 1197-204	7.3	132
233	Molecules of various pharmacologically-relevant sizes can cross the ultrasound-induced blood-brain barrier opening in vivo. *Ultrasound in Medicine and Biology*, **2010**, 36, 58-67	3.5	125
232	Pulse wave imaging for noninvasive and quantitative measurement of arterial stiffness in vivo. *American Journal of Hypertension*, **2010**, 23, 393-8	2.3	117
231	Multi-modality safety assessment of blood-brain barrier opening using focused ultrasound and definity microbubbles: a short-term study. *Ultrasound in Medicine and Biology*, **2010**, 36, 1445-59	3.5	116
230	The mechanism of interaction between focused ultrasound and microbubbles in blood-brain barrier opening in mice. *Journal of the Acoustical Society of America*, **2011**, 130, 3059-67	2.2	114
229	Noninvasive and localized neuronal delivery using short ultrasonic pulses and microbubbles. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 16539-44	11.5	111
228	ECG-gated, mechanical and electromechanical wave imaging of cardiovascular tissues in vivo. *Ultrasound in Medicine and Biology*, **2007**, 33, 1075-85	3.5	107
227	Noninvasive, transient and selective blood-brain barrier opening in non-human primates in vivo. *PLoS ONE*, **2011**, 6, e22598	3.7	106

226	Long-Term Safety of Repeated Blood-Brain Barrier Opening via Focused Ultrasound with Microbubbles in Non-Human Primates Performing a Cognitive Task. *PLoS ONE*, **2015**, 10, e0125911	3.7	101
225	A quantitative pressure and microbubble-size dependence study of focused ultrasound-induced blood-brain barrier opening reversibility in vivo using MRI. *Magnetic Resonance in Medicine*, **2012**, 67, 769-77	4.4	97
224	Noninvasive and localized blood-brain barrier disruption using focused ultrasound can be achieved at short pulse lengths and low pulse repetition frequencies. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 725-37	7.3	97
223	Optimization of the ultrasound-induced blood-brain barrier opening. *Theranostics*, **2012**, 2, 1223-37	12.1	96
222	Activation of signaling pathways following localized delivery of systemically administered neurotrophic factors across the blood-brain barrier using focused ultrasound and microbubbles. *Physics in Medicine and Biology*, **2012**, 57, N65-81	3.8	89
221	Ultrasound-induced blood-brain barrier opening. *Current Pharmaceutical Biotechnology*, **2012**, 13, 1332-45	2.6	88
220	Pulse wave imaging of the human carotid artery: an in vivo feasibility study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2012**, 59, 174-81	3.2	87
219	Quantitative viscoelastic parameters measured by harmonic motion imaging. *Physics in Medicine and Biology*, **2009**, 54, 3579-94	3.8	87
218	Targeted drug delivery with focused ultrasound-induced blood-brain barrier opening using acoustically-activated nanodroplets. *Journal of Controlled Release*, **2013**, 172, 795-804	11.7	82
217	Tissue displacements during acupuncture using ultrasound elastography techniques. *Ultrasound in Medicine and Biology*, **2004**, 30, 1173-83	3.5	81
216	A novel noninvasive technique for pulse-wave imaging and characterization of clinically-significant vascular mechanical properties in vivo. *Ultrasonic Imaging*, **2007**, 29, 137-54	1.9	79
215	Theoretical quality assessment of myocardial elastography with in vivo validation. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2007**, 54, 2233-45	3.2	78
214	DDEL-13. FOCUSED ULTRASOUND MEDIATED BLOOD BRAIN BARRIER DISRUPTION IN A MURINE MODEL OF PONTINE GLIOMA: A SAFETY AND FEASIBILITY STUDY. *Neuro-Oncology*, **2020**, 22, iii286-iii286	1	78
213	Pulse wave imaging of normal and aneurysmal abdominal aortas in vivo. *IEEE Transactions on Medical Imaging*, **2009**, 28, 477-86	11.7	77
212	Feasibility of noninvasive cavitation-guided blood-brain barrier opening using focused ultrasound and microbubbles in nonhuman primates. *Applied Physics Letters*, **2011**, 98, 163704	3.4	76
