Valerij G Kiselev

List of Publications by Year
in descending order

93	5,652	109137 35	88477 70
papers	citations	h-index	g-index

94	94	94	5860
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure with diffusion MRI: what scale we are sensitive to?. Journal of Neuroscience Methods, 2021, 347, 108910.	1.3	15
2	Toward Quantification. Investigative Radiology, 2021, 56, 1-9.	3.5	9
3	Threeâ€dimensional spatially resolved phase graph framework. Magnetic Resonance in Medicine, 2021, 86, 551-560.	1.9	4
4	Response to Comment on â€œLarmor Frequency in Heterogeneous Mediaâ€. Journal of Magnetic Resonance, 2019, 308, 106556.	1.2	0
5	Larmor frequency dependence on structural anisotropy of magnetically heterogeneous media. Journal of Magnetic Resonance, 2019, 307, 106584.	1.2	10
6	Intra-axonal diffusivity in brain white matter. NeuroImage, 2019, 189, 543-550.	2.1	71
7	A unique analytical solution of the white matter standard model using linear and planar encodings. Magnetic Resonance in Medicine, 2019, 81, 3819-3825.	1.9	35
8	Comparison of automated and visual DWI ASPECTS in acute ischemic stroke. Journal of Neuroradiology, 2019, 46, 288-293.	0.6	6
9	Discrimination of epileptogenic lesions and perilesional white matter using diffusion tensor magnetic resonance imaging. Neuroradiology Journal, 2019, 32, 10-16.	0.6	3
10	Larmor frequency in heterogeneous media. Journal of Magnetic Resonance, 2019, 299, 168-175.	1.2	12
11	Quantifying brain microstructure with diffusion MRI: Theory and parameter estimation. NMR in Biomedicine, 2019, 32, e3998.	1.6	335
12	On modeling. Magnetic Resonance in Medicine, 2018, 79, 3172-3193.	1.9	286
13	Arterial input function in a dedicated slice for cerebral perfusion measurements in humans. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2018, 31, 439-448.	1.1	4
14	Modelfree global tractography. NeuroImage, 2018, 174, 576-586.	2.1	7
15	The larmor frequency shift in magnetically heterogeneous media depends on their mesoscopic structure. Magnetic Resonance in Medicