

# Magalie Viallon

## List of Publications by Year in descending order

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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	Diffusion-weighted magnetic resonance imaging for the assessment of fibrosis in chronic hepatitis C. <i>Hepatology</i> , 2007, 46, 658-665.	7.3	244
2	New approaches in imaging of the brachial plexus. <i>European Journal of Radiology</i> , 2010, 74, 403-410.	2.6	137
3	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. <i>European Radiology</i> , 2008, 18, 1018-1023.	4.5	131
4	Clinical applications of diffusion tensor tractography of the spinal cord. <i>Neuroradiology</i> , 2008, 50, 25-29.	2.2	119
5	Diffusion tensor imaging (DTI) and tractography of the brachial plexus: feasibility and initial experience in neoplastic conditions. <i>Neuroradiology</i> , 2010, 52, 237-245.	2.2	80
6	Interictal arterial spin-labeling MRI perfusion in intractable epilepsy. <i>Journal of Neuroradiology</i> , 2010, 37, 60-63.	1.1	77
7	k-Space filtering in 2D gradient-echo breath-hold hyperpolarized <sup>3</sup> He MRI: Spatial resolution and signal-to-noise ratio considerations. <i>Magnetic Resonance in Medicine</i> , 2002, 47, 687-695.	3.0	74
8	Combined Use of Pulsed Arterial Spin-Labeling and Susceptibility-Weighted Imaging in Stroke at 3T. <i>European Neurology</i> , 2010, 64, 286-296.	1.4	73
9	Shear-Wave Elastography Assessments of Quadriceps Stiffness Changes prior to, during and after Prolonged Exercise: A Longitudinal Study during an Extreme Mountain Ultra-Marathon. <i>PLoS ONE</i> , 2016, 11, e0161855.	2.5	71
10	Comparison of Immediate With Delayed Stenting Using the Minimalist Immediate Mechanical Intervention Approach in Acute ST-Segmentâ€Elevation Myocardial Infarction. <i>Circulation: Cardiovascular Interventions</i> , 2016, 9, e003388.	3.9	71
11	State-of-the-art MRI techniques in neuroradiology: principles, pitfalls, and clinical applications. <i>Neuroradiology</i> , 2015, 57, 441-467.	2.2	69
12	Reference-Free PRFS MR-Thermometry Using Near-Harmonic 2-D Reconstruction of the Background Phase. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 287-301.	8.9	64
13	Imaging of the optic nerve. <i>European Journal of Radiology</i> , 2010, 74, 299-313.	2.6	63
14	MRI in lung transplant recipients using hyperpolarized <sup>3</sup> He: Comparison with CT. <i>Journal of Magnetic Resonance Imaging</i> , 2002, 15, 268-274.	3.4	60
15	Radiofrequency ablation of small liver malignancies under magnetic resonance guidance: progress in targeting and preliminary observations with temperature monitoring. <i>European Radiology</i> , 2010, 20, 886-897.	4.5	58
16	Pathology of the Trigeminal Nerve. <i>Neuroimaging Clinics of North America</i> , 2008, 18, 283-307.	1.0	54
17	Evaluation of Peak Wall Stress in an Ascending Thoracic Aortic Aneurysm Using FSI Simulations: Effects of Aortic Stiffness and Peripheral Resistance. <i>Cardiovascular Engineering and Technology</i> , 2018, 9, 707-722.	1.6	54
18	Fast Volumetric Ultrasound B-Mode and Doppler Imaging with a New High-Channels Density Platform for Advanced 4D Cardiac Imaging/Therapy. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 200.	2.5	54

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19	Laser-polarized <sup>3</sup> He as a probe for dynamic regional measurements of lung perfusion and ventilation using magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 2000, 44, 1-4.	3.0	50
20	In Vivo Cardiac Diffusion-Weighted Magnetic Resonance Imaging. <i>Investigative Radiology</i> , 2012, 47, 662-670.	6.2	48
21	Increased Pancreatic Fat Fraction Is Present in Obese Adolescents With Metabolic Syndrome. <i>Journal of Pediatric Gastroenterology and Nutrition</i> , 2012, 54, 720-726.	1.8	47
22	3D fat-saturated T1 SPACE sequence for the diagnosis of cervical artery dissection. <i>Neuroradiology</i> , 2013, 55, 595-602.	2.2	47
23	Dynamic imaging of hyperpolarized <sup>3</sup> He distribution in rat lungs using interleaved-spiral scans. <i>NMR in Biomedicine</i> , 2000, 13, 207-213.	2.8	46
24	Low b-Value Diffusion-Weighted Cardiac Magnetic Resonance Imaging. <i>Investigative Radiology</i> , 2011, 46, 751-758.	6.2	44
25	ARFI-prepared MRgHIFU in liver: Simultaneous mapping of ARFI-displacement and temperature elevation, using a fast GRE-EPI sequence. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 932-946.	3.0	44
26	Observation and correction of transient cavitation-induced PRFS thermometry artifacts during radiofrequency ablation, using simultaneous Ultrasound/MR imaging. <i>Medical Physics</i> , 2010, 37, 1491-1506.	3.0	43
27	Hybrid Ultrasound/Magnetic Resonance Simultaneous Acquisition and Image Fusion for Motion Monitoring in the Upper Abdomen. <i>Investigative Radiology</i> , 2013, 48, 333-340.	6.2	43
28	In vivo free-breathing DTI and MIM of the whole human heart using a real-time slice-followed SE-EPI navigator-based sequence: A reproducibility study in healthy volunteers. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 70-82.	3.0	43
29	Whole-Body MRI for Metastases Screening: A Preliminary Study Using 3D VIBE Sequences With Automatic Subtraction Between Noncontrast and Contrast Enhanced Images. <i>American Journal of Clinical Oncology: Cancer Clinical Trials</i> , 2008, 31, 285-292.	1.3	42
30	Improvement of renal diffusion-weighted magnetic resonance imaging with readout-segmented echo-planar imaging at 3T. <i>Magnetic Resonance Imaging</i> , 2015, 33, 701-708.	1.8	42
31	Fluid- and Biomechanical Analysis of Ascending Thoracic Aorta Aneurysm with Concomitant Aortic Insufficiency. <i>Annals of Biomedical Engineering</i> , 2017, 45, 2921-2932.	2.5	42
32	Ultrasonography-based 2D motion-compensated HIFU sonication integrated with reference-free MR temperature monitoring: a feasibility study <i>ex vivo</i> . <i>Physics in Medicine and Biology</i> , 2012, 57, N159-N171.	3.0	41
33	Real-time method for motion-compensated MR thermometry and MRgHIFU treatment in abdominal organs. <i>Magnetic Resonance in Medicine</i> , 2014, 72, 1087-1095.	3.0	41
34	Dynamic MR angiography (MRA) of spinal vascular diseases at 3T. <i>European Radiology</i> , 2010, 20, 2491-2495.	4.5	39
35	Free-Breathing Diffusion Tensor Imaging and Tractography of the Human Heart in Healthy Volunteers Using Wavelet-Based Image Fusion. <i>IEEE Transactions on Medical Imaging</i> , 2015, 34, 306-316.	8.9	37
36	Neuro-imaging of cerebral ischemic stroke. <i>Journal of Neuroradiology</i> , 2008, 35, 197-209.	1.1	36

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37	Head-to-head comparison of eight late gadolinium-enhanced cardiac MR (LGE CMR) sequences at 1.5 tesla: From bench to bedside. <i>Journal of Magnetic Resonance Imaging</i> , 2011, 34, 1374-1387.	3.4	35
38	Extension of Fourier-Based Techniques for Ultrafast Imaging in Ultrasound With Diverging Waves. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016, 63, 2125-2137.	3.0	35
39	MR perfusion imaging using encapsulated laser-polarized <sup>3</sup> He. <i>Magnetic Resonance in Medicine</i> , 2001, 46, 535-540.	3.0	34
40	Quantification of myocardial blood flow and blood flow reserve in the presence of arterial dispersion: A simulation study. <i>Magnetic Resonance in Medicine</i> , 2002, 47, 787-793.	3.0	33
41	Respiratory-Gated MRgHIFU in Upper Abdomen Using an MR-Compatible In-Bore Digital Camera. <i>BioMed Research International</i> , 2014, 2014, 1-9.	1.9	33
42	Review of the principal extra spinal pathologies causing sciatica and new MRI approaches. <i>British Journal of Radiology</i> , 2012, 85, 672-681.	2.2	32
43	MRI neurography and diffusion tensor imaging of a sciatic perineuroma in a child. <i>Pediatric Radiology</i> , 2008, 38, 1009-1012.	2.0	30
44	An MR-compliant phased-array HIFU transducer with augmented steering range, dedicated to abdominal thermotherapy. <i>Physics in Medicine and Biology</i> , 2011, 56, 3563-3582.	3.0	30
45	Magnetic Resonance-Guided Shielding of Prefocal Acoustic Obstacles in Focused Ultrasound Therapy. <i>Investigative Radiology</i> , 2013, 48, 366-380.	6.2	27
46	Arterial spin-labeling MRI perfusion in tuberous sclerosis: Correlation with PET. <i>Journal of Neuroradiology</i> , 2010, 37, 127-130.	1.1	23
47	T1 mapping performance and measurement repeatability: results from the multi-national T1 mapping standardization phantom program (TIMES). <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020, 22, 31.	3.3	23
48	T2-weighted cardiac MR assessment of the myocardial area-at-risk and salvage area in acute reperfused myocardial infarction: Comparison of state-of-the-art dark blood and bright blood T2-weighted sequences. <i>Journal of Magnetic Resonance Imaging</i> , 2012, 35, 328-339.	3.4	22
49	Assessment of Cardiac Motion Effects on the Fiber Architecture of the Human Heart In Vivo. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1928-1938.	8.9	22
50	Relationship Between Ascending Thoracic Aortic Aneurysms Hemodynamics and Biomechanical Properties. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 949-956.	4.2	22
51	Coupling hemodynamics with mechanobiology in patient-specific computational models of ascending thoracic aortic aneurysms. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 205, 106107.	4.7	21
52	Look for the nerves! MR neurography adds essential diagnostic value to routine MRI in pediatric practice: A pictorial overview. <i>Journal of Neuroradiology</i> , 2011, 38, 141-147.	1.1	20
53	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. <i>International Journal of Hyperthermia</i> , 2012, 28, 250-266.	2.5	20
54	90Y Time-of-flight PET/MR on a hybrid scanner following liver radioembolisation (SIRT). <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2011, 38, 1744-1745.	6.4	18

