Virginie Callot

List of Publications by Year in Descending Order

61 papers	1,503 citations	21 h-index	37 g-index
63 ext. papers	1,892 ext. citations	5.2 avg, IF	4.35 L-index

#	Paper	IF	Citations
61	Respiratory-triggered quantitative MR spectroscopy of the human cervical spinal cord at 7 T.. *Magnetic Resonance in Medicine*, **2022**, 87, 2600-2612	4.4	0
60	T1-Based Synthetic Magnetic Resonance Contrasts Improve Multiple Sclerosis and Focal Epilepsy Imaging at 7 T. *Investigative Radiology*, **2021**, 56, 127-133	10.1	1
59	Visualization of Gray Matter Atrophy and Anterior Corticospinal Tract Signal Hyperintensity in Amyotrophic Lateral Sclerosis Using 7T MRI. *Neurology*, **2021**, 96, 1094-1095	6.5	
58	T1 Mapping for Microstructural Assessment of the Cervical Spinal Cord in the Evaluation of Patients with Degenerative Cervical Myelopathy. *American Journal of Neuroradiology*, **2021**, 42, 1348-1357	4.4	0
57	Feasibility of human spinal cord perfusion mapping using dynamic susceptibility contrast imaging at 7T: Preliminary results and identified guidelines. *Magnetic Resonance in Medicine*, **2021**, 85, 1183-1194	4.4	2
56	Biomechanical comparison of spinal cord compression types occurring in Degenerative Cervical Myelopathy. *Clinical Biomechanics*, **2021**, 81, 105174	2.2	2
55	Open-access quantitative MRI data of the spinal cord and reproducibility across participants, sites and manufacturers. *Scientific Data*, **2021**, 8, 219	8.2	6
54	Generic acquisition protocol for quantitative MRI of the spinal cord. *Nature Protocols*, **2021**, 16, 4611-4632	13.8	11
53	An optimized MP2RAGE sequence for studying both brain and cervical spinal cord in a single acquisition at 3T. *Magnetic Resonance Imaging*, **2021**, 84, 18-26	3.3	1
52	Sensitivity of the Inhomogeneous Magnetization Transfer Imaging Technique to Spinal Cord Damage in Multiple Sclerosis. *American Journal of Neuroradiology*, **2020**, 41, 929-937	4.4	3
51	Multiple sclerosis lesions in motor tracts from brain to cervical cord: spatial distribution and correlation with disability. *Brain*, **2020**, 143, 2089-2105	11.2	17
50	Intravoxel Incoherent Motion at 7 Tesla to quantify human spinal cord perfusion: limitations and promises. *Magnetic Resonance in Medicine*, **2020**, 84, 1198-1217	4.4	4
49	Improved Cervical Cord Lesion Detection with 3D-MP2RAGE Sequence in Patients with Multiple Sclerosis. *American Journal of Neuroradiology*, **2020**, 41, 1131-1134	4.4	2
48	Cervical Canal Morphology: Effects of Neck Flexion in Normal Condition: New Elements for Biomechanical Simulations and Surgical Management. *Spine*, **2020**, 45, 1102-1109	3.3	2
47	Anterior fissure, central canal, posterior septum and more: New insights into the cervical spinal cord gray and white matter regional organization using T mapping at 7T. *NeuroImage*, **2020**, 205, 116275	7.9	3
46	Spatial distribution of multiple sclerosis lesions in the cervical spinal cord. *Brain*, **2019**, 142, 633-646	11.2	47
45	Focal and diffuse cervical spinal cord damage in patients with early relapsing-remitting MS: A multicentre magnetisation transfer ratio study. *Multiple Sclerosis Journal*, **2019**, 25, 1113-1123	5	9

