Elisa E Konofagou

List of Publications by Year in Descending Order

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	Neuronal responses to focused ultrasound are gated by pre-stimulation brain rhythms.. *Brain Stimulation*, **2022**, 15, 233-243	5.1	0
242	Focused ultrasound excites action potentials in mammalian peripheral neurons in part through the mechanically gated ion channel PIEZO2.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2115821119	11.5	1
241	Optimization of Blood-Brain Barrier Opening with Focused Ultrasound: The Animal Perspective. *AAPS Advances in the Pharmaceutical Sciences Series*, **2022**, 607-628	0.5	
240	Imaging of Single Transducer-Harmonic Motion Imaging-derived Displacements at Several Oscillation Frequencies Simultaneously. *IEEE Transactions on Medical Imaging*, **2022**, 1-1	11.7	
239	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	
238	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	
237	Modeling Pulse Wave Propagation Through a Stenotic Artery With Fluid Structure Interaction: A Validation Study Using Ultrasound Pulse Wave Imaging. *Journal of Biomechanical Engineering*, **2021**, 143,	2.1	2
236	Real-Time Positron Emission Tomography Evaluation of Topotecan Brain Kinetics after Ultrasound-Mediated Blood-Brain Barrier Permeability. *Pharmaceutics*, **2021**, 13,	6.4	2
235	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
234	High-Resolution Focused Ultrasound Neuromodulation Induces Limb-Specific Motor Responses in Mice in Vivo. *Ultrasound in Medicine and Biology*, **2021**, 47, 998-1013	3.5	3
233	Application of a sub-0.1-mm implantable mote for in vivo real-time wireless temperature sensing. *Science Advances*, **2021**, 7,	14.3	16
232	Feasibility of Harmonic Motion Imaging Using a Single Transducer: In Vivo Imaging of Breast Cancer in a Mouse Model and Human Subjects. *IEEE Transactions on Medical Imaging*, **2021**, 40, 1390-1404	11.7	1
231	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
230	Combining brain perturbation and neuroimaging in non-human primates. *NeuroImage*, **2021**, 235, 118017	7.9	15
229	Cardiac Resynchronization Therapy Response Assessment with Electromechanical Activation Mapping within 24 Hours of Device Implantation: A Pilot Study. *Journal of the American Society of Echocardiography*, **2021**, 34, 757-766.e8	5.8	1
228	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
227	Real-Time Passive Acoustic Mapping Using Sparse Matrix Multiplication. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 164-177	3.2	3

226	Displacement Imaging During Focused Ultrasound Median Nerve Modulation: A Preliminary Study in Human Pain Sensation Mitigation. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 526-537	3.2	3
225	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
224	Pulse Wave Imaging Coupled With Vector Flow Mapping: A Phantom, Simulation, and In Vivo Study. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 2516-2531	3.2	0
223	Pulse wave imaging for the mechanical assessment of atherosclerotic plaques **2021**, 529-542		
222	Synchronous temperature variation monitoring during ultrasound imaging and/or treatment pulse application: a phantom study **2021**, 1, 1-10		0
221	Contrast-Free Detection of Focused Ultrasound-Induced Blood-Brain Barrier Opening Using Diffusion Tensor Imaging. *IEEE Transactions on Biomedical Engineering*, **2021**, 68, 2499-2508	5	3
220	Cavitation-modulated inflammatory response following focused ultrasound blood-brain barrier opening. *Journal of Controlled Release*, **2021**, 337, 458-471	11.7	6
219	Electromechanical Wave Imaging With Machine Learning for Automated Isochrone Generation. *IEEE Transactions on Medical Imaging*, **2021**, 40, 2258-2271	11.7	2
218	Neurogenic Flare Response following Image-Guided Focused Ultrasound in the Mouse Peripheral Nervous System in Vivo. *Ultrasound in Medicine and Biology*, **2021**, 47, 2759-2767	3.5	0
217	Feasibility of Bilinear Mechanical Characterization of the Abdominal Aorta in a Hypertensive Mouse Model. *Ultrasound in Medicine and Biology*, **2021**, 47, 3480-3490	3.5	1
216	Guest Editorial Introduction to the Special Issue on Recent Advances in Ultrasound Technology for Brain Imaging and Therapy. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2021**, 68, 3-5	3.2	0
215	Temporal stability of lipid-shelled microbubbles during acoustically-mediated blood-brain barrier opening. *Frontiers in Physics*, **2020**, 8,	3.9	6
214	Displacement Imaging for Focused Ultrasound Peripheral Nerve Neuromodulation. *IEEE Transactions on Medical Imaging*, **2020**, 39, 3391-3402	11.7	12
213	Ultrasound neuromodulation: mechanisms and the potential of multimodal stimulation for neuronal function assessment. *Frontiers in Physics*, **2020**, 8,	3.9	15
212	Noninvasive localization of cardiac arrhythmias using electromechanical wave imaging. *Science Translational Medicine*, **2020**, 12,	17.5	3
211	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
210	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
209	Harmonic Motion Imaging of Pancreatic Tumor Stiffness Indicates Disease State and Treatment Response. *Clinical Cancer Research*, **2020**, 26, 1297-1308	12.9	11

208	Catheter Ablation Lesion Visualization With Intracardiac Strain Imaging in Canines and Humans. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2020**, 67, 1800-1810	3.2	2
207	Focused ultrasound induced-blood-brain barrier opening in mouse brain receiving radiosurgery dose of radiation enhances local delivery of systemic therapy. *British Journal of Radiology*, **2020**, 93, 20190214	3.4	4
206	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
205	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
204	Hyaluronidase reduced edema after experimental traumatic brain injury. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 2026-2037	7.3	3
203	A comparison between unfocused and focused transmit strategies in cardiac strain imaging. *Physics in Medicine and Biology*, **2020**, 65, 03NT01	3.8	1
202	Cardiovascular elastography **2020**, 67-107		
201	Arterial wall mechanical inhomogeneity detection and atherosclerotic plaque characterization using high frame rate pulse wave imaging in carotid artery disease patients in vivo. *Physics in Medicine and Biology*, **2020**, 65, 025010	3.8	6
200	Atrophy associated with tau pathology precedes overt cell death in a mouse model of progressive tauopathy. *Science Advances*, **2020**, 6,	14.3	8
199	Harmonic motion imaging of human breast masses: an in vivo clinical feasibility. *Scientific Reports*, **2020**, 10, 15254	4.9	3
198	Monitoring Canine Myocardial Infarction Formation and Recovery via Transthoracic Cardiac Strain Imaging. *Ultrasound in Medicine and Biology*, **2020**, 46, 2785-2800	3.5	0
197	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
196	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
195	Fast qualitative two-dimensional mapping of ultrasound fields with acoustic cavitation-enhanced ultrasound imaging. *Journal of the Acoustical Society of America*, **2019**, 146, EL158	2.2	3
194	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
193	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
192	Myocardial Elastography **2019**, 1073-1082		
191	Electromechanical Wave Imaging **2019**, 1083-1095		

190	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
189	Intrinsic Cardiovascular Wave and Strain Imaging. *Series in Bioengineering*, **2019**, 163-190	0.7	
188	Bioavailability and cytosolic kinases modulate response to deoxynucleoside therapy in TK2 deficiency. *EBioMedicine*, **2019**, 46, 356-367	8.8	11
187	Unilateral Focused Ultrasound-Induced Blood-Brain Barrier Opening Reduces Phosphorylated Tau from The rTg4510 Mouse Model. *Theranostics*, **2019**, 9, 5396-5411	12.1	32
186	Blood-brain barrier opening with focused ultrasound in experimental models of Parkinson's disease. *Movement Disorders*, **2019**, 34, 1252-1261	7	15
185	4D cardiac electromechanical activation imaging. *Computers in Biology and Medicine*, **2019**, 113, 103382	7	8
184	Atherosclerotic plaque mechanical characterization coupled with vector Doppler imaging in atherosclerotic carotid arteries in-vivo. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2019**, 2019, 6200-6203	0.9	1
183	Imaging of pulse wave propagation coupled with vector flow and wall shear stress mapping in atherosclerotic plaque phantoms and in vivo **2019**,		2
182	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
181	Transcranial Blood-Brain Barrier Opening and Power Cavitation Imaging Using a Diagnostic Imaging Array **2019**,		2
180	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	
179	Focused ultrasound stimulation of median nerve modulates somatosensory evoked responses **2019** ,		2
178	Pulse Wave Imaging in Carotid Artery Stenosis Human Patients in Vivo. *Ultrasound in Medicine and Biology*, **2019**, 45, 353-366	3.5	14
177	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
176	Cardiac Lesion Mapping In Vivo Using Intracardiac Myocardial Elastography. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 14-20	3.2	6
175	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
174	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
173	Focused Ultrasound Steering for Harmonic Motion Imaging. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2018**, 65, 292-294	3.2	4