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55	Prediction of the Biomechanical Effects of Compression Therapy by Finite Element Modeling and Ultrasound Elastography. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 1011-1019.	4.2	18
56	MRI of Reperfused Acute Myocardial Infarction Edema: ADC Quantification versus T1 and T2 Mapping. <i>Radiology</i> , 2020, 295, 542-549.	7.3	18
57	<sup>3</sup> He-MRI-based vs. conventional determination of lung volumes in patients after unilateral lung transplantation: a new approach to regional spirometry. <i>Acta Anaesthesiologica Scandinavica</i> , 2002, 46, 845-852.	1.6	17
58	Ictal hyperperfusion demonstrated by arterial spin-labeling MRI in status epilepticus. <i>Journal of Neuroradiology</i> , 2010, 37, 250-251.	1.1	17
59	Ascending thoracic aorta aneurysm repair induces positive hemodynamic outcomes in a patient with unchanged bicuspid aortic valve. <i>Journal of Biomechanics</i> , 2018, 81, 145-148.	2.1	17
60	Vascular and perfusion imaging using encapsulated laser-polarized helium. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2001, 12, 16-22.	2.0	16
61	Extreme Mountain Ultra-Marathon Leads to Acute but Transient Increase in Cerebral Water Diffusivity and Plasma Biomarkers Levels Changes. <i>Frontiers in Physiology</i> , 2017, 7, 664.	2.8	16
62	Arterial spin-labeling demonstrates ictal cortical hyperperfusion in epilepsy secondary to hemimegalencephaly. <i>Journal of Neuroradiology</i> , 2009, 36, 303-305.	1.1	15
63	Quantitative comparison of human myocardial fiber orientations derived from DTI and polarized light imaging. <i>Physics in Medicine and Biology</i> , 2018, 63, 215003.	3.0	14
64	NMR Imaging of Thermally Polarized Helium-3 Gas. <i>Journal of Magnetic Resonance</i> , 1999, 138, 308-312.	2.1	13
65	Arterial spin labeling shows cortical collateral flow in the endovascular treatment of vasospasm after post-traumatic subarachnoid hemorrhage. <i>Journal of Neuroradiology</i> , 2009, 36, 158-161.	1.1	13
66	New horizons in MR-controlled and monitored radiofrequency ablation of liver tumours. <i>Cancer Imaging</i> , 2007, 7, 160-166.	2.8	12
67	Experimental Methods for Improved Spatial Control of Thermal Lesions in Magnetic Resonance-Guided Focused Ultrasound Ablation. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 1580-1595.	1.5	11
68	Chemical-Shift-Encoded Magnetic Resonance Imaging and Spectroscopy to Reveal Immediate and Long-Term Multi-Organ Composition Changes of a 14-Days Periodic Fasting Intervention: A Technological and Case Report. <i>Frontiers in Nutrition</i> , 2019, 6, 5.	3.7	11
69	Reliability of standardized ultrasound measurements of quadriceps muscle thickness in neurological critically ill patients: a comparison to computed tomography measures. <i>Journal of Rehabilitation Medicine</i> , 2020, 52, jrm00032.	1.1	11
70	Myofiber strain in healthy humans using DENSE and cDTI. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 277-292.	3.0	10
71	Computational prediction of hemodynamical and biomechanical alterations induced by aneurysm dilatation in patient-specific ascending thoracic aortas. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2020, 36, e3326.	2.1	9
72	A Nonparametric Temperature Controller With Nonlinear Negative Reaction for Multi-Point Rapid MR-Guided HIFU Ablation. <i>IEEE Transactions on Medical Imaging</i> , 2014, 33, 1324-1337.	8.9	8

