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	Feasibility of Intestinal<scp>MR</scp>Elastography in Inflammatory Bowel Disease. Journal of Magnetic Resonance Imaging, 2022, 55, 815-822.	3.4	13
2	Noninvasive Detection of Intracranial Hypertension by Novel Ultrasound Time-Harmonic Elastography. Investigative Radiology, 2022, 57, 77-84.	6.2	5
3	Multifrequency magnetic resonance elastography-based tomoelastography of the parotid glandsâ€“feasibility and reference values. Dentomaxillofacial Radiology, 2022, 51, 20210337.	2.7	1
4	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
5	Microscopic multifrequency MR elastography for mapping viscoelasticity in zebrafish. Magnetic Resonance in Medicine, 2022, 87, 1435-1445.	3.0	7
6	Sexual Dimorphism in Extracellular Matrix Composition and Viscoelasticity of the Healthy and Inflamed Mouse Brain. Biology, 2022, 11, 230.	2.8	14
7	Fully automated quantification of in vivo viscoelasticity of prostate zones using magnetic resonance elastography with Dense U-net segmentation. Scientific Reports, 2022, 12, 2001.	3.3	2
8	Liquid-Liver Phantom. Investigative Radiology, 2022, 57, 502-509.	6.2	14
9	Multiple motion encoding in phase-contrast MRI: A general theory and application to elastography imaging. Medical Image Analysis, 2022, 78, 102416.	11.6	6
10	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
11	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
12	Valsalva Maneuver Decreases Liver and Spleen Stiffness Measured by Time-Harmonic Ultrasound Elastography. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	4.1	7
13	Tomoelastography based on multifrequency MR elastography predicts liver function reserve in patients with hepatocellular carcinoma: a prospective study. Insights Into Imaging, 2022, 13, .	3.4	3
14	Solid fraction determines stiffness and viscosity in decellularized pancreatic tissues. , 2022, , 212999.		3
15	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
16	Adipose cells and tissues soften with lipid accumulation while in diabetes adipose tissue stiffens. Scientific Reports, 2022, 12, .	3.3	13
17	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
18	MR elastography: Principles, guidelines, and terminology. Magnetic Resonance in Medicine, 2021, 85, 2377-2390.	3.0	100

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19	Superviscous properties of the in vivo brain at large scales. Acta Biomaterialia, 2021, 121, 393-404.	8.3	16
20	Reduction of breathing artifacts in multifrequency magnetic resonance elastography of the abdomen. Magnetic Resonance in Medicine, 2021, 85, 1962-1973.	3.0	24
21	Distinguishing pancreatic cancer and autoimmune pancreatitis with in vivo tomoelastography. European Radiology, 2021, 31, 3366-3374.	4.5	27
22	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
23	How histopathologic changes in pediatric nonalcoholic fatty liver disease influence in vivo liver stiffness. Acta Biomaterialia, 2021, 123, 178-186.	8.3	13
24	Tomoelastography Based on Multifrequency MR Elastography for Prostate Cancer Detection: Comparison with Multiparametric MRI. Radiology, 2021, 299, 362-370.	7.3	23
25	Real-Time Deformability Cytometry Detects Leukocyte Stiffening After Gadolinium-Based Contrast Agent Exposure. Investigative Radiology, 2021, Publish Ahead of Print, .	6.2	2
26	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
27	Spatial heterogeneity of hepatic fibrosis in primary sclerosing cholangitis vs. viral hepatitis assessed by MR elastography. Scientific Reports, 2021, 11, 9820.	3.3	8
28	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
29	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
30	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
31	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
32	Application of Magnetic Resonance Imaging in Liver Biomechanics: A Systematic Review. Frontiers in Physiology, 2021, 12, 733393.	2.8	13
33	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
34	Simulating Local Deformations in the Human Cortex Due to Blood Flow-Induced Changes in Mechanical Tissue Properties: Impact on Functional Magnetic Resonance Imaging. Frontiers in Neuroscience, 2021, 15, 722366.	2.8	3
35	Assessment of Albumin ECM Accumulation and Inflammation as Novel In Vivo Diagnostic Targets for Multi-Target MR Imaging. Biology, 2021, 10, 964.	2.8	2
36	Molecular MR Imaging of Prostate Cancer. Biomedicines, 2021, 9, 1.	3.2	29

