Ingolf Sack

List of Publications by Year
in descending order

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189	8,024	44069	62596
papers	citations	48 h-index	80 g-index

221	221	221	3991
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The impact of aging and gender on brain viscoelasticity. NeuroImage, 2009, 46, 652-657.	4.2	345
2	Noninvasive assessment of the rheological behavior of human organs using multifrequency MR elastography: a study of brain and liver viscoelasticity. Physics in Medicine and Biology, 2007, 52, 7281-7294.	3.0	295
3	Nonâ€invasive measurement of brain viscoelasticity using magnetic resonance elastography. NMR in Biomedicine, 2008, 21, 265-271.	2.8	275
4	MR-elastography reveals degradation of tissue integrity in multiple sclerosis. NeuroImage, 2010, 49, 2520-2525.	4.2	262
5	Assessment of liver viscoelasticity using multifrequency MR elastography. Magnetic Resonance in Medicine, 2008, 60, 373-379.	3.0	227
6	Viscoelasticity-based Staging of Hepatic Fibrosis with Multifrequency MR Elastography. Radiology, 2010, 257, 80-86.	7.3	198
7	Brain Viscoelasticity Alteration in Chronic-Progressive Multiple Sclerosis. PLoS ONE, 2012, 7, e29888.	2.5	195
8	Structure-sensitive elastography: on the viscoelastic powerlaw behavior of in vivo human tissue in health and disease. Soft Matter, 2013, 9, 5672.	2.7	153
9	Fractional encoding of harmonic motions in MR elastography. Magnetic Resonance in Medicine, 2007, 57, 388-395.	3.0	152
10	In vivo viscoelastic properties of the brain in normal pressure hydrocephalus. NMR in Biomedicine, 2011, 24, 385-392.	2.8	146
11	The Influence of Physiological Aging and Atrophy on Brain Viscoelastic Properties in Humans. PLoS ONE, 2011, 6, e23451.	2.5	145
12	High-Resolution Mechanical Imaging of Glioblastoma by Multifrequency Magnetic Resonance Elastography. PLoS ONE, 2014, 9, e110588.	2.5	120
13	US-based Real-time Elastography for the Detection of Fibrotic Gut Tissue in Patients with Stricturing Crohn Disease. Radiology, 2015, 275, 889-899.	7.3	111
14	Tomoelastography by multifrequency wave number recovery from time-harmonic propagating shear waves. Medical Image Analysis, 2016, 30, 1-10.	11.6	111
15	In vivo waveguide elastography of white matter tracts in the human brain. Magnetic Resonance in Medicine, 2012, 68, 1410-1422.	3.0	110
16	Viscoelasticity-based MR elastography of skeletal muscle. Physics in Medicine and Biology, 2010, 55, 6445-6459.	3.0	109
17	Shear wave group velocity inversion in MR elastography of human skeletal muscle. Magnetic Resonance in Medicine, 2006, 56, 489-497.	3.0	106
18	Multifrequency inversion in magnetic resonance elastography. Physics in Medicine and Biology, 2012, 57, 2329-2346.	3.0	106

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19	Towards an Elastographic Atlas of Brain Anatomy. PLoS ONE, 2013, 8, e71807.	2.5	106
20	In Vivo Determination of Hepatic Stiffness Using Steady-State Free Precession Magnetic Resonance Elastography. Investigative Radiology, 2006, 41, 841-848.	6.2	105
21	How tissue fluidity influences brain tumor progression. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 128-134.	7.1	103
22	MR elastography of the human heart: Noninvasive assessment of myocardial elasticity changes by shear wave amplitude variations. Magnetic Resonance in Medicine, 2009, 61, 668-677.	3.0	101
23	MR Elastography of the Liver and the Spleen Using a Piezoelectric Driver, Singleâ€Shot Waveâ€Field Acquisition, and Multifrequency Dual Parameter Reconstruction. Magnetic Resonance in Medicine, 2014, 71, 267-277.	3.0	100
24	MR elastography: Principles, guidelines, and terminology. Magnetic Resonance in Medicine, 2021, 85, 2377-2390.	3.0	100
25	Magnetic resonance elastography reveals altered brain viscoelasticity in experimental autoimmune encephalomyelitis. NeuroImage: Clinical, 2012, 1, 81-90.	2.7	99
26	Alteration of brain viscoelasticity after shunt treatment in normal pressure hydrocephalus. Neuroradiology, 2012, 54, 189-196.	2.2	99
27	Viscoelastic properties of liver measured by oscillatory rheometry and multifrequency magnetic resonance elastography. Biorheology, 2010, 47, 133-141.	0.4	88
28	High-resolution mechanical imaging of the human brain by three-dimensional multifrequency magnetic resonance elastography at 7T. NeuroImage, 2014, 90, 308-314.	4.2	77
29	Cerebral magnetic resonance elastography in supranuclear palsy and idiopathic Parkinson's disease. NeuroImage: Clinical, 2013, 3, 381-387.	2.7	76
30	Wide-range dynamic magnetic resonance elastography. Journal of Biomechanics, 2011, 44, 1380-1386.	2.1	75
31	In vivo measurement of volumetric strain in the human brain induced by arterial pulsation and harmonic waves. Magnetic Resonance in Medicine, 2013, 70, 671-683.	3.0	73
32	InÂVivo Time Harmonic Elastography of the Human Heart. Ultrasound in Medicine and Biology, 2012, 38, 214-222.	1.5	72
33	In vivo wideband multifrequency MR elastography of the human brain and liver. Magnetic Resonance in Medicine, 2016, 76, 1116-1126.	3.0	70
34	Combining viscoelasticity, diffusivity and volume of the hippocampus for the diagnosis of Alzheimer's disease based on magnetic resonance imaging. NeuroImage: Clinical, 2018, 18, 485-493.	2.7	69
35	Tomoelastography of the abdomen: Tissue mechanical properties of the liver, spleen, kidney, and pancreas from single <scp>MR</scp> elastography scans at different hydration states. Magnetic Resonance in Medicine, 2017, 78, 976-983.	3.0	67
36	Analysis of wave patterns in MR elastography of skeletal muscle using coupled harmonic oscillator simulations. Magnetic Resonance Imaging, 2002, 20, 95-104.	1.8	66

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37	Isovolumetric Elasticity Alteration in the Human Heart Detected by InÂVivo Time-Harmonic Elastography. Ultrasound in Medicine and Biology, 2013, 39, 2272-2278.	1.5	64
38	MR elastography in a murine stroke model reveals correlation of macroscopic viscoelastic properties of the brain with neuronal density. NMR in Biomedicine, 2013, 26, 1534-1539.	2.8	62
39	Enhanced Adult Neurogenesis Increases Brain Stiffness: In Vivo Magnetic Resonance Elastography in a Mouse Model of Dopamine Depletion. PLoS ONE, 2014, 9, e92582.	2.5	61
40	Collagen networks determine viscoelastic properties of connective tissues yet do not hinder diffusion of the aqueous solvent. Soft Matter, 2019, 15, 3055-3064.	2.7	60
41	Scatter-based magnetic resonance elastography. Physics in Medicine and Biology, 2009, 54, 2229-2241.	3.0	58
42	In vivo waveguide elastography: Effects of neurodegeneration in patients with amyotrophic lateral sclerosis. Magnetic Resonance in Medicine, 2014, 72, 1755-1761.	3.0	58
43	In Vivo Abdominal Magnetic Resonance Elastography for the Assessment of Portal Hypertension Before and After Transjugular Intrahepatic Portosystemic Shunt Implantation. Investigative Radiology, 2015, 50, 347-351.	6.2	58
44	Tomoelastography Distinguishes Noninvasively between Benign and Malignant Liver Lesions. Cancer Research, 2019, 79, 5704-5710.	0.9	58
45	Fractal network dimension and viscoelastic powerlaw behavior: I. A modeling approach based on a coarse-graining procedure combined with shear oscillatory rheometry. Physics in Medicine and Biology, 2012, 57, 4023-4040.	3.0	57
46	Brain maturation is associated with increasing tissue stiffness and decreasing tissue fluidity. Acta Biomaterialia, 2019, 99, 433-442.	8.3	55
47	MR elastography detection of early viscoelastic response of the murine hippocampus to amyloid Î² accumulation and neuronal cell loss due to Alzheimer's disease. Journal of Magnetic Resonance Imaging, 2018, 47, 105-114.	3.4	54
48	Tissue structure and inflammatory processes shape viscoelastic properties of the mouse brain. NMR in Biomedicine, 2015, 28, 831-839.	2.8	53
49	Cardiac MR Elastography: Comparison with left ventricular pressure measurement. Journal of Cardiovascular Magnetic Resonance, 2009, 11, 44.	3.3	51
50	Simulation and analysis of magnetic resonance elastography wave images using coupled harmonic oscillators and Gaussian local frequency estimation. Magnetic Resonance Imaging, 2001, 19, 703-713.	1.8	50
51	Fractal network dimension and viscoelastic powerlaw behavior: II. An experimental study of structure-mimicking phantoms by magnetic resonance elastography. Physics in Medicine and Biology, 2012, 57, 4041-4053.	3.0	47
52	Threeâ€parameter shear wave inversion in MR elastography of incompressible transverse isotropic media: Application to in vivo lower leg muscles. Magnetic Resonance in Medicine, 2016, 75, 1537-1545.	3.0	47
53	Higherâ€resolution MR elastography reveals early mechanical signatures of neuroinflammation in patients with clinically isolated syndrome. Journal of Magnetic Resonance Imaging, 2016, 44, 51-58.	3.4	47
54	Two-dimensional waveform analysis in MR elastography of skeletal muscles. Physics in Medicine and Biology, 2005, 50, 1313-1325.	3.0	46

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55	Nonlinear multiscale regularisation in MR elastography: Towards fine feature mapping. Medical Image Analysis, 2017, 35, 133-145.	11.6	46
56	Multifrequency Magnetic Resonance Elastography for the Assessment of Renal Allograft Function. Investigative Radiology, 2016, 51, 591-595.	6.2	44
57	Perfusion alters stiffness of deep gray matter. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 116-125.	4.3	44
58	Cardiac Magnetic Resonance Elastography. Investigative Radiology, 2008, 43, 762-772.	6.2	42
59	Cardiac Magnetic Resonance Elastography. Investigative Radiology, 2010, 45, 782-787.	6.2	41
60	Wideband MRE and static mechanical indentation of human liver specimen: Sensitivity of viscoelastic constants to the alteration of tissue structure in hepatic fibrosis. Journal of Biomechanics, 2014, 47, 1665-1674.	2.1	41
61	In vivo high-resolution magnetic resonance elastography of the uterine corpus and cervix. European Radiology, 2014, 24, 3025-3033.	4.5	40
62	Multifrequency Time-Harmonic Elastography for the Measurement of Liver Viscoelasticity in Large Tissue Windows. Ultrasound in Medicine and Biology, 2015, 41, 724-733.	1.5	40
63	US Time-Harmonic Elastography: Detection of Liver Fibrosis in Adolescents with Extreme Obesity with Nonalcoholic Fatty Liver Disease. Radiology, 2018, 288, 99-106.	7.3	38
64	In vivo magnetic resonance elastography of human brain at 7 T and 1.5 T. Journal of Magnetic Resonance Imaging, 2010, 32, 577-583.	3.4	37
65	Shear-wave Amplitudes Measured with Cardiac MR Elastography for Diagnosis of Diastolic Dysfunction. Radiology, 2014, 271, 681-687.	7.3	37
66	Evidence by15N CPMAS and15Nâ^'13C REDOR NMR for Fixation of Atmospheric CO2by Amino Groups of Biopolymers in the Solid State. Journal of the American Chemical Society, 1999, 121, 4892-4893.	13.7	36
67	In vivotime-harmonic multifrequency elastography of the human liver. Physics in Medicine and Biology, 2014, 59, 1641-1654.	3.0	35
68	A compact 0.5â€‰T MR elastography device and its application for studying viscoelasticity changes in biological tissues during progressive formalin fixation. Magnetic Resonance in Medicine, 2018, 79, 470-478.	3.0	35
69	Towards compressionâ€sensitive magnetic resonance elastography of the liver: Sensitivity of harmonic volumetric strain to portal hypertension. Journal of Magnetic Resonance Imaging, 2014, 39, 298-306.	3.4	34
70	Two-Dimensional Time-Harmonic Elastography of the Human Liver and Spleen. Ultrasound in Medicine and Biology, 2016, 42, 2562-2571.	1.5	34
71	Tomoelastography of the prostate using multifrequency MR elastography and externally placed pressurizedâ€air drivers. Magnetic Resonance in Medicine, 2018, 79, 1325-1333.	3.0	34
72	Fast tomoelastography of the mouse brain by multifrequency singleâ€shot MR elastography. Magnetic Resonance in Medicine, 2019, 81, 2676-2687.	3.0	34

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73	Increasing the spatial resolution and sensitivity of magnetic resonance elastography by correcting for subject motion and susceptibility-induced image distortions. Journal of Magnetic Resonance Imaging, 2017, 46, 134-141.	3.4	32
74	Time Harmonic Elastography Reveals Sensitivity of Liver Stiffness to Water Ingestion. Ultrasound in Medicine and Biology, 2016, 42, 1289-1294.	1.5	31
75	Progressive supranuclear palsy and idiopathic Parkinsonâ€™s disease are associated with local reduction of in vivo brain viscoelasticity. European Radiology, 2018, 28, 3347-3354.	4.5	31
76	Multiparametric Quantitative MRI for the Detection of IgA Nephropathy Using Tomoelastography, DWI, and BOLD Imaging. Investigative Radiology, 2019, 54, 669-674.	6.2	31
77	Observation of nonlinear shear wave propagation using magnetic resonance elastography. Magnetic Resonance in Medicine, 2004, 52, 842-850.	3.0	30
78	Elasticity-based determination of isovolumetric phases in the human heart. Journal of Cardiovascular Magnetic Resonance, 2010, 12, 60.	3.3	30
79	Increased Retention of Gadolinium in the Inflamed Brain After Repeated Administration of Gadopentetate Dimeglumine. Investigative Radiology, 2019, 54, 617-626.	6.2	30
80	Dopaminergic Neurodegeneration in the Mouse Is Associated with Decrease of Viscoelasticity of Substantia Nigra Tissue. PLoS ONE, 2016, 11, e0161179.	2.5	30
81	Solid-State NMR Determination of Peptide Torsion Angles:Â Applications of2H-Dephased REDOR. Journal of the American Chemical Society, 2000, 122, 12263-12269.	13.7	29
82	Electromagnetic actuator for generating variably oriented shear waves in MR elastography. Magnetic Resonance in Medicine, 2003, 50, 220-222.	3.0	29
83	Heterogeneous Multifrequency Direct Inversion (HMDI) for magnetic resonance elastography with application to a clinical brain exam. Medical Image Analysis, 2018, 46, 180-188.	11.6	29
84	Molecular MR Imaging of Prostate Cancer. Biomedicines, 2021, 9, 1.	3.2	29
85	Tomoelastography of the native kidney: Regional variation and physiological effects on in vivo renal stiffness. Magnetic Resonance in Medicine, 2018, 79, 2126-2134.	3.0	28
86	Tomoelastography for the Evaluation of Pediatric Nonalcoholic Fatty Liver Disease. Investigative Radiology, 2019, 54, 198-203.	6.2	28
87	Hypercapnia increases brain viscoelasticity. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2445-2455.	4.3	28
88	High-resolution mechanical imaging of the kidney. Journal of Biomechanics, 2014, 47, 639-644.	2.1	27
89	Distinguishing pancreatic cancer and autoimmune pancreatitis with in vivo tomoelastography. European Radiology, 2021, 31, 3366-3374.	4.5	27
90	2H NMR Theory of Transition Metal Dihydrides:Â Coherent and Incoherent Quantum Dynamics. Journal of Physical Chemistry A, 1997, 101, 4679-4689.	2.5	26

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91	Measurement of in vivo cerebral volumetric strain induced by the Valsalva maneuver. Journal of Biomechanics, 2014, 47, 1652-1657.	2.1	26
92	Diagnostic performance of tomoelastography of the liver and spleen for staging hepatic fibrosis. European Radiology, 2020, 30, 1719-1729.	4.5	26
93	Biomechanical properties of the hypoxic and dying brain quantified by magnetic resonance elastography. Acta Biomaterialia, 2020, 101, 395-402.	8.3	26
94	In Vivo Quantification of Water Diffusion, Stiffness, and Tissue Fluidity in Benign Prostatic Hyperplasia and Prostate Cancer. Investigative Radiology, 2020, 55, 524-530.	6.2	26
95	Tabletop magnetic resonance elastography for the measurement of viscoelastic parameters of small tissue samples. Journal of Magnetic Resonance, 2015, 251, 13-18.	2.1	25
96	In vivo time-harmonic ultrasound elastography of the human brain detects acute cerebral stiffness changes induced by intracranial pressure variations. Scientific Reports, 2018, 8, 17888.	3.3	25
97	Tomoelastography Paired With T2* Magnetic Resonance Imaging Detects Lupus Nephritis With Normal Renal Function. Investigative Radiology, 2019, 54, 89-97.	6.2	25
98	Comparison of non-invasive assessment of liver fibrosis in patients with alpha1-antitrypsin deficiency using magnetic resonance elastography (MRE), acoustic radiation force impulse (ARFI) Quantification, and 2D-shear wave elastography (2D-SWE). PLoS ONE, 2018, 13, e0196486.	2.5	24
99	Reduction of breathing artifacts in multifrequency magnetic resonance elastography of the abdomen. Magnetic Resonance in Medicine, 2021, 85, 1962-1973.	3.0	24
100	Comparison of ultrasound shear wave elastography with magnetic resonance elastography and renal microvascular flow in the assessment of chronic renal allograft dysfunction. Acta Radiologica, 2018, 59, 1139-1145.	1.1	23
101	Tomoelastography Based on Multifrequency MR Elastography for Prostate Cancer Detection: Comparison with Multiparametric MRI. Radiology, 2021, 299, 362-370.	7.3	23
102	Physiologic Reduction of Hepatic Venous Blood Flow by the Valsalva Maneuver Decreases Liver Stiffness. Journal of Ultrasound in Medicine, 2017, 36, 1305-1311.	1.7	21
103	Realâ€time MR elastography for viscoelasticity quantification in skeletal muscle during dynamic exercises. Magnetic Resonance in Medicine, 2020, 84, 103-114.	3.0	21
104	Cerebral multifrequency MR elastography by remote excitation of intracranial shear waves. NMR in Biomedicine, 2015, 28, 1426-1432.	2.8	20
105	In vivo multifrequency magnetic resonance elastography of the human intervertebral disk. Magnetic Resonance in Medicine, 2015, 74, 1380-1387.	3.0	20
106	Measurement of vibrationâ€induced volumetric strain in the human lung. Magnetic Resonance in Medicine, 2013, 69, 667-674.	3.0	18
107	Inflammation-induced brain endothelial activation leads to uptake of electrostatically stabilized iron oxide nanoparticles via sulfated glycosaminoglycans. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1411-1421.	3.3	18
108	Cardiac-gated steady-state multifrequency magnetic resonance elastography of the brain: Effect of cerebral arterial pulsation on brain viscoelasticity. Journal of Cerebral Blood Flow and Metabolism, 2020, 40, 991-1001.	4.3	18

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109	An analytical solution to the dispersionâ€byâ€inversion problem in magnetic resonance elastography. Magnetic Resonance in Medicine, 2020, 84, 61-71.	3.0	18
110	Tomoelastography for Measurement of Tumor Volume Related to Tissue Stiffness in Pancreatic Ductal Adenocarcinomas. Investigative Radiology, 2020, 55, 769-774.	6.2	18
111	Added Value of Viscoelasticity for MRI-Based Prediction of Ki-67 Expression of Hepatocellular Carcinoma Using a Deep Learning Combined Radiomics (DLCR) Model. Cancers, 2022, 14, 2575.	3.7	18
112	Compression-sensitive magnetic resonance elastography. Physics in Medicine and Biology, 2013, 58, 5287-5299.	3.0	16
113	Multifrequency magnetic resonance elastography of the brain reveals tissue degeneration in neuromyelitis optica spectrum disorder. European Radiology, 2017, 27, 2206-2215.	4.5	16
114	Nonâ€invasive structureâ€“function assessment of the liver by 2D timeâ€harmonic elastography and the dynamic Liver MAximum capacity (LiMAx) test. Journal of Gastroenterology and Hepatology (Australia), 2019, 34, 1611-1619.	2.8	16
115	Magnetic resonance elastography quantification of the solid-to-fluid transition of liver tissue due to decellularization. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103640.	3.1	16
116	Superviscous properties of the in vivo brain at large scales. Acta Biomaterialia, 2021, 121, 393-404.	8.3	16
117	US Time-Harmonic Elastography for the Early Detection of Glomerulonephritis. Radiology, 2019, 292, 676-684.	7.3	15
118	In vivo magnetic particle imaging: angiography of inferior vena cava and aorta in rats using newly developed multicore particles. Scientific Reports, 2020, 10, 17247.	3.3	15
119	Time-Resolved Response of Cerebral Stiffness to Hypercapnia in Humans. Ultrasound in Medicine and Biology, 2020, 46, 936-943.	1.5	15
120	Phase preparation in steady-state free precession MR elastography. Magnetic Resonance Imaging, 2008, 26, 228-235.	1.8	14
121	Full-Field-of-View Time-Harmonic Elastography of the Native Kidney. Ultrasound in Medicine and Biology, 2018, 44, 949-954.	1.5	14
122	Fast Robust Dejitter and Interslice Discontinuity Removal in MRI Phase Acquisitions: Application to Magnetic Resonance Elastography. IEEE Transactions on Medical Imaging, 2019, 38, 1578-1587.	8.9	14
123	Ultrasound Time-Harmonic Elastography of the Aorta. Investigative Radiology, 2019, 54, 675-680.	6.2	14
124	Real-Time Multifrequency MR Elastography of the Human Brain Reveals Rapid Changes in Viscoelasticity in Response to the Valsalva Maneuver. Frontiers in Bioengineering and Biotechnology, 2021, 9, 666456.	4.1	14
125	Influence of fibrosis progression on the viscous properties of in vivo liver tissue elucidated by shear wave dispersion in multifrequency MR elastography. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 121, 104645.	3.1	14
126	Sexual Dimorphism in Extracellular Matrix Composition and Viscoelasticity of the Healthy and Inflamed Mouse Brain. Biology, 2022, 11, 230.	2.8	14

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127	Liquid-Liver Phantom. Investigative Radiology, 2022, 57, 502-509.	6.2	14