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73	An experimental model to investigate the targeting accuracy of MR-guided focused ultrasound ablation in liver. <i>Journal of Translational Medicine</i> , 2014, 12, 12.	4.4	8
74	Quantifying the effect of tissue deformation on diffusion-weighted MRI: a mathematical model and an efficient simulation framework applied to cardiac diffusion imaging. <i>Physics in Medicine and Biology</i> , 2016, 61, 5662-5686.	3.0	8
75	Hemodynamics alteration in patient-specific dilated ascending thoracic aortas with tricuspid and bicuspid aortic valves. <i>Journal of Biomechanics</i> , 2020, 110, 109954.	2.1	8
76	Peripheral Nerves, Tumors, and Hybrid PET-MRI. <i>Clinical Nuclear Medicine</i> , 2013, 38, e40-e42.	1.3	7
77	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. <i>American Journal of Neuroradiology</i> , 2015, 36, 1231-1236.	2.4	7
78	Motion-Induced Signal Loss in In Vivo Cardiac Diffusion-Weighted Imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2020, 51, 319-320.	3.4	7
79	Arterial spin labeling demonstrates early recanalization after stroke. <i>Journal of Neuroradiology</i> , 2009, 36, 109-111.	1.1	6
80	The role of imaging and molecular imaging in the early detection of metabolic and cardiovascular dysfunctions. <i>International Journal of Obesity</i> , 2010, 34, S67-S81.	3.4	6
81	CMRSegTools: an Osirix plugin for myocardial infarct sizing on DE-CMR images. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2014, 16, P204.	3.3	5
82	A new high channels density ultrasound platform for advanced 4D cardiac imaging. , 2017, , .		5
83	Improved image reconstruction incorporating non-rigid motion correction for cardiac MRI using BLADE acquisition. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2009, 11, .	3.3	4
84	Extension of Ultrasound Fourier Slice Imaging theory to sectorial acquisition. , 2015, , .		4
85	Comparison Between Multiline Transmission and Diverging Wave Imaging: Assessment of Image Quality and Motion Estimation Accuracy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2019, 66, 1560-1572.	3.0	4
86	Vascular and perfusion imaging using encapsulated laser-polarized helium. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2001, 12, 16-22.	2.0	3
87	Dynamic Contrast-Enhanced MR Perfusion of Intradural Spinal Lesions. <i>American Journal of Neuroradiology</i> , 2017, 38, 192-194.	2.4	3
88	Kinetics of Cardiac Remodeling and Fibrosis Biomarkers During an Extreme Mountain Ultramarathon. <i>Frontiers in Cardiovascular Medicine</i> , 2022, 9, 790551.	2.4	3
89	Applications cliniques de l'imagerie hybride TEP-IRM. <i>Medecine Nucleaire</i> , 2012, 36, 605-614.	0.2	2
90	Intravoxel Incoherent Motion applied to Cardiac diffusion weighted MRI using breath-hold acquisitions in healthy volunteers. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2012, 14, .	3.3	2

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91	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
92	Time samples selection in spiral acquisition for sparse magnetic resonance spectroscopic imaging. , 2017, , .		2
93	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
94	Validation of cardiac diffusion tensor imaging sequences: A multicentre testâ€“retest phantom study. NMR in Biomedicine, 2022, 35, e4685.	2.8	2
95	Simultaneous Ultrasound Imaging and MRI Acquisition. Medical Radiology, 2011, , 457-470.	0.1	1
96	Myocardial T1-mapping for early detection of left ventricular myocardial fibrosis in systemic sclerosis. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	1
97	Early detection of myocardial fibrosis in type II diabetic patients using MR T1-mapping. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	1
98	In vivo cardiac diffusion tensor imaging in free-breathing conditions. Journal of Cardiovascular Magnetic Resonance, 2013, 15, P231.	3.3	1
99	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
100	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
101	3D ultrasound imaging of tissue anisotropy using spatial coherence: Comparison between plane waves and diverging waves. , 2017, , .		1
102	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
103	Full 3D anisotropic estimation of tissue in ultrasound imaging. , 2019, , .		1
104	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
105	Impact of obesity on global and regional systolic function in children: a CMR study. Journal of Cardiovascular Magnetic Resonance, 2011, 13, .	3.3	0
106	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
107	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
108	Comparison of three diffusion encoding schemes for cardiac imaging under free breathing conditions.. Journal of Cardiovascular Magnetic Resonance, 2016, 18, W16.	3.3	0

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109	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
110	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
111	3D ultrasound imaging of tissue anisotropy using spatial coherence: Comparison between plane and diverging waves. , 2017, , .		0
112	Potential of Low Energy UltraSound for Inducing Cardioprotection Mechanisms: In-Vitro Investigations on a Hypoxia-Reoxygenation Model of Cardiac Cells. , 2018, , .		0
113	Biliary Tract. , 2009, , 133-147.		0