172	Non-invasive Characterization of Focal Arrhythmia with Electromechanical Wave Imaging in Vivo. *Ultrasound in Medicine and Biology*, **2018**, 44, 2241-2249	3.5	7
171	Pulse inversion enhances the passive mapping of microbubble-based ultrasound therapy. *Applied Physics Letters*, **2018**, 113, 044102	3.4	14
170	Modulation of Brain Function and Behavior by Focused Ultrasound. *Current Behavioral Neuroscience Reports*, **2018**, 5, 153-164	1.7	15
169	Non-invasive peripheral nerve stimulation via focused ultrasound in vivo. *Physics in Medicine and Biology*, **2018**, 63, 035011	3.8	58
168	A Harmonic Motion Imaging (HMI)clinical System for Detection and Characterization of in Vivo Human Breast Masses - Initial Feasibility **2018**,		1
167	Automated Spatial Mechanical Inhomogeneity Detection and Arterial Wall Characterization in Human Atherosclerotic Carotid Arteries In-Vivo **2018**,		2
166	F4-09-01: NEURORESTORATION OF THE DOPAMINERGIC PATHWAY USING FOCUSED ULTRASOUND-MEDIATED PROTEIN AND GENE DELIVERY IN A PARKINSONIAN MODEL **2018**, 14, P1396-P1397		
165	Focused Ultrasound Enhanced Intranasal Delivery of Neurotrophic Factors Exhibit Neurorestorative Effects in Parkinson's Disease Mouse Model **2018**,		2
164	Intrinsic Cardiovascular Wave and Strain Imaging **2018**, 189-226		
163	Harmonic Motion Imaging **2018**, 264-283		
162	Technical Note: In vivo Young's modulus mapping of pancreatic ductal adenocarcinoma during HIFU ablation using harmonic motion elastography (HME). *Medical Physics*, **2018**, 45, 5244-5250	4.4	3
161	Efficient Blood-Brain Barrier Opening in Primates with Neuronavigation-Guided Ultrasound and Real-Time Acoustic Mapping. *Scientific Reports*, **2018**, 8, 7978	4.9	50
160	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
159	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
158	Non-invasive, Focused Ultrasound-Facilitated Gene Delivery for Optogenetics. *Scientific Reports*, **2017**, 7, 39955	4.9	37
157	Pulse wave imaging using coherent compounding in a phantom and in vivo. *Physics in Medicine and Biology*, **2017**, 62, 1700-1730	3.8	20
156	3D Myocardial Elastography In Vivo. *IEEE Transactions on Medical Imaging*, **2017**, 36, 618-627	11.7	18
155	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

154	Assessment of arterial stiffness in periodontitis using a novel pulse wave imaging methodology. *Journal of Clinical Periodontology*, **2017**, 44, 502-510	7.7	3
153	Technical Note: A 3-D rendering algorithm for electromechanical wave imaging of a beating heart. *Medical Physics*, **2017**, 44, 4766-4772	4.4	8
152	Cardiac Strain Imaging With Coherent Compounding of Diverging Waves. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2017**, 64, 1212-1222	3.2	29
151	Comparison between multi-channel LDV and PWI for measurement of pulse wave velocity in distensible tubes: Towards a new diagnostic technique for detection of arteriosclerosis. *Optics and Lasers in Engineering*, **2017**, 97, 41-51	4.6	3
150	Noninvasive Evaluation of Varying Pulse Pressures Using Brachial Sphymomanometry, Applanation Tonometry, and Pulse Wave Ultrasound Manometry. *Artery Research*, **2017**, 18, 22-28	2.2	4
149	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
148	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
147	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
146	Electromechanical wave imaging and electromechanical wave velocity estimation in a large animal model of myocardial infarction. *Physics in Medicine and Biology*, **2017**, 62, 9341-9356	3.8	2
145	In vivo repeatability of the pulse wave inverse problem in human carotid arteries. *Journal of Biomechanics*, **2017**, 64, 136-144	2.9	4
144	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
143	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
142	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
141	3D Quasi-Static Ultrasound Elastography With Plane Wave In Vivo. *IEEE Transactions on Medical Imaging*, **2017**, 36, 357-365	11.7	29
140	**2017**,		2
139	Toward a Cognitive Neural Prosthesis Using Focused Ultrasound. *Frontiers in Neuroscience*, **2017**, 11, 607	5.1	18
138	Characterizing Focused-Ultrasound Mediated Drug Delivery to the Heterogeneous Primate Brain In Vivo with Acoustic Monitoring. *Scientific Reports*, **2016**, 6, 37094	4.9	33
137	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