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37	Added Value of Tomoelastography for Characterization of Pancreatic Neuroendocrine Tumor Aggressiveness Based on Stiffness. Cancers, 2021, 13, 5185.	3.7	8
38	A stacked frequency approach for inhomogeneous time-dependent MRE: an inverse problem for the elastic shear modulus. IMA Journal of Applied Mathematics, 2021, 86, 121-145.	1.6	1
39	Microscopic multifrequency magnetic resonance elastography of ex vivo abdominal aortic aneurysms for extracellular matrix imaging in a mouse model. Acta Biomaterialia, 2021, 140, 389-389.	8.3	2
40	Whole tissue and single cell mechanics are correlated in human brain tumors. Soft Matter, 2021, 17, 10744-10752.	2.7	9
41	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
42	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
43	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
44	Diagnostic performance of tomoelastography of the liver and spleen for staging hepatic fibrosis. European Radiology, 2020, 30, 1719-1729.	4.5	26
45	Biomechanical properties of the hypoxic and dying brain quantified by magnetic resonance elastography. Acta Biomaterialia, 2020, 101, 395-402.	8.3	26
46	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
47	Realâ€time MR elastography for viscoelasticity quantification in skeletal muscle during dynamic exercises. Magnetic Resonance in Medicine, 2020, 84, 103-114.	3.0	21
48	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
49	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
50	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
51	Tomoelastography for non-invasive detection of ameloblastoma and metastatic neck lymph nodes. BMJ Case Reports, 2020, 13, e235930.	0.5	2
52	Ultrasound Time-Harmonic Elastography of the Pancreas. Investigative Radiology, 2020, 55, 270-276.	6.2	9
53	An analytical solution to the dispersionâ€byâ€inversion problem in magnetic resonance elastography. Magnetic Resonance in Medicine, 2020, 84, 61-71.	3.0	18
54	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

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55	Time-Resolved Response of Cerebral Stiffness to Hypercapnia in Humans. Ultrasound in Medicine and Biology, 2020, 46, 936-943.	1.5	15
56	Quantification of Aortic Stiffness by Ultrasound Time-Harmonic Elastography. Investigative Radiology, 2020, 55, 174-180.	6.2	8
57	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
58	Cerebral Ultrasound Time-Harmonic Elastography Reveals Softening of the Human Brain Due to Dehydration. Frontiers in Physiology, 2020, 11, 616984.	2.8	5
59	Tomoelastography for Measurement of Tumor Volume Related to Tissue Stiffness in Pancreatic Ductal Adenocarcinomas. Investigative Radiology, 2020, 55, 769-774.	6.2	18
60	Liver Magnetic Resonance Elastography: Clinical Use and Interpretation. , 2020, , 69-93.		2
61	The MRE Inverse Problem for the Elastic Shear Modulus. SIAM Journal on Applied Mathematics, 2019, 79, 1367-1388.	1.8	5
62	US Time-Harmonic Elastography for the Early Detection of Glomerulonephritis. Radiology, 2019, 292, 676-684.	7.3	15
63	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
64	Tomoelastography Distinguishes Noninvasively between Benign and Malignant Liver Lesions. Cancer Research, 2019, 79, 5704-5710.	0.9	58
65	Brain maturation is associated with increasing tissue stiffness and decreasing tissue fluidity. Acta Biomaterialia, 2019, 99, 433-442.	8.3	55
66	Tomoelastography Paired With T2* Magnetic Resonance Imaging Detects Lupus Nephritis With Normal Renal Function. Investigative Radiology, 2019, 54, 89-97.	6.2	25
67	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
68	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
69	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
70	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
71	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
72	A prospective study of daclatasvir and sofosbuvir in chronic HCV-infected kidney transplant recipients. BMC Nephrology, 2019, 20, 36.	1.8	7

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73	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
74	Tomoelastography for non-invasive detection and treatment monitoring in acute appendicitis. BMJ Case Reports, 2019, 12, e230791.	0.5	4
75	Multiparametric Quantitative MRI for the Detection of IgA Nephropathy Using Tomoelastography, DWI, and BOLD Imaging. Investigative Radiology, 2019, 54, 669-674.	6.2	31
76	Tomoelastography for the Evaluation of Pediatric Nonalcoholic Fatty Liver Disease. Investigative Radiology, 2019, 54, 198-203.	6.2	28
77	Increased Retention of Gadolinium in the Inflamed Brain After Repeated Administration of Gadopentetate Dimeglumine. Investigative Radiology, 2019, 54, 617-626.	6.2	30
78	Ultrasound Time-Harmonic Elastography of the Aorta. Investigative Radiology, 2019, 54, 675-680.	6.2	14
79	Hypercapnia increases brain viscoelasticity. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2445-2455.	4.3	28
80	Fast tomoelastography of the mouse brain by multifrequency singleâ€shot MR elastography. Magnetic Resonance in Medicine, 2019, 81, 2676-2687.	3.0	34
81	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
82	The Extracellular Matrix as a Target for Biophysical and Molecular Magnetic Resonance Imaging. , 2018, , 123-150.		3
83	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
84	Introduction: Medical Imaging for the Quantitative Measurement of Biophysical Parameters. , 2018, , 1-6.		1
85	The Fundamentals of Transport in Living Tissues Quantified by Medical Imaging Technologies. , 2018, , 9-43.		1
86	Full-Field-of-View Time-Harmonic Elastography of the Native Kidney. Ultrasound in Medicine and Biology, 2018, 44, 949-954.	1.5	14
87	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
88	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
89	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
90	Perfusion alters stiffness of deep gray matter. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 116-125.	4.3	44