44	Regional T mapping of the whole cervical spinal cord using an optimized MP2RAGE sequence. *NMR in Biomedicine*, **2019**, 32, e4142	4.4	7
43	Measurement of magnetization transfer ratio (MTR) from cervical spinal cord: Multicenter reproducibility and variability. *Journal of Magnetic Resonance Imaging*, **2019**, 49, 1777-1785	5.6	2
42	Automatic segmentation of the spinal cord and intramedullary multiple sclerosis lesions with convolutional neural networks. *NeuroImage*, **2019**, 184, 901-915	7.9	77
41	Feasibility of single-shot multi-level multi-angle diffusion tensor imaging of the human cervical spinal cord at 7T. *Magnetic Resonance in Medicine*, **2018**, 80, 947-957	4.4	13
40	Automatic spinal cord localization, robust to MRI contrasts using global curve optimization. *Medical Image Analysis*, **2018**, 44, 215-227	15.4	15
39	PAM50: Unbiased multimodal template of the brainstem and spinal cord aligned with the ICBM152 space. *NeuroImage*, **2018**, 165, 170-179	7.9	71
38	High-speed video analysis improves the accuracy of spinal cord compression measurement in a mouse contusion model. *Journal of Neuroscience Methods*, **2018**, 293, 1-5	3	8
37	Estimation of the ear canal displacement field due to in-ear device insertion using a registration method on a human-like artificial ear. *Hearing Research*, **2018**, 365, 16-27	3.9	4
36	Magnetization transfer from inhomogeneously broadened lines (ihMT): Improved imaging strategy for spinal cord applications. *Magnetic Resonance in Medicine*, **2017**, 77, 581-591	4.4	18
35	Topologically preserving straightening of spinal cord MRI. *Journal of Magnetic Resonance Imaging*, **2017**, 46, 1209-1219	5.6	17
34	Region-specific impairment of the cervical spinal cord (SC) in amyotrophic lateral sclerosis: A preliminary study using SC templates and quantitative MRI (diffusion tensor imaging/inhomogeneous magnetization transfer). *NMR in Biomedicine*, **2017**, 30, e3801	4.4	25
33	SCT: Spinal Cord Toolbox, an open-source software for processing spinal cord MRI data. *NeuroImage*, **2017**, 145, 24-43	7.9	216
32	Fully-integrated framework for the segmentation and registration of the spinal cord white and gray matter. *NeuroImage*, **2017**, 150, 358-372	7.9	29
31	OptiC: Robust and Automatic Spinal Cord Localization on a Large Variety of MRI Data Using a Distance Transform Based Global Optimization. *Lecture Notes in Computer Science*, **2017**, 712-719	0.9	1
30	High-resolution multi-parametric quantitative magnetic resonance imaging of the human cervical spinal cord at 7T. *NeuroImage*, **2016**, 143, 58-69	7.9	35
29	Geometrical variations in white and gray matter affect the biomechanics of spinal cord injuries more than the arachnoid space. *Advances in Mechanical Engineering*, **2016**, 8, 168781401666470	1.2	11
28	Tract-specific and age-related variations of the spinal cord microstructure: a multi-parametric MRI study using diffusion tensor imaging (DTI) and inhomogeneous magnetization transfer (ihMT). *NMR in Biomedicine*, **2016**, 29, 817-32	4.4	45
27	Segmentation of the human spinal cord. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2016**, 29, 125-53	2.8	39