211	Permeability dependence study of the focused ultrasound-induced blood-brain barrier opening at distinct pressures and microbubble diameters using DCE-MRI. *Magnetic Resonance in Medicine*, **2011**, 66, 821-30	4.4	74
210	A composite high-frame-rate system for clinical cardiovascular imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2008**, 55, 2221-33	3.2	72
209	Enhanced delivery and bioactivity of the neurturin neurotrophic factor through focused ultrasound-mediated blood--brain barrier opening in vivo. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 611-22	7.3	69

208	Imaging of wall motion coupled with blood flow velocity in the heart and vessels in vivo: a feasibility study. *Ultrasound in Medicine and Biology*, **2011**, 37, 980-95	3.5	65
207	Focused ultrasound neuromodulation of cortical and subcortical brain structures using 1.9 MHz. *Medical Physics*, **2016**, 43, 5730	4.4	65
206	Myocardial elastography at both high temporal and spatial resolution for the detection of infarcts. *Ultrasound in Medicine and Biology*, **2007**, 33, 1206-23	3.5	64
205	A focused ultrasound method for simultaneous diagnostic and therapeutic applications--a simulation study. *Physics in Medicine and Biology*, **2001**, 46, 2967-84	3.8	64
204	Blood-Brain Barrier Opening in Behaving Non-Human Primates via Focused Ultrasound with Systemically Administered Microbubbles. *Scientific Reports*, **2015**, 5, 15076	4.9	62
203	Real-time, transcranial monitoring of safe blood-brain barrier opening in non-human primates. *PLoS ONE*, **2014**, 9, e84310	3.7	62
202	Numerical study of a simple transcranial focused ultrasound system applied to blood-brain barrier opening. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2010**, 57, 2637-53	3.2	62
201	Electromechanical wave imaging for arrhythmias. *Physics in Medicine and Biology*, **2011**, 56, L1-11	3.8	61
200	Electromechanical wave imaging of normal and ischemic hearts in vivo. *IEEE Transactions on Medical Imaging*, **2010**, 29, 625-35	11.7	61
199	High-frame rate, full-view myocardial elastography with automated contour tracking in murine left ventricles in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2008**, 55, 240-8	3.2	61
198	Dependence of the reversibility of focused- ultrasound-induced blood-brain barrier opening on pressure and pulse length in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2013**, 60, 2257-65	3.2	60
197	3D-Printed Tissue-Mimicking Phantoms for Medical Imaging and Computational Validation Applications. *3D Printing and Additive Manufacturing*, **2014**, 1, 14-23	4	60
196	Acoustic cavitation-based monitoring of the reversibility and permeability of ultrasound-induced blood-brain barrier opening. *Physics in Medicine and Biology*, **2015**, 60, 9079-94	3.8	59
195	Imaging the electromechanical activity of the heart in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 8565-70	11.5	58
194	Non-invasive peripheral nerve stimulation via focused ultrasound in vivo. *Physics in Medicine and Biology*, **2018**, 63, 035011	3.8	58
193	Transcranial cavitation detection in primates during blood-brain barrier opening--a performance assessment study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2014**, 61, 966-78	3.2	57
192	Noninvasive and transient blood-brain barrier opening in the hippocampus of Alzheimer's double transgenic mice using focused ultrasound. *Ultrasonic Imaging*, **2008**, 30, 189-200	1.9	57
191	Quo vadis elasticity imaging?. *Ultrasonics*, **2004**, 42, 331-6	3.5	56

190	Microbubble type and distribution dependence of focused ultrasound-induced blood-brain barrier opening. *Ultrasound in Medicine and Biology*, **2014**, 40, 130-7	3.5	54
189	Pulse wave imaging in normal, hypertensive and aneurysmal human aortas in vivo: a feasibility study. *Physics in Medicine and Biology*, **2013**, 58, 4549-62	3.8	51
188	Efficient Blood-Brain Barrier Opening in Primates with Neuronavigation-Guided Ultrasound and Real-Time Acoustic Mapping. *Scientific Reports*, **2018**, 8, 7978	4.9	50
187	Effects of various parameters on lateral displacement estimation in ultrasound elastography. *Ultrasound in Medicine and Biology*, **2009**, 35, 1352-66	3.5	49
186	Identifying the inertial cavitation threshold and skull effects in a vessel phantom using focused ultrasound and microbubbles. *Ultrasound in Medicine and Biology*, **2010**, 36, 840-52	3.5	49
185	A clinical feasibility study of atrial and ventricular electromechanical wave imaging. *Heart Rhythm*, **2013**, 10, 856-62	6.7	45
184	Mapping of cardiac electrical activation with electromechanical wave imaging: an in silico-in vivo reciprocity study. *Heart Rhythm*, **2011**, 8, 752-9	6.7	43
183	In vivo study of myocardial elastography under graded ischemia conditions. *Physics in Medicine and Biology*, **2011**, 56, 1155-72	3.8	43
182	Effects of the microbubble shell physicochemical properties on ultrasound-mediated drug delivery to the brain. *Journal of Controlled Release*, **2015**, 212, 30-40	11.7	42
181	Preliminary validation of angle-independent myocardial elastography using MR tagging in a clinical setting. *Ultrasound in Medicine and Biology*, **2008**, 34, 1980-97	3.5	41
180	Elastographic imaging of the normal canine prostate in vitro. *Ultrasonic Imaging*, **1999**, 21, 201-15	1.9	40
179	Single-element focused ultrasound transducer method for harmonic motion imaging. *Ultrasonic Imaging*, **2006**, 28, 144-58	1.9	39
178	In vivo feasibility of real-time monitoring of focused ultrasound surgery (FUS) using harmonic motion imaging (HMI). *IEEE Transactions on Biomedical Engineering*, **2010**, 57, 7-11	5	38
177	Focused ultrasound-enhanced intranasal brain delivery of brain-derived neurotrophic factor. *Scientific Reports*, **2016**, 6, 28599	4.9	38
176	Non-invasive, Focused Ultrasound-Facilitated Gene Delivery for Optogenetics. *Scientific Reports*, **2017**, 7, 39955	4.9	37
175	Piecewise Pulse Wave Imaging (pPWI) for Detection and Monitoring of Focal Vascular Disease in Murine Aortas and Carotids In Vivo. *IEEE Transactions on Medical Imaging*, **2016**, 35, 13-28	11.7	35
174	Characterizing Focused-Ultrasound Mediated Drug Delivery to the Heterogeneous Primate Brain In Vivo with Acoustic Monitoring. *Scientific Reports*, **2016**, 6, 37094	4.9	33
173	A new brain drug delivery strategy: focused ultrasound-enhanced intranasal drug delivery. *PLoS ONE*, **2014**, 9, e108880	3.7	33

172	Unilateral Focused Ultrasound-Induced Blood-Brain Barrier Opening Reduces Phosphorylated Tau from The rTg4510 Mouse Model. *Theranostics*, **2019**, 9, 5396-5411	12.1	32
171	Physiologic cardiovascular strain and intrinsic wave imaging. *Annual Review of Biomedical Engineering*, **2011**, 13, 477-505	12	31
170	Performance assessment of HIFU lesion detection by harmonic motion imaging for focused ultrasound (HMIFU): a 3-D finite-element-based framework with experimental validation. *Ultrasound in Medicine and Biology*, **2011**, 37, 2013-27	3.5	31
169	Amelioration of the nigrostriatal pathway facilitated by ultrasound-mediated neurotrophic delivery in early Parkinson's disease. *Journal of Controlled Release*, **2019**, 303, 289-301	11.7	30
168	Noninvasive electromechanical wave imaging and conduction-relevant velocity estimation in vivo. *Ultrasonics*, **2010**, 50, 208-15	3.5	30
167	The temperature dependence of ultrasound-stimulated acoustic emission. *Ultrasound in Medicine and Biology*, **2002**, 28, 331-8	3.5	30
166	The use of ultrasound-stimulated acoustic emission in the monitoring of modulus changes with temperature. *Ultrasonics*, **2003**, 41, 337-45	3.5	30
165	A Clinical System for Non-invasive Blood-Brain Barrier Opening Using a Neuronavigation-Guided Single-Element Focused Ultrasound Transducer. *Ultrasound in Medicine and Biology*, **2020**, 46, 73-89	3.5	30
164	Cardiac Strain Imaging With Coherent Compounding of Diverging Waves. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 1212-1222	3.2	29
163	3D Quasi-Static Ultrasound Elastography With Plane Wave In Vivo. *IEEE Transactions on Medical Imaging*, **2017**, 36, 357-365	11.7	29
162	Pulse-wave propagation in straight-geometry vessels for stiffness estimation: theory, simulations, phantoms and in vitro findings. *Journal of Biomechanical Engineering*, **2012**, 134, 114502	2.1	29
161	Focused ultrasound-facilitated brain drug delivery using optimized nanodroplets: vaporization efficiency dictates large molecular delivery. *Physics in Medicine and Biology*, **2018**, 63, 035002	3.8	27
160	Sparse matrix beamforming and image reconstruction for 2-D HIFU monitoring using harmonic motion imaging for focused ultrasound (HMIFU) with in vitro validation. *IEEE Transactions on Medical Imaging*, **2014**, 33, 2107-17	11.7	27
159	Harmonic Motion Imaging (HMI) for Tumor Imaging and Treatment Monitoring. *Current Medical Imaging*, **2012**, 8, 16-26	1.2	27
158	An experimental study on the stiffness of size-isolated microbubbles using atomic force microscopy. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2013**, 60, 524-34	3.2	26
157	Lipid microbubbles as a vehicle for targeted drug delivery using focused ultrasound-induced blood-brain barrier opening. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 1236-1250	7.3	25
156	Electromechanical wave imaging for noninvasive mapping of the 3D electrical activation sequence in canines and humans in vivo. *Journal of Biomechanics*, **2012**, 45, 856-64	2.9	25
155	AORTIC PULSE WAVE VELOCITY MEASURED BY PULSE WAVE IMAGING (PWI): A COMPARISON WITH APPLANATION TONOMETRY. *Artery Research*, **2011**, 5, 65-71	2.2	25

154	Single-heartbeat electromechanical wave imaging with optimal strain estimation using temporally unequispaced acquisition sequences. *Physics in Medicine and Biology*, **2012**, 57, 1095-112	3.8	25
153	Longitudinal Motor and Behavioral Assessment of Blood-Brain Barrier Opening with Transcranial Focused Ultrasound. *Ultrasound in Medicine and Biology*, **2016**, 42, 2270-82	3.5	24
152	Detection of Aortic Wall Inclusion Using Regional Pulse Wave Propagation and Velocity. *Artery Research*, **2012**, 6,	2.2	24
151	Estimating localized oscillatory tissue motion for assessment of the underlying mechanical modulus. *Ultrasonics*, **2004**, 42, 951-6	3.5	24
150	Targeting Effects on the Volume of the Focused Ultrasound-Induced Blood-Brain Barrier Opening in Nonhuman Primates In Vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 798-810	3.2	23
149	Monitoring and staging abdominal aortic aneurysm disease with pulse wave imaging. *Ultrasound in Medicine and Biology*, **2014**, 40, 2404-14	3.5	22
148	Intracardiac myocardial elastography in canines and humans in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 337-49	3.2	22
147	Using ultrasound to understand acupuncture. Acupuncture needle manipulation and its effect on connective tissue. *IEEE Engineering in Medicine and Biology Magazine*, **2005**, 24, 41-6		22
146	High intensity focused ultrasound (HIFU) focal spot localization using harmonic motion imaging (HMI). *Physics in Medicine and Biology*, **2015**, 60, 5911-24	3.8	21
145	Focused ultrasound enhanced intranasal delivery of brain derived neurotrophic factor produces neurorestorative effects in a Parkinson's disease mouse model. *Scientific Reports*, **2019**, 9, 19402	4.9	21
144	Pulse wave imaging using coherent compounding in a phantom and in vivo. *Physics in Medicine and Biology*, **2017**, 62, 1700-1730	3.8	20
143	Pharmacokinetic analysis and drug delivery efficiency of the focused ultrasound-induced blood-brain barrier opening in non-human primates. *Magnetic Resonance Imaging*, **2017**, 37, 273-281	3.3	20
142	Multi-parametric monitoring and assessment of high-intensity focused ultrasound (HIFU) boiling by harmonic motion imaging for focused ultrasound (HMIFU): an ex vivo feasibility study. *Physics in Medicine and Biology*, **2014**, 59, 1121-45	3.8	20
141	Mapping the longitudinal wall stiffness heterogeneities within intact canine aortas using Pulse Wave Imaging (PWI) ex vivo. *Journal of Biomechanics*, **2013**, 46, 1866-74	2.9	20
140	Harmonic motion imaging for abdominal tumor detection and high-intensity focused ultrasound ablation monitoring: an in vivo feasibility study in a transgenic mouse model of pancreatic cancer. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 1662-73	3.2	20
139	Direct brain infusion can be enhanced with focused ultrasound and microbubbles. *Journal of Cerebral Blood Flow and Metabolism*, **2017**, 37, 706-714	7.3	19
138	Electromechanical wave imaging of biologically and electrically paced canine hearts in vivo. *Ultrasound in Medicine and Biology*, **2014**, 40, 177-87	3.5	19
137	Validation of electromechanical wave imaging in a canine model during pacing and sinus rhythm. *Heart Rhythm*, **2016**, 13, 2221-2227	6.7	19

136	3D Myocardial Elastography In Vivo. *IEEE Transactions on Medical Imaging*, **2017**, 36, 618-627	11.7	18
135	Toward a Cognitive Neural Prosthesis Using Focused Ultrasound. *Frontiers in Neuroscience*, **2017**, 11, 607	5.1	18
134	Simulation study of amplitude-modulated (AM) harmonic motion imaging (HMI) for stiffness contrast quantification with experimental validation. *Ultrasonic Imaging*, **2010**, 32, 154-76	1.9	18
133	Elasticity mapping of murine abdominal organs in vivo using harmonic motion imaging (HMI). *Physics in Medicine and Biology*, **2016**, 61, 5741-54	3.8	17
132	Tumor characterization and treatment monitoring of postsurgical human breast specimens using harmonic motion imaging (HMI). *Breast Cancer Research*, **2016**, 18, 46	8.3	16
131	Angle-independent and multi-dimensional myocardial elastography--from theory to clinical validation. *Ultrasonics*, **2008**, 48, 563-7	3.5	16
130	Application of a sub-0.1-mm implantable mote for in vivo real-time wireless temperature sensing. *Science Advances*, **2021**, 7,	14.3	16
129	Non-contact, ultrasound-based indentation method for measuring elastic properties of biological tissues using harmonic motion imaging (HMI). *Physics in Medicine and Biology*, **2015**, 60, 2853-68	3.8	15
128	Ultrasound neuromodulation: mechanisms and the potential of multimodal stimulation for neuronal function assessment. *Frontiers in Physics*, **2020**, 8,	3.9	15
127	Image-guided focused ultrasound modulates electrically evoked motor neuronal activity in the mouse peripheral nervous system in vivo. *Journal of Neural Engineering*, **2020**, 17, 026026	5	15
126	Modulation of Brain Function and Behavior by Focused Ultrasound. *Current Behavioral Neuroscience Reports*, **2018**, 5, 153-164	1.7	15
125	Blood-brain barrier opening with focused ultrasound in experimental models of Parkinson's disease. *Movement Disorders*, **2019**, 34, 1252-1261	7	15
124	Combining brain perturbation and neuroimaging in non-human primates. *NeuroImage*, **2021**, 235, 118017	7.9	15
123	An inverse approach to determining spatially varying arterial compliance using ultrasound imaging. *Physics in Medicine and Biology*, **2016**, 61, 5486-507	3.8	15
122	Electromechanical wave imaging (EWI) validation in all four cardiac chambers with 3D electroanatomic mapping in canines in vivo. *Physics in Medicine and Biology*, **2016**, 61, 8105-8119	3.8	14
121	Pulse inversion enhances the passive mapping of microbubble-based ultrasound therapy. *Applied Physics Letters*, **2018**, 113, 044102	3.4	14
120	Ex Vivo characterization of canine liver tissue viscoelasticity after high-intensity focused ultrasound ablation. *Ultrasound in Medicine and Biology*, **2014**, 40, 341-50	3.5	14
119	Feasibility and Validation of 4-D Pulse Wave Imaging in Phantoms and In Vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 1305-1317	3.2	14

118	The effect of temperature dependent tissue parameters on acoustic radiation force induced displacements. *Physics in Medicine and Biology*, **2016**, 61, 7427-7447	3.8	14
117	Pulse Wave Imaging in Carotid Artery Stenosis Human Patients in Vivo. *Ultrasound in Medicine and Biology*, **2019**, 45, 353-366	3.5	14