128	Vibrationâ€synchronized magnetic resonance imaging for the detection of myocardial elasticity changes. Magnetic Resonance in Medicine, 2012, 67, 919-924.	3.0	13
129	The influence of body temperature on tissue stiffness, blood perfusion, and water diffusion in the mouse brain. Acta Biomaterialia, 2019, 96, 412-420.	8.3	13
130	Separation of fluid and solid shear wave fields and quantification of coupling density by magnetic resonance poroelastography. Magnetic Resonance in Medicine, 2021, 85, 1655-1668.	3.0	13
131	How histopathologic changes in pediatric nonalcoholic fatty liver disease influence in vivo liver stiffness. Acta Biomaterialia, 2021, 123, 178-186.	8.3	13
132	Feasibility of Intestinal<scp>MR</scp>Elastography in Inflammatory Bowel Disease. Journal of Magnetic Resonance Imaging, 2022, 55, 815-822.	3.4	13
133	Application of Magnetic Resonance Imaging in Liver Biomechanics: A Systematic Review. Frontiers in Physiology, 2021, 12, 733393.	2.8	13
134	Adipose cells and tissues soften with lipid accumulation while in diabetes adipose tissue stiffens. Scientific Reports, 2022, 12, .	3.3	13
135	Contribution of Tissue Inflammation and Blood-Brain Barrier Disruption to Brain Softening in a Mouse Model of Multiple Sclerosis. Frontiers in Neuroscience, 2021, 15, 701308.	2.8	12
136	MR Elastography-Based Assessment of Matrix Remodeling at Lesion Sites Associated With Clinical Severity in a Model of Multiple Sclerosis. Frontiers in Neurology, 2019, 10, 1382.	2.4	12
137	Time-Harmonic Elastography of the Liver is Sensitive to Intrahepatic Pressure Gradient and Liver Decompression after Transjugular Intrahepatic Portosystemic Shunt (TIPS) Implantation. Ultrasound in Medicine and Biology, 2017, 43, 595-600.	1.5	11
138	Comparison of inversion methods in<scp>MR</scp>elastography: An openâ€access pipeline for processing multifrequency shearâ€wave data and demonstration in a phantom, human kidneys, and brain. Magnetic Resonance in Medicine, 2022, 88, 1840-1850.	3.0	11
139	Sensitivity of multifrequency magnetic resonance elastography and diffusion-weighted imaging to cellular and stromal integrity of liver tissue. Journal of Biomechanics, 2019, 88, 201-208.	2.1	9
140	Viscoelasticity of striatal brain areas reflects variations in body mass index of lean to overweight male adults. Brain Imaging and Behavior, 2020, 14, 2477-2487.	2.1	9
141	Quantitative MRI for Assessment of Treatment Outcomes in a Rabbit VX2 Hepatic Tumor Model. Journal of Magnetic Resonance Imaging, 2020, 52, 668-685.	3.4	9
142	Ultrasound Time-Harmonic Elastography of the Pancreas. Investigative Radiology, 2020, 55, 270-276.	6.2	9
143	In vivo stiffness of multiple sclerosis lesions is similar to that of normal-appearing white matter. Acta Biomaterialia, 2022, 138, 410-421.	8.3	9
144	Whole tissue and single cell mechanics are correlated in human brain tumors. Soft Matter, 2021, 17, 10744-10752.	2.7	9

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145	Time-Resolved Analysis of Left Ventricular Shear Wave Amplitudes in Cardiac Elastography for the Diagnosis of Diastolic Dysfunction. Investigative Radiology, 2016, 51, 1-6.	6.2	8
146	Time-Harmonic Ultrasound elastography of the Descending Abdominal Aorta: Initial Results. Ultrasound in Medicine and Biology, 2017, 43, 2550-2557.	1.5	8
147	Quantification of Aortic Stiffness by Ultrasound Time-Harmonic Elastography. Investigative Radiology, 2020, 55, 174-180.	6.2	8
148	Spatial heterogeneity of hepatic fibrosis in primary sclerosing cholangitis vs. viral hepatitis assessed by MR elastography. Scientific Reports, 2021, 11, 9820.	3.3	8
149	Rectal Tumor Stiffness Quantified by In Vivo Tomoelastography and Collagen Content Estimated by Histopathology Predict Tumor Aggressiveness. Frontiers in Oncology, 2021, 11, 701336.	2.8	8
150	Added Value of Tomoelastography for Characterization of Pancreatic Neuroendocrine Tumor Aggressiveness Based on Stiffness. Cancers, 2021, 13, 5185.	3.7	8
151	Alterations of the proton-T2 time in relaxed skeletal muscle induced by passive extremity flexions. Journal of Magnetic Resonance Imaging, 2006, 23, 541-546.	3.4	7
152	A prospective study of daclatasvir and sofosbuvir in chronic HCV-infected kidney transplant recipients. BMC Nephrology, 2019, 20, 36.	1.8	7
153	Inversionâ€recovery MR elastography of the human brain for improved stiffness quantification near fluidâ€“solid boundaries. Magnetic Resonance in Medicine, 2021, 86, 2552-2561.	3.0	7
154	Microscopic multifrequency MR elastography for mapping viscoelasticity in zebrafish. Magnetic Resonance in Medicine, 2022, 87, 1435-1445.	3.0	7
155	Different Impact of Gadopentetate and Gadobutrol on Inflammation-Promoted Retention and Toxicity of Gadolinium Within the Mouse Brain. Investigative Radiology, 2022, 57, 677-688.	6.2	7
156	Valsalva Maneuver Decreases Liver and Spleen Stiffness Measured by Time-Harmonic Ultrasound Elastography. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	4.1	7
157	Magnetic Resonance Elastography of the Heart. Current Cardiovascular Imaging Reports, 2014, 7, 1.	0.6	6
158	Changes in Liver Mechanical Properties and Water Diffusivity During Normal Pregnancy Are Driven by Cellular Hypertrophy. Frontiers in Physiology, 2020, 11, 605205.	2.8	6
159	Multiple motion encoding in phase-contrast MRI: A general theory and application to elastography imaging. Medical Image Analysis, 2022, 78, 102416.	11.6	6
160	The MRE Inverse Problem for the Elastic Shear Modulus. SIAM Journal on Applied Mathematics, 2019, 79, 1367-1388.	1.8	5
161	Quantitative Time-Harmonic Ultrasound Elastography of the Abdominal Aorta and Inferior Vena Cava. Ultrasound in Medicine and Biology, 2019, 45, 2349-2355.	1.5	5
162	Transtemporal Investigation of Brain Parenchyma Elasticity Using 2-D Shear Wave Elastography: Trustworthy?. Ultrasound in Medicine and Biology, 2019, 45, 1344-1345.	1.5	5

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163	Tomoelastography for Longitudinal Monitoring of Viscoelasticity Changes in the Liver and in Renal Allografts after Direct-Acting Antiviral Treatment in 15 Kidney Transplant Recipients with Chronic HCV Infection. Journal of Clinical Medicine, 2021, 10, 510.	2.4	5
164	Noninvasive Detection of Intracranial Hypertension by Novel Ultrasound Time-Harmonic Elastography. Investigative Radiology, 2022, 57, 77-84.	6.2	5
165	Cerebral Ultrasound Time-Harmonic Elastography Reveals Softening of the Human Brain Due to Dehydration. Frontiers in Physiology, 2020, 11, 616984.	2.8	5
166	Tomoelastography for non-invasive detection and treatment monitoring in acute appendicitis. BMJ Case Reports, 2019, 12, e230791.	0.5	4
167	Steady-State Multifrequency Magnetic Resonance Elastography of the Thoracic and Abdominal Human Aortaâ€"Validation and Reference Values. Investigative Radiology, 2020, Publish Ahead of Print, 451-456.	6.2	4
168	Effect of Post-mortem Interval and Perfusion on the Biophysical Properties of ex vivo Liver Tissue Investigated Longitudinally by MRE and DWI. Frontiers in Physiology, 2021, 12, 696304.	2.8	4
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