Magalie Viallon

List of Publications by Year
in descending order

113 papers	3,174 citations	101543 36 h-index	175258 52 g-index
119 all docs	119 docs citations	119 times ranked	4095 citing authors

#	Article	IF	Citations
1	Validation of cardiac diffusion tensor imaging sequences: A multicentre testâ€“retest phantom study. NMR in Biomedicine, 2022, 35, e4685.	2.8	2
2	Kinetics of Cardiac Remodeling and Fibrosis Biomarkers During an Extreme Mountain Ultramarathon. Frontiers in Cardiovascular Medicine, 2022, 9, 790551.	2.4	3
3	Myofiber strain in healthy humans using DENSE and cDTI. Magnetic Resonance in Medicine, 2021, 86, 277-292.	3.0	10
4	Coupling hemodynamics with mechanobiology in patient-specific computational models of ascending thoracic aortic aneurysms. Computer Methods and Programs in Biomedicine, 2021, 205, 106107.	4.7	21
5	Significance of Hemodynamics Biomarkers, Tissue Biomechanics and Numerical Simulations in the Pathogenesis of Ascending Thoracic Aortic Aneurysms. Current Pharmaceutical Design, 2021, 27, 1890-1898.	1.9	1
6	Motionâ€Induced Signal Loss in In Vivo Cardiac Diffusionâ€Weighted Imaging. Journal of Magnetic Resonance Imaging, 2020, 51, 319-320.	3.4	7
7	Relationship Between Ascending Thoracic Aortic Aneurysms Hemodynamics and Biomechanical Properties. IEEE Transactions on Biomedical Engineering, 2020, 67, 949-956.	4.2	22
8	Hemodynamics alteration in patient-specific dilated ascending thoracic aortas with tricuspid and bicuspid aortic valves. Journal of Biomechanics, 2020, 110, 109954.	2.1	8
9	T1 mapping performance and measurement repeatability: results from the multi-national T1 mapping standardization phantom program (T1MES). Journal of Cardiovascular Magnetic Resonance, 2020, 22, 31.	3.3	23
10	MRI of Reperfused Acute Myocardial Infarction Edema: ADC Quantification versus T1 and T2 Mapping. Radiology, 2020, 295, 542-549.	7.3	18
11	Reliability of standardized ultrasound measurements of quadriceps muscle thickness in neurological critically ill patients: a comparison to computed tomography measures.. Journal of Rehabilitation Medicine, 2020, 52, jrm00032.	1.1	11
12	Computational prediction of hemodynamical and biomechanical alterations induced by aneurysm dilatation in patientâ€specific ascending thoracic aortas. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3326.	2.1	9
13	Comparison Between Multiline Transmission and Diverging Wave Imaging: Assessment of Image Quality and Motion Estimation Accuracy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1560-1572.	3.0	4
14	Automatic myocardial ischemic lesion detection on magnetic resonance perfusion weighted imaging prior perfusion quantification: A pre-modeling strategy. Computers in Biology and Medicine, 2019, 110, 108-119.	7.0	1
15	Chemical-Shift-Encoded Magnetic Resonance Imaging and Spectroscopy to Reveal Immediate and Long-Term Multi-Organs Composition Changes of a 14-Days Periodic Fasting Intervention: A Technological and Case Report. Frontiers in Nutrition, 2019, 6, 5.	3.7	11
16	Full 3D anisotropic estimation of tissue in ultrasound imaging. , 2019, , .		1
17	Potential of Low Energy UltraSound for Inducing Cardioprotection Mechanisms: In-Vitro Investigations on a Hypoxia-Reoxygenation Model of Cardiac Cells. , 2018, , .		0
18	Quantitative comparison of human myocardial fiber orientations derived from DTI and polarized light imaging. Physics in Medicine and Biology, 2018, 63, 215003.	3.0	14