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91	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
92	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
93	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
94	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
95	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
96	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
97	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
98	Nonlinear multiscale regularisation in MR elastography: Towards fine feature mapping. Medical Image Analysis, 2017, 35, 133-145.	11.6	46
99	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
100	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
101	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
102	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
103	Time-Harmonic Ultrasound elastography of the Descending Abdominal Aorta: Initial Results. Ultrasound in Medicine and Biology, 2017, 43, 2550-2557.	1.5	8
104	Multifrequency magnetic resonance elastography of the brain reveals tissue degeneration in neuromyelitis optica spectrum disorder. European Radiology, 2017, 27, 2206-2215.	4.5	16
105	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
106	Higher-resolution MR elastography reveals early mechanical signatures of neuroinflammation in patients with clinically isolated syndrome. Journal of Magnetic Resonance Imaging, 2016, 44, spcone-spcone.	3.4	2
107	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
108	Multifrequency Magnetic Resonance Elastography for the Assessment of Renal Allograft Function. Investigative Radiology, 2016, 51, 591-595.	6.2	44

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109	In vivo wideband multifrequency MR elastography of the human brain and liver. Magnetic Resonance in Medicine, 2016, 76, 1116-1126.	3.0	70
110	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
111	Time Harmonic Elastography Reveals Sensitivity of Liver Stiffness to Water Ingestion. Ultrasound in Medicine and Biology, 2016, 42, 1289-1294.	1.5	31
112	Two-Dimensional Time-Harmonic Elastography of the Human Liver and Spleen. Ultrasound in Medicine and Biology, 2016, 42, 2562-2571.	1.5	34
113	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
114	Tomoelastography by multifrequency wave number recovery from time-harmonic propagating shear waves. Medical Image Analysis, 2016, 30, 1-10.	11.6	111
115	Tomoelastography by Multifrequency Wave Number Recovery. Informatik Aktuell, 2016, , 3-7.	0.6	2
116	Dopaminergic Neurodegeneration in the Mouse Is Associated with Decrease of Viscoelasticity of Substantia Nigra Tissue. PLoS ONE, 2016, 11, e0161179.	2.5	30
117	Tissue structure and inflammatory processes shape viscoelastic properties of the mouse brain. NMR in Biomedicine, 2015, 28, 831-839.	2.8	53
118	Cerebral multifrequency MR elastography by remote excitation of intracranial shear waves. NMR in Biomedicine, 2015, 28, 1426-1432.	2.8	20
119	In vivo multifrequency magnetic resonance elastography of the human intervertebral disk. Magnetic Resonance in Medicine, 2015, 74, 1380-1387.	3.0	20
120	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
121	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
122	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
123	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
124	B-Mode-gestÃ¼tzte zeitharmonische Leber-Elastographie zur Diagnose hepatischer Fibrose bei adipÃ¶sen Patienten. Informatik Aktuell, 2015, , 41-46.	0.6	0
125	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
126	High-Resolution Mechanical Imaging of Glioblastoma by Multifrequency Magnetic Resonance Elastography. PLoS ONE, 2014, 9, e110588.	2.5	120

