Jelle Veraart

List of Publications by Year
in descending order

66 papers	6,107 citations	117625 34 h-index	110387 64 g-index
72 all docs	72 docs citations	72 times ranked	6756 citing authors

#	Article	IF	Citations
1	What's new and what's next in diffusion MRI preprocessing. NeuroImage, 2022, 249, 118830.	4.2	43
2	Improved diffusion parameter estimation by incorporating T2 relaxation properties into the DKI-FWE model. NeuroImage, 2022, 256, 119219.	4.2	4
3	Reproducibility of the Standard Model of diffusion in white matter on clinical MRI systems. NeuroImage, 2022, 257, 119290.	4.2	15
4	Improved Task-based Functional MRI Language Mapping in Patients with Brain Tumors through Marchenko-Pastur Principal Component Analysis Denoising. Radiology, 2021, 298, 365-373.	7.3	19
5	The variability of MR axon radii estimates in the human white matter. Human Brain Mapping, 2021, 42, 2201-2213.	3.6	30
6	Toward more robust and reproducible diffusion kurtosis imaging. Magnetic Resonance in Medicine, 2021, 86, 1600-1613.	3.0	25
7	Nanostructure-specific X-ray tomography reveals myelin levels, integrity and axon orientations in mouse and human nervous tissue. Nature Communications, 2021, 12, 2941.	12.8	33
8	On the need for bundle-specific microstructure kernels in diffusion MRI. NeuroImage, 2020, 208, 116460.	4.2	9
9	Cross-scanner and cross-protocol multi-shell diffusion MRI data harmonization: Algorithms and results. NeuroImage, 2020, 221, 117128.	4.2	54
10	The diagnostic role of diffusional kurtosis imaging in glioma grading and differentiation of gliomas from other intra-axial brain tumours: a systematic review with critical appraisal and meta-analysis. Neuroradiology, 2020, 62, 791-802.	2.2	23
11	Multi-parametric quantitative in vivo spinal cord MRI with unified signal readout and image denoising. NeuroImage, 2020, 217, 116884.	4.2	34
12	Noninvasive quantification of axon radii using diffusion MRI. ELife, 2020, 9, .	6.0	137
13	Cross-scanner and cross-protocol diffusion MRI data harmonisation: A benchmark database and evaluation of algorithms. NeuroImage, 2019, 195, 285-299.	4.2	92
14	Muti-shell Diffusion MRI Harmonisation and Enhancement Challenge (MUSHAC): Progress and Results. Mathematics and Visualization, 2019, , 217-224.	0.6	12
15	Along-axon diameter variation and axonal orientation dispersion revealed with 3D electron microscopy: implications for quantifying brain white matter microstructure with histology and diffusion MRI. Brain Structure and Function, 2019, 224, 1469-1488.	2.3	77
16	A resting state fMRI analysis pipeline for pooling inference across diverse cohorts: an ENIGMA rs-fMRI protocol. Brain Imaging and Behavior, 2019, 13, 1453-1467.	2.1	49
17	On the scaling behavior of water diffusion in human brain white matter. NeuroImage, 2019, 185, 379-387.	4.2	109
18	Diffusion kurtosis imaging with free water elimination: A bayesian estimation approach. Magnetic Resonance in Medicine, 2018, 80, 802-813.	3.0	20

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19	Miniature pig model of human adolescent brain white matter development. Journal of Neuroscience Methods, 2018, 296, 99-108.	2.5	22
20	Rotationally-invariant mapping of scalar and orientational metrics of neuronal microstructure with diffusion MRI. NeuroImage, 2018, 174, 518-538.	4.2	173
21	TE dependent Diffusion Imaging (TEdDI) distinguishes between compartmental T2 relaxation times. NeuroImage, 2018, 182, 360-369.	4.2	160
22	Integration of routine QA data into mega‑analysis may improve quality and sensitivity of multisite diffusion tensor imaging studies. Human Brain Mapping, 2018, 39, 1015-1023.	3.6	20
23	Characterization of Prostate Microstructure Using Water Diffusion and NMR Relaxation. Frontiers in Physics, 2018, 6, .	2.1	40
24	Evaluation of the accuracy and precision of the diffusion parameter EStImation with Gibbs and NoisE removal pipeline. NeuroImage, 2018, 183, 532-543.	4.2	123
25	Comparison of heritability estimates on resting state fMRI connectivity phenotypes using the ENIGMA analysis pipeline. Human Brain Mapping, 2018, 39, 4893-4902.	3.6	45
26	Heritability estimates on resting state fMRI data using ENIGMA analysis pipeline. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2018, 23, 307-318.	0.7	14
27	Time-Dependent Diffusion in Prostate Cancer. Investigative Radiology, 2017, 52, 405-411.	6.2	58
28	Lipid Metabolism, Abdominal Adiposity, and Cerebral Health in the Amish. Obesity, 2017, 25, 1876-1880.	3.0	8
29	Semi-automated brain tumor segmentation on multi-parametric MRI using regularized non-negative matrix factorization. BMC Medical Imaging, 2017, 17, 29.	2.7	34
30	*In vivo* measurement of membrane permeability and myofiber size in human muscle using time‑dependent diffusion tensor imaging and the random permeable barrier model. NMR in Biomedicine, 2017, 30, e3612.	2.8	44
31	The successive projection algorithm as an initialization method for brain tumor segmentation using non-negative matrix factorization. PLoS ONE, 2017, 12, e0180268.	2.5	11
32	Diffusion MRI noise mapping using random matrix theory. Magnetic Resonance in Medicine, 2016, 76, 1582-1593.	3.0	541
33	Comparison of unsupervised classification methods for brain tumor segmentation using multi-parametric MRI. NeuroImage: Clinical, 2016, 12, 753-764.	2.7	64
34	Gibbs ringing in diffusion MRI. Magnetic Resonance in Medicine, 2016, 76, 301-314.	3.0	108
35	Denoising of diffusion MRI using random matrix theory. NeuroImage, 2016, 142, 394-406.	4.2	1,208
36	Diffusion-weighted imaging uncovers likely sources of processing-speed deficits in schizophrenia. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13504-13509.	7.1	43