#	Article	IF	Citations
19	Evaluation of Peak Wall Stress in an Ascending Thoracic Aortic Aneurysm Using FSI Simulations: Effects of Aortic Stiffness and Peripheral Resistance. Cardiovascular Engineering and Technology, 2018, 9, 707-722.	1.6	54
20	Ascending thoracic aorta aneurysm repair induces positive hemodynamic outcomes in a patient with unchanged bicuspid aortic valve. Journal of Biomechanics, 2018, 81, 145-148.	2.1	17
21	Fast Volumetric Ultrasound B-Mode and Doppler Imaging with a New High-Channels Density Platform for Advanced 4D Cardiac Imaging/Therapy. Applied Sciences (Switzerland), 2018, 8, 200.	2.5	54
22	IMPACT OF AN ULTRA-MARATHON OF 330 KM ON PLASMA LEVELS OF CARDIAC BIOMARKERS. British Journal of Sports Medicine, 2017, 51, 348.1-348.	6.7	0
23	A new high channels density ultrasound platform for advanced 4D cardiac imaging. , 2017, , .		5
24	Fluid- and Biomechanical Analysis of Ascending Thoracic Aorta Aneurysm with Concomitant Aortic Insufficiency. Annals of Biomedical Engineering, 2017, 45, 2921-2932.	2.5	42
25	Dynamic Contrast-Enhanced MR Perfusion of Intradural Spinal Lesions. American Journal of Neuroradiology, 2017, 38, 192-194.	2.4	3
26	3D ultrasound imaging of tissue anisotropy using spatial coherence: Comparison between plane waves and diverging waves. , 2017, , .		1
27	Time samples selection in spiral acquisition for sparse magnetic resonance spectroscopic imaging. , 2017, , .		2
28	Extreme Mountain Ultra-Marathon Leads to Acute but Transient Increase in Cerebral Water Diffusivity and Plasma Biomarkers Levels Changes. Frontiers in Physiology, 2017, 7, 664.	2.8	16
29	3D ultrasound imaging of tissue anisotropy using spatial coherence: Comparison between plane and diverging waves. , 2017, , .		0
30	Shear-Wave Elastography Assessments of Quadriceps Stiffness Changes prior to, during and after Prolonged Exercise: A Longitudinal Study during an Extreme Mountain Ultra-Marathon. PLoS ONE, 2016, 11, e0161855.	2.5	71
31	In vivo freeâ€breathing DTI and IVIM of the whole human heart using a realâ€time sliceâ€followed SEâ€EPI navigatorâ€based sequence: A reproducibility study in healthy volunteers. Magnetic Resonance in Medicine, 2016, 76, spcone.	3.0	1
32	In vivo freeâ€breathing DTI and IVIM of the whole human heart using a realâ€time sliceâ€followed SEâ€EPI navigatorâ€based sequence: A reproducibility study in healthy volunteers. Magnetic Resonance in Medicine, 2016, 76, 70-82.	3.0	43
33	Apparent Diffusion coefficient (ADC), T1 and T2 quantitative indexes of the myocardium in athletes before, during and after extreme mountain ultra-marathon: correlation with myocardial damages and inflammation biomarkers. Journal of Cardiovascular Magnetic Resonance, 2016, 18, O41.	3.3	0
34	Quantifying the effect of tissue deformation on diffusion-weighted MRI: a mathematical model and an efficient simulation framework applied to cardiac diffusion imaging. Physics in Medicine and Biology, 2016, 61, 5662-5686.	3.0	8
35	Comparison of three diffusion encoding schemes for cardiac imaging under free breathing conditions.. Journal of Cardiovascular Magnetic Resonance, 2016, 18, W16.	3.3	0
36	Extension of Fourier-Based Techniques for Ultrafast Imaging in Ultrasound With Diverging Waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2125-2137.	3.0	35

#	Article	IF	Citations
37	Does T1-mapping in border-zone and/or remote regions can help to predict functional recovery after revascularization in chronic Coronary Total Occlusion (CTO) patients?. Journal of Cardiovascular Magnetic Resonance, 2016, 18, O45.	3.3	0
38	Comparison of Immediate With Delayed Stenting Using the Minimalist Immediate Mechanical Intervention Approach in Acute ST-Segmentâ€“Elevation Myocardial Infarction. Circulation: Cardiovascular Interventions, 2016, 9, e003388.	3.9	71
39	Extension of Ultrasound Fourier Slice Imaging theory to sectorial acquisition. , 2015, , .		4
40	Prediction of the Biomechanical Effects of Compression Therapy by Finite Element Modeling and Ultrasound Elastography. IEEE Transactions on Biomedical Engineering, 2015, 62, 1011-1019.	4.2	18
41	Arterial Spin-Labeling Parameters Influence Signal Variability and Estimated Regional Relative Cerebral Blood Flow in Normal Aging and Mild Cognitive Impairment: FAIR versus PICORE Techniques. American Journal of Neuroradiology, 2015, 36, 1231-1236.	2.4	7
42	Improvement of renal diffusion-weighted magnetic resonance imaging with readout-segmented echo-planar imaging at 3T. Magnetic Resonance Imaging, 2015, 33, 701-708.	1.8	42
43	Prediction of recovery after revascularization in chronic Coronary Total Occlusion (CTO) patients. Adenosine or low-dose dobutamine stress with LGE CMR: which is the best combination?. Journal of Cardiovascular Magnetic Resonance, 2015, 17, .	3.3	1
44	In vivo free-breathing DTI & IVIM of the whole human heart using a real-time slice-followed SE-EPI navigator-based sequence: a reproducibility study in healthy volunteers. Journal of Cardiovascular Magnetic Resonance, 2015, 17, P383.	3.3	2
45	State-of-the-art MRI techniques in neuroradiology: principles, pitfalls, and clinical applications. Neuroradiology, 2015, 57, 441-467.	2.2	69
46	Free-Breathing Diffusion Tensor Imaging and Tractography of the Human Heart in Healthy Volunteers Using Wavelet-Based Image Fusion. IEEE Transactions on Medical Imaging, 2015, 34, 306-316.	8.9	37
47	Automated Quantification of Myocardial Infarction Using a Hidden Markov Random Field Model and the EM Algorithm. Lecture Notes in Computer Science, 2015, , 256-264.	1.3	2
48	Respiratory-Gated MRgHIFU in Upper Abdomen Using an MR-Compatible In-Bore Digital Camera. BioMed Research International, 2014, 2014, 1-9.	1.9	33
49	A Nonparametric Temperature Controller With Nonlinear Negative Reaction for Multi-Point Rapid MR-Guided HIFU Ablation. IEEE Transactions on Medical Imaging, 2014, 33, 1324-1337.	8.9	8
50	Real-time method for motion-compensated MR thermometry and MRgHIFU treatment in abdominal organs. Magnetic Resonance in Medicine, 2014, 72, 1087-1095.	3.0	41
51	CMRSegTools: an Osirix plugin for myocardial infarct sizing on DE-CMR images. Journal of Cardiovascular Magnetic Resonance, 2014, 16, P204.	3.3	5
52	An experimental model to investigate the targeting accuracy of MR-guided focused ultrasound ablation in liver. Journal of Translational Medicine, 2014, 12, 12.	4.4	8
53	3D fat-saturated T1 SPACE sequence for the diagnosis of cervical artery dissection. Neuroradiology, 2013, 55, 595-602.	2.2	47
54	Quantitative investigation of cardiac motion effects on in vivo diffusion tensor parameters: a simulation study. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P244.	3.3	0

#	Article	IF	Citations
55	In vivo cardiac diffusion tensor imaging in free-breathing conditions. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P231.	3.3	1
56	Assessment of Cardiac Motion Effects on the Fiber Architecture of the Human Heart In Vivo. IEEE Transactions on Medical Imaging, 2013, 32, 1928-1938.	8.9	22
57	Experimental Methods for Improved Spatial Control of Thermal Lesions in Magnetic Resonance-Guided Focused Ultrasound Ablation. Ultrasound in Medicine and Biology, 2013, 39, 1580-1595.	1.5	11
58	Hybrid Ultrasound/Magnetic Resonance Simultaneous Acquisition and Image Fusion for Motion Monitoring in the Upper Abdomen. Investigative Radiology, 2013, 48, 333-340.	6.2	43
59	Magnetic Resonanceâ€"Guided Shielding of Prefocal Acoustic Obstacles in Focused Ultrasound Therapy. Investigative Radiology, 2013, 48, 366-380.	6.2	27
60	Peripheral Nerves, Tumors, and Hybrid PET-MRI. Clinical Nuclear Medicine, 2013, 38, e40-e42.	1.3	7
61	Ultrasonography-based 2D motion-compensated HIFU sonication integrated with reference-free MR temperature monitoring: a feasibility studyex vivo. Physics in Medicine and Biology, 2012, 57, N159-N171.	3.0	41
62	Increased Pancreatic Fat Fraction Is Present in Obese Adolescents With Metabolic Syndrome. Journal of Pediatric Gastroenterology and Nutrition, 2012, 54, 720-726.	1.8	47
63	In Vivo Cardiac Diffusion-Weighted Magnetic Resonance Imaging. Investigative Radiology, 2012, 47, 662-670.	6.2	48
64	A pilot study for clinical feasibility of the near-harmonic 2D referenceless PRFS thermometry in liver under free breathing using MR-guided LITT ablation data. International Journal of Hyperthermia, 2012, 28, 250-266.	2.5	20
65	Review of the principal extra spinal pathologies causing sciatica and new MRI approaches. British Journal of Radiology, 2012, 85, 672-681.	2.2	32
66	Applications cliniques de lâ€™imagerie hybride TEP-IRM. Medecine Nucleaire, 2012, 36, 605-614.	0.2	2
67	ARFIâ€prepared MRgHIFU in liver: Simultaneous mapping of ARFIâ€displacement and temperature elevation, using a fast GREâ€EPI sequence. Magnetic Resonance in Medicine, 2012, 68, 932-946.	3.0	44
68	Reference-Free PRFS MR-Thermometry Using Near-Harmonic 2-D Reconstruction of the Background Phase. IEEE Transactions on Medical Imaging, 2012, 31, 287-301.	8.9	64
69	Intravoxel Incoherent Motion applied to Cardiac diffusion weighted MRI using breath-hold acquisitions in healthy volunteers. Journal of Cardiovascular Magnetic Resonance, 2012, 14, .	3.3	2
70	T2â€weighted cardiac MR assessment of the myocardial areaâ€atâ€risk and salvage area in acute reperfused myocardial infarction: Comparison of stateâ€ofâ€theâ€art dark blood and bright blood T2â€weighted sequences. Journal of Magnetic Resonance Imaging, 2012, 35, 328-339.	3.4	22
71	Look for the nerves! MR neurography adds essential diagnostic value to routine MRI in pediatric practice: A pictorial overview. Journal of Neuroradiology, 2011, 38, 141-147.	1.1	20
72	Simultaneous Ultrasound Imaging and MRI Acquisition. Medical Radiology, 2011, , 457-470.	0.1	1

#	Article	IF	Citations
73	Low b-Value Diffusion-Weighted Cardiac Magnetic Resonance Imaging. Investigative Radiology, 2011, 46, 751-758.	6.2	44
74	90Y Time-of-flight PET/MR on a hybrid scanner following liver radioembolisation (SIRT). European Journal of Nuclear Medicine and Molecular Imaging, 2011, 38, 1744-1745.	6.4	18
75	Myocardial T1-mapping for early detection of left ventricular myocardial fibrosis in systemic sclerosis. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	1
76	Early detection of myocardial fibrosis in type II diabetic patients using MR T1-mapping. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	1
77	Impact of obesity on global and regional systolic function in children: a CMR study. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	0
78	Headâ€toâ€head comparison of eight late gadoliniumâ€enhanced cardiac MR (LGE CMR) sequences at 1.5 tesla: From bench to bedside. Journal of Magnetic Resonance Imaging, 2011, 34, 1374-1387.	3.4	35
79	An MR-compliant phased-array HIFU transducer with augmented steering range, dedicated to abdominal thermotherapy. Physics in Medicine and Biology, 2011, 56, 3563-3582.	3.0	30
80	Radiofrequency ablation of small liver malignancies under magnetic resonance guidance: progress in targeting and preliminary observations with temperature monitoring. European Radiology, 2010, 20, 886-897.	4.5	58
81	Dynamic MR angiography (MRA) of spinal vascular diseases at 3T. European Radiology, 2010, 20, 2491-2495.	4.5	39
82	Diffusion tensor imaging (DTI) and tractography of the brachial plexus: feasibility and initial experience in neoplastic conditions. Neuroradiology, 2010, 52, 237-245.	2.2	80
83	The role of imaging and molecular imaging in the early detection of metabolic and cardiovascular dysfunctions. International Journal of Obesity, 2010, 34, S67-S81.	3.4	6
84	Combined Use of Pulsed Arterial Spin-Labeling and Susceptibility-Weighted Imaging in Stroke at 3T. European Neurology, 2010, 64, 286-296.	1.4	73
85	Observation and correction of transient cavitation-induced PRFS thermometry artifacts during radiofrequency ablation, using simultaneous Ultrasound/MR imaging. Medical Physics, 2010, 37, 1491-1506.	3.0	43
86	Interictal arterial spin-labeling MRI perfusion in intractable epilepsy. Journal of Neuroradiology, 2010, 37, 60-63.	1.1	77
87	Imaging of the optic nerve. European Journal of Radiology, 2010, 74, 299-313.	2.6	63
88	New approaches in imaging of the brachial plexus. European Journal of Radiology, 2010, 74, 403-410.	2.6	137
89	Ictal hyperperfusion demonstrated by arterial spin-labeling MRI in status epilepticus. Journal of Neuroradiology, 2010, 37, 250-251.	1.1	17
90	Arterial spin-labeling MRI perfusion in tuberous sclerosis: Correlation with PET. Journal of Neuroradiology, 2010, 37, 127-130.	1.1	23