116	Assessing the Stability of Aortic Aneurysms with Pulse Wave Imaging. *Radiology*, **2016**, 281, 772-781	20.5	13
115	Imaging the mechanics and electromechanics of the heart. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2006**, Suppl, 6648-51		13
114	Focused ultrasound mediated blood-brain barrier opening is safe and feasible in a murine pontine glioma model. *Scientific Reports*, **2021**, 11, 6521	4.9	13
113	Focused Ultrasound-Mediated Blood-Brain Barrier Opening Increases Delivery and Efficacy of Etoposide for Glioblastoma Treatment. *International Journal of Radiation Oncology Biology Physics*, **2021**, 110, 539-550	4	13
112	Fast lesion mapping during HIFU treatment using harmonic motion imaging guided focused ultrasound (HMIgFUS) in vitro and in vivo. *Physics in Medicine and Biology*, **2017**, 62, 3111-3123	3.8	12
111	Assessing the atrial electromechanical coupling during atrial focal tachycardia, flutter, and fibrillation using electromechanical wave imaging in humans. *Computers in Biology and Medicine*, **2015**, 65, 161-7	7	12
110	Displacement Imaging for Focused Ultrasound Peripheral Nerve Neuromodulation. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3391-3402	11.7	12
109	Noninvasive Young's modulus visualization of fibrosis progression and delineation of pancreatic ductal adenocarcinoma (PDAC) tumors using Harmonic Motion Elastography (HME). *Theranostics*, **2020**, 10, 4614-4626	12.1	12
108	Time-Domain Simulation of Ultrasound Propagation in a Tissue-Like Medium Based on the Resolution of the Nonlinear Acoustic Constitutive Relations. *Acta Acustica United With Acustica*, **2016**, 102, 876-892	1.5	12
107	Ultrasound for the Brain: A Review of Physical and Engineering Principles, and Clinical Applications. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 6-20	3.2	12
106	Harmonic Motion Imaging of Pancreatic Tumor Stiffness Indicates Disease State and Treatment Response. *Clinical Cancer Research*, **2020**, 26, 1297-1308	12.9	11
105	Cross-correlation analysis of pulse wave propagation in arteries: in vitro validation and in vivo feasibility. *Physics in Medicine and Biology*, **2018**, 63, 115006	3.8	11
104	Bioavailability and cytosolic kinases modulate response to deoxynucleoside therapy in TK2 deficiency. *EBioMedicine*, **2019**, 46, 356-367	8.8	11
103	Reproducibility and Angle Independence of Electromechanical Wave Imaging for the Measurement of Electromechanical Activation during Sinus Rhythm in Healthy Humans. *Ultrasound in Medicine and Biology*, **2017**, 43, 2256-2268	3.5	11
102	Imaging the Propagation of the Electromechanical Wave in Heart Failure Patients with Cardiac Resynchronization Therapy. *PACE - Pacing and Clinical Electrophysiology*, **2017**, 40, 35-45	1.6	11
101	Radiation-force-based estimation of acoustic attenuation using harmonic motion imaging (HMI) in phantoms and in vitro livers before and after HIFU ablation. *Physics in Medicine and Biology*, **2015**, 60, 7499-512	3.8	11

100	Performance assessment of Pulse Wave Imaging using conventional ultrasound in canine aortas and normal human arteries. *Artery Research*, **2015**, 11, 19-28	2.2	11
99	Numerical modeling of ultrasound heating for the correction of viscous heating artifacts in soft tissue temperature measurements. *Applied Physics Letters*, **2019**, 114, 203702	3.4	10
98	Adaptive Pulse Wave Imaging: Automated Spatial Vessel Wall Inhomogeneity Detection in Phantoms and in-Vivo. *IEEE Transactions on Medical Imaging*, **2020**, 39, 259-269	11.7	10
97	Evaluation of Coronary Artery Disease Using Myocardial Elastography with Diverging Wave Imaging: Validation against Myocardial Perfusion Imaging and Coronary Angiography. *Ultrasound in Medicine and Biology*, **2017**, 43, 893-902	3.5	9
96	Localization of Accessory Pathways in Pediatric Patients With Wolff-Parkinson-White Syndrome Using 3D-Rendered Electromechanical Wave Imaging. *JACC: Clinical Electrophysiology*, **2019**, 5, 427-437	4.6	9