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37	Super‐resolution reconstruction of diffusion parameters from diffusion‐weighted images with different slice orientations. Magnetic Resonance in Medicine, 2016, 75, 181-195.	3.0	40
38	Diffusion kurtosis imaging probes cortical alterations and white matter pathology following cuprizone induced demyelination and spontaneous remyelination. NeuroImage, 2016, 125, 363-377.	4.2	122
39	Degeneracy in model parameter estimation for multi‐compartmental diffusion in neuronal tissue. NMR in Biomedicine, 2016, 29, 33-47.	2.8	252
40	In vivo quantification of demyelination and recovery using compartment-specific diffusion MRI metrics validated by electron microscopy. NeuroImage, 2016, 132, 104-114.	4.2	156
41	In vivo observation and biophysical interpretation of time-dependent diffusion in human white matter. NeuroImage, 2016, 129, 414-427.	4.2	147
42	Diffusion Kurtosis Imaging. , 2016, , 407-418.		3
43	Diffusion Kurtosis Imaging: A Possible MRI Biomarker for AD Diagnosis?. Journal of Alzheimer's Disease, 2015, 48, 937-948.	2.6	50
44	Hierarchical non-negative matrix factorization to characterize brain tumor heterogeneity using multi-parametric MRI. NMR in Biomedicine, 2015, 28, 1599-1624.	2.8	29
45	Iterative reweighted linear least squares for accurate, fast, and robust estimation of diffusion magnetic resonance parameters. Magnetic Resonance in Medicine, 2015, 73, 2174-2184.	3.0	48
46	One diffusion acquisition and different white matter models: How does microstructure change in human early development based on WMTI and NODDI?. NeuroImage, 2015, 107, 242-256.	4.2	179
47	Integrating diffusion kurtosis imaging, dynamic susceptibility-weighted contrast-enhanced MRI, and short echo time chemical shift imaging for grading gliomas. Neuro-Oncology, 2014, 16, 1010-1021.	1.2	64
48	Super‐resolution for multislice diffusion tensor imaging. Magnetic Resonance in Medicine, 2013, 69, 103-113.	3.0	50
49	Subchronic memantine induced concurrent functional disconnectivity and altered ultra-structural tissue integrity in the rodent brain: revealed by multimodal MRI. Psychopharmacology, 2013, 227, 479-491.	3.1	18
50	Altered diffusion tensor imaging measurements in aged transgenic Huntington disease rats. Brain Structure and Function, 2013, 218, 767-778.	2.3	19
51	Does the use of hormonal contraceptives cause microstructural changes in cerebral white matter? Preliminary results of a DTI and tractography study. European Radiology, 2013, 23, 57-64.	4.5	54
52	Weighted linear least squares estimation of diffusion MRI parameters: Strengths, limitations, and pitfalls. NeuroImage, 2013, 81, 335-346.	4.2	407
53	Diffusion kurtosis imaging to detect amyloidosis in an APP/PS1 mouse model for Alzheimer's disease. Magnetic Resonance in Medicine, 2013, 69, 1115-1121.	3.0	46
54	Comprehensive framework for accurate diffusion MRI parameter estimation. Magnetic Resonance in Medicine, 2013, 70, 972-984.	3.0	89

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55	Gliomas: Diffusion Kurtosis MR Imaging in Grading. Radiology, 2012, 263, 492-501.	7.3	311
56	Four-point-algorithm for the recovery of the pose of a one-dimensional camera with unknown focal length. IET Computer Vision, 2012, 6, 314.	2.0	3
57	A complementary diffusion tensor imaging (DTI)-histological study in a model of Huntington's disease. Neurobiology of Aging, 2012, 33, 945-959.	3.1	29
58	Identification and characterization of Huntington related pathology: An in vivo DKI imaging study. NeuroImage, 2012, 63, 653-662.	4.2	34
59	Nonlocal maximum likelihood estimation method for denoising multiple-coil magnetic resonance images. Magnetic Resonance Imaging, 2012, 30, 1512-1518.	1.8	59
60	Population-averaged diffusion tensor imaging atlas of the Sprague Dawley rat brain. NeuroImage, 2011, 58, 975-983.	4.2	33
61	The effect of template selection on diffusion tensor voxel-based analysis results. NeuroImage, 2011, 55, 566-573.	4.2	57
62	More accurate estimation of diffusion tensor parameters using diffusion kurtosis imaging. Magnetic Resonance in Medicine, 2011, 65, 138-145.	3.0	202
63	Constrained maximum likelihood estimation of the diffusion kurtosis tensor using a Rician noise model. Magnetic Resonance in Medicine, 2011, 66, 678-686.	3.0	77
64	Feasibility and Advantages of Diffusion Weighted Imaging Atlas Construction in Q-Space. Lecture Notes in Computer Science, 2011, 14, 166-173.	1.3	13
65	Mobile Camera Localization Using Apollonius Circles and Virtual Landmarks. Journal of Intelligent and Robotic Systems: Theory and Applications, 2010, 58, 287-308.	3.4	4
66	Non-rigid coregistration of diffusion kurtosis data. , 2010, , .		0