#	Article	IF	Citations
91	Improved image reconstruction incorporating non-rigid motion correction for cardiac MRI using BLADE acquisition. Journal of Cardiovascular Magnetic Resonance, 2009, 11, .	3.3	4
92	Arterial spin labeling demonstrates early recanalization after stroke. Journal of Neuroradiology, 2009, 36, 109-111.	1.1	6
93	Arterial spin labeling shows cortical collateral flow in the endovascular treatment of vasospasm after post-traumatic subarachnoid hemorrhage. Journal of Neuroradiology, 2009, 36, 158-161.	1.1	13
94	Arterial spin-labeling demonstrates ictal cortical hyperperfusion in epilepsy secondary to hemimegalencephaly. Journal of Neuroradiology, 2009, 36, 303-305.	1.1	15
95	Biliary Tract. , 2009, , 133-147.		0
96	Clinical applications of diffusion tensor tractography of the spinal cord. Neuroradiology, 2008, 50, 25-29.	2.2	119
97	MRI neurography and diffusion tensor imaging of a sciatic perineuroma in a child. Pediatric Radiology, 2008, 38, 1009-1012.	2.0	30
98	High-resolution and functional magnetic resonance imaging of the brachial plexus using an isotropic 3D T2 STIR (Short Term Inversion Recovery) SPACE sequence and diffusion tensor imaging. European Radiology, 2008, 18, 1018-1023.	4.5	131
99	Pathology of the Trigeminal Nerve. Neuroimaging Clinics of North America, 2008, 18, 283-307.	1.0	54
100	Neuro-imaging of cerebral ischemic stroke. Journal of Neuroradiology, 2008, 35, 197-209.	1.1	36
101	Whole-Body MRI for Metastases Screening: A Preliminary Study Using 3D VIBE Sequences With Automatic Subtraction Between Noncontrast and Contrast Enhanced Images. American Journal of Clinical Oncology: Cancer Clinical Trials, 2008, 31, 285-292.	1.3	42
102	New horizons in MR-controlled and monitored radiofrequency ablation of liver tumours. Cancer Imaging, 2007, 7, 160-166.	2.8	12
103	Diffusion-weighted magnetic resonance imaging for the assessment of fibrosis in chronic hepatitis C. Hepatology, 2007, 46, 658-665.	7.3	244
104	MRI in lung transplant recipients using hyperpolarized3He: Comparison with CT. Journal of Magnetic Resonance Imaging, 2002, 15, 268-274.	3.4	60
105	Quantification of myocardial blood flow and blood flow reserve in the presence of arterial dispersion: A simulation study. Magnetic Resonance in Medicine, 2002, 47, 787-793.	3.0	33
106	k-Space filtering in 2D gradient-echo breath-hold hyperpolarized3He MRI: Spatial resolution and signal-to-noise ratio considerations. Magnetic Resonance in Medicine, 2002, 47, 687-695.	3.0	74
107	3 He-MRI-based vs. conventional determination of lung volumes in patients after unilateral lung transplantation: a new approach to regional spirometry. Acta Anaesthesiologica Scandinavica, 2002, 46, 845-852.	1.6	17
108	Vascular and perfusion imaging using encapsulated laser-polarized helium. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2001, 12, 16-22.	2.0	16

#	Article	IF	Citations
109	Vascular and perfusion imaging using encapsulated laser-polarized helium. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2001, 12, 16-22.	2.0	3
110	MR perfusion imaging using encapsulated laser-polarized3He. Magnetic Resonance in Medicine, 2001, 46, 535-540.	3.0	34
111	Laser-polarized3He as a probe for dynamic regional measurements of lung perfusion and ventilation using magnetic resonance imaging. Magnetic Resonance in Medicine, 2000, 44, 1-4.	3.0	50
112	Dynamic imaging of hyperpolarized3He distribution in rat lungs using interleaved-spiral scans. NMR in Biomedicine, 2000, 13, 207-213.	2.8	46
113	NMR Imaging of Thermally Polarized Helium-3 Gas. Journal of Magnetic Resonance, 1999, 138, 308-312.	2.1	13