95	High-intensity focused ultrasound monitoring using harmonic motion imaging for focused ultrasound (HMIFU) under boiling or slow denaturation conditions. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 1308-19	3.2	9
94	Quantification of Arterial Wall Inhomogeneity Size, Distribution, and Modulus Contrast Using FSI Numerical Pulse Wave Propagation. *Artery Research*, **2014**, 8, 57-65	2.2	9
93	FEASIBILITY STUDY OF A CLINICAL BLOOD-BRAIN BARRIER OPENING ULTRASOUND SYSTEM. *Nano LIFE*, **2010**, 1, 309	0.9	9
92	Iterative Curve Fitting of the Bioheat Transfer Equation for Thermocouple-Based Temperature Estimation In Vitro and In Vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 70-80	3.2	9
91	Technical Note: A 3-D rendering algorithm for electromechanical wave imaging of a beating heart. *Medical Physics*, **2017**, 44, 4766-4772	4.4	8
90	Differential displacement of soft tissue layers from manual therapy loading. *Clinical Biomechanics*, **2016**, 33, 66-72	2.2	8
89	4D cardiac electromechanical activation imaging. *Computers in Biology and Medicine*, **2019**, 113, 103382	7	8
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87	Atrophy associated with tau pathology precedes overt cell death in a mouse model of progressive tauopathy. *Science Advances*, **2020**, 6,	14.3	8
86	Optimization of Transmit Parameters in Cardiac Strain Imaging With Full and Partial Aperture Coherent Compounding. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 684-696	3.2	7
85	Non-invasive Characterization of Focal Arrhythmia with Electromechanical Wave Imaging in Vivo. *Ultrasound in Medicine and Biology*, **2018**, 44, 2241-2249	3.5	7
84	Real-time Monitoring of High Intensity Focused Ultrasound (HIFU) Ablation of In Vitro Canine Livers Using Harmonic Motion Imaging for Focused Ultrasound (HMIFU). *Journal of Visualized Experiments*, **2015**, e53050	1.6	7
83	Safety evaluation of a clinical focused ultrasound system for neuronavigation guided blood-brain barrier opening in non-human primates. *Scientific Reports*, **2021**, 11, 15043	4.9	7

82	Temporal stability of lipid-shelled microbubbles during acoustically-mediated blood-brain barrier opening. *Frontiers in Physics*, **2020**, 8,	3.9	6
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34	Identifying the Inertial Cavitation Pressure Threshold and Skull Effects in a Vessel Phantom Using Focused Ultrasound and Microbubbles **2010**,		1
33	The Dependence of the Ultrasound-Induced Blood-Brain Barrier Opening Characteristics on Microbubble Size In Vivo **2009**,		1
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10	P1-095: Focused Ultrasound Using Neurotrophic Factors for the Treatment of Neurodegenerative Disease **2016**, 12, P437-P437	
9	3D-rendered Electromechanical Wave Imaging for Localization of Accessory Pathways in Wolff-Parkinson-White Minors. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 6192-6195	0.9
8	Pulse wave imaging for the mechanical assessment of atherosclerotic plaques **2021**, 529-542	
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6	Intrinsic Cardiovascular Wave and Strain Imaging **2018**, 189-226	
5	Harmonic Motion Imaging **2018**, 264-283	
4	Optimization of Blood-Brain Barrier Opening with Focused Ultrasound: The Animal Perspective. *AAPS Advances in the Pharmaceutical Sciences Series*, **2022**, 607-628	0.5
3	Imaging of Single Transducer-Harmonic Motion Imaging-derived Displacements at Several Oscillation Frequencies Simultaneously. *IEEE Transactions on Medical Imaging*, **2022**, 1-1	11.7
2	MODL-24. Focused ultrasound-mediated blood-brain barrier opening and panobinostat in a thalamic syngeneic murine DMG model is feasible and safe.. *Neuro-Oncology*, **2022**, 24, i174-i174	1
1	MODL-25. Radiation and focused ultrasound-mediated blood-brain barrier opening for DMG: safety and feasibility of combinatorial therapy. *Neuro-Oncology*, **2022**, 24, i174-i174	1