26	A reliable spatially normalized template of the human spinal cord--Applications to automated white matter/gray matter segmentation and tensor-based morphometry (TBM) mapping of gray matter alterations occurring with age. *NeuroImage*, **2015**, 117, 20-8	7.9	28
25	Fast imaging strategies for mouse kidney perfusion measurement with pseudocontinuous arterial spin labeling (pCASL) at ultra high magnetic field (11.75 tesla). *Journal of Magnetic Resonance Imaging*, **2015**, 42, 999-1008	5.6	9
24	Construction of an in vivo human spinal cord atlas based on high-resolution MR images at cervical and thoracic levels: preliminary results. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2014**, 27, 257-67	2.8	38
23	Morphometrics of the entire human spinal cord and spinal canal measured from in vivo high-resolution anatomical magnetic resonance imaging. *Spine*, **2014**, 39, E262-9	3.3	44
22	High-resolution mouse kidney perfusion imaging by pseudo-continuous arterial spin labeling at 11.75T. *Magnetic Resonance in Medicine*, **2014**, 71, 1186-96	4.4	15
21	In vivo short TE localized 1H MR spectroscopy of mouse cervical spinal cord at very high magnetic field (11.75 T). *Magnetic Resonance in Medicine*, **2013**, 69, 1226-32	4.4	2
20	Multimodal MR imaging (diffusion, perfusion, and spectroscopy): is it possible to distinguish oligodendroglial tumor grade and 1p/19q codeletion in the pretherapeutic diagnosis?. *American Journal of Neuroradiology*, **2013**, 34, 1326-33	4.4	84
19	Epileptogenic brain lesions in children: the added-value of combined diffusion imaging and proton MR spectroscopy to the presurgical differential diagnosis. *Child's Nervous System*, **2012**, 28, 273-82	1.7	19
18	Pseudo-continuous arterial spin labeling at very high magnetic field (11.75 T) for high-resolution mouse brain perfusion imaging. *Magnetic Resonance in Medicine*, **2012**, 67, 1225-36	4.4	18
17	Early evaluation of tumoral response to antiangiogenic therapy by arterial spin labeling perfusion magnetic resonance imaging and susceptibility weighted imaging in a patient with recurrent glioblastoma receiving bevacizumab. *Journal of Clinical Oncology*, **2011**, 29, e308-11	2.2	21
16	Spinal cord - MR of rodent models. *Methods in Molecular Biology*, **2011**, 771, 355-83	1.4	3
15	Cerebral perfusion MRI in mice. *Methods in Molecular Biology*, **2011**, 771, 117-38	1.4	3
14	Echo planar diffusion tensor imaging of the mouse spinal cord at thoracic and lumbar levels: A feasibility study. *Magnetic Resonance in Medicine*, **2010**, 63, 1125-34	4.4	5
13	Mouse lumbar and cervical spinal cord blood flow measurements by arterial spin labeling: sensitivity optimization and first application. *Magnetic Resonance in Medicine*, **2009**, 62, 430-9	4.4	24
12	(1)H MR spectroscopy of human brain tumours: a practical approach. *European Journal of Radiology*, **2008**, 67, 268-274	4.7	45
11	Spinal cord blood flow measurement by arterial spin labeling. *Magnetic Resonance in Medicine*, **2008** , 59, 846-54	4.4	36
10	Short-scan-time multi-slice diffusion MRI of the mouse cervical spinal cord using echo planar imaging. *NMR in Biomedicine*, **2008**, 21, 868-77	4.4	14
9	Correlations between MR and endothelial hyperplasia in low-grade gliomas. *Journal of Magnetic Resonance Imaging*, **2007**, 26, 52-60	5.6	11

8	In vivo mouse spinal cord imaging using echo-planar imaging at 11.75 T. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2007**, 20, 169-73	2.8	13
7	In vivo study of microcirculation in canine myocardium using the IVIM method. *Magnetic Resonance in Medicine*, **2003**, 50, 531-40	4.4	79
6	Helium-3 MRI diffusion coefficient: correlation to morphometry in a model of mild emphysema. *European Respiratory Journal*, **2003**, 22, 14-9	13.6	117
5	Vascular and perfusion imaging using encapsulated laser-polarized helium. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2001**, 12, 16-22	2.8	13
4	Vascular and perfusion imaging using encapsulated laser-polarized helium. *Magnetic Resonance Materials in Physics, Biology, and Medicine*, **2001**, 12, 16-22	2.8	3
3	MR perfusion imaging using encapsulated laser-polarized 3He. *Magnetic Resonance in Medicine*, **2001**, 46, 535-40	4.4	28
2	Laser-polarized (3)He as a probe for dynamic regional measurements of lung perfusion and ventilation using magnetic resonance imaging. *Magnetic Resonance in Medicine*, **2000**, 44, 1-4	4.4	45
1	Dynamic imaging of hyperpolarized (3)He distribution in rat lungs using interleaved-spiral scans. *NMR in Biomedicine*, **2000**, 13, 207-13	4.4	40