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127	In vivo waveguide elastography: Effects of neurodegeneration in patients with amyotrophic lateral sclerosis. Magnetic Resonance in Medicine, 2014, 72, 1755-1761.	3.0	58
128	In vivo high-resolution magnetic resonance elastography of the uterine corpus and cervix. European Radiology, 2014, 24, 3025-3033.	4.5	40
129	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
130	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
131	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
132	In vivotime-harmonic multifrequency elastography of the human liver. Physics in Medicine and Biology, 2014, 59, 1641-1654.	3.0	35
133	Magnetic Resonance Elastography of the Heart. Current Cardiovascular Imaging Reports, 2014, 7, 1.	0.6	6
134	High-resolution mechanical imaging of the kidney. Journal of Biomechanics, 2014, 47, 639-644.	2.1	27
135	Measurement of in vivo cerebral volumetric strain induced by the Valsalva maneuver. Journal of Biomechanics, 2014, 47, 1652-1657.	2.1	26
136	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
137	Shear-wave Amplitudes Measured with Cardiac MR Elastography for Diagnosis of Diastolic Dysfunction. Radiology, 2014, 271, 681-687.	7.3	37
138	Measurement of vibrationâ€induced volumetric strain in the human lung. Magnetic Resonance in Medicine, 2013, 69, 667-674.	3.0	18
139	Cerebral magnetic resonance elastography in supranuclear palsy and idiopathic Parkinson's disease. NeuroImage: Clinical, 2013, 3, 381-387.	2.7	76
140	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
141	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
142	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
143	Compression-sensitive magnetic resonance elastography. Physics in Medicine and Biology, 2013, 58, 5287-5299.	3.0	16
144	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

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145	Towards an Elastographic Atlas of Brain Anatomy. PLoS ONE, 2013, 8, e71807.	2.5	106
146	Multifrequency inversion in magnetic resonance elastography. Physics in Medicine and Biology, 2012, 57, 2329-2346.	3.0	106
147	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
148	In vivo time harmonic multiple frequency elastography of human liver. , 2012, , .		0
149	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
150	InÂVivo Time Harmonic Elastography of the Human Heart. Ultrasound in Medicine and Biology, 2012, 38, 214-222.	1.5	72
151	Magnetic resonance elastography reveals altered brain viscoelasticity in experimental autoimmune encephalomyelitis. NeuroImage: Clinical, 2012, 1, 81-90.	2.7	99
152	Brain Viscoelasticity Alteration in Chronic-Progressive Multiple Sclerosis. PLoS ONE, 2012, 7, e29888.	2.5	195
153	In vivo waveguide elastography of white matter tracts in the human brain. Magnetic Resonance in Medicine, 2012, 68, 1410-1422.	3.0	110
154	Vibrationâ€synchronized magnetic resonance imaging for the detection of myocardial elasticity changes. Magnetic Resonance in Medicine, 2012, 67, 919-924.	3.0	13
155	Alteration of brain viscoelasticity after shunt treatment in normal pressure hydrocephalus. Neuroradiology, 2012, 54, 189-196.	2.2	99
156	Fast 3D Vector Field Multi-Frequency Magnetic Resonance Elastography of the Human Brain. Informatik Aktuell, 2012, , 363-368.	0.6	0
157	Direct Magnetic Resonance Elastography. Informatik Aktuell, 2012, , 3-8.	0.6	0
158	Shear Wave Diffusion Observed by Magnetic Resonance Elastography. Mathematics and Visualization, 2012, , 157-168.	0.6	1
159	In vivo viscoelastic properties of the brain in normal pressure hydrocephalus. NMR in Biomedicine, 2011, 24, 385-392.	2.8	146
160	The Influence of Physiological Aging and Atrophy on Brain Viscoelastic Properties in Humans. PLoS ONE, 2011, 6, e23451.	2.5	145
161	Wide-range dynamic magnetic resonance elastography. Journal of Biomechanics, 2011, 44, 1380-1386.	2.1	75
162	Cardiac Magnetic Resonance Elastography. Investigative Radiology, 2010, 45, 782-787.	6.2	41

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163	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
164	Elasticity-based determination of isovolumetric phases in the human heart. Journal of Cardiovascular Magnetic Resonance, 2010, 12, 60.	3.3	30
165	Viscoelasticity-based Staging of Hepatic Fibrosis with Multifrequency MR Elastography. Radiology, 2010, 257, 80-86.	7.3	198
166	Viscoelasticity-based MR elastography of skeletal muscle. Physics in Medicine and Biology, 2010, 55, 6445-6459.	3.0	109
167	Viscoelastic properties of liver measured by oscillatory rheometry and multifrequency magnetic resonance elastography. Biorheology, 2010, 47, 133-141.	0.4	88
168	MR-elastography reveals degradation of tissue integrity in multiple sclerosis. NeuroImage, 2010, 49, 2520-2525.	4.2	262
169	Scatter-based magnetic resonance elastography. Physics in Medicine and Biology, 2009, 54, 2229-2241.	3.0	58
170	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
171	Cardiac MR Elastography: Comparison with left ventricular pressure measurement. Journal of Cardiovascular Magnetic Resonance, 2009, 11, 44.	3.3	51
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