136	Assessing the Stability of Aortic Aneurysms with Pulse Wave Imaging. *Radiology*, **2016**, 281, 772-781	20.5	13
135	Tumor characterization and treatment monitoring of postsurgical human breast specimens using harmonic motion imaging (HMI). *Breast Cancer Research*, **2016**, 18, 46	8.3	16
134	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
133	Differential displacement of soft tissue layers from manual therapy loading. *Clinical Biomechanics*, **2016**, 33, 66-72	2.2	8
132	High intensity focused ultrasound as a tool for tissue engineering: Application to cartilage. *Medical Engineering and Physics*, **2016**, 38, 192-8	2.4	3
131	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
130	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
129	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
128	Focused ultrasound-enhanced intranasal brain delivery of brain-derived neurotrophic factor. *Scientific Reports*, **2016**, 6, 28599	4.9	38
127	An inverse approach to determining spatially varying arterial compliance using ultrasound imaging. *Physics in Medicine and Biology*, **2016**, 61, 5486-507	3.8	15
126	Focused ultrasound neuromodulation of cortical and subcortical brain structures using 1.9 MHz. *Medical Physics*, **2016**, 43, 5730	4.4	65
125	P1-095: Focused Ultrasound Using Neurotrophic Factors for the Treatment of Neurodegenerative Disease **2016**, 12, P437-P437		
124	Energy-based constitutive modelling of local material properties of canine aortas. *Royal Society Open Science*, **2016**, 3, 160365	3.3	6
123	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
122	Validation of electromechanical wave imaging in a canine model during pacing and sinus rhythm. *Heart Rhythm*, **2016**, 13, 2221-2227	6.7	19
121	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
120	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
119	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

118	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
117	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
116	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
115	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
114	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
113	Blood-Brain Barrier Opening in Behaving Non-Human Primates via Focused Ultrasound with Systemically Administered Microbubbles. *Scientific Reports*, **2015**, 5, 15076	4.9	62
112	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
111	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
110	Atrial electromechanical cycle length mapping in paced canine hearts in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 1277-87	3.2	6
109	Targeting effects on the volume of the focused-ultrasound-induced blood-brain barrier opening in Non-Human Primates in vivo **2015**,		1
108	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
107	Intracardiac myocardial elastography in canines and humans in vivo. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2015**, 62, 337-49	3.2	22
106	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
105	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
104	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
103	Monitoring and staging abdominal aortic aneurysm disease with pulse wave imaging. *Ultrasound in Medicine and Biology*, **2014**, 40, 2404-14	3.5	22
102	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
101	Electromechanical wave imaging of biologically and electrically paced canine hearts in vivo. *Ultrasound in Medicine and Biology*, **2014**, 40, 177-87	3.5	19

100	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
99	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
98	Real-time, transcranial monitoring of safe blood-brain barrier opening in non-human primates. *PLoS ONE*, **2014**, 9, e84310	3.7	62
97	A new brain drug delivery strategy: focused ultrasound-enhanced intranasal drug delivery. *PLoS ONE*, **2014**, 9, e108880	3.7	33
96	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
95	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
94	3D-Printed Tissue-Mimicking Phantoms for Medical Imaging and Computational Validation Applications. *3D Printing and Additive Manufacturing*, **2014**, 1, 14-23	4	60
93	Emerging Engineering Technologies for Opening the BBB. *AAPS Advances in the Pharmaceutical Sciences Series*, **2014**, 545-570	0.5	
92	Harmonic motion imaging in abdominal tumor detection and HIFU ablation monitoring: A feasibility study in a transgenic mouse model of pancreatic cancer **2014**,		1
91	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
90	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
89	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
88	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
87	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
86	A clinical feasibility study of atrial and ventricular electromechanical wave imaging. *Heart Rhythm*, **2013**, 10, 856-62	6.7	45
85	Localized delivery of the Neurturin (NTN) neurotrophic factor through focused ultrasound - Mediated blood-brain barrier opening **2013**,		1
84	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
83	Detection of Aortic Wall Inclusion Using Regional Pulse Wave Propagation and Velocity. *Artery Research*, **2012**, 6,	2.2	24

82	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
81	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
80	Multi-parametric monitoring of high intensity focused ultrasound (HIFU) treatment using harmonic motion imaging for focused ultrasound (HMIFU) **2012**,		1
79	Optimization of the ultrasound-induced blood-brain barrier opening. *Theranostics*, **2012**, 2, 1223-37	12.1	96
78	Harmonic Motion Imaging (HMI) for Tumor Imaging and Treatment Monitoring. *Current Medical Imaging*, **2012**, 8, 16-26	1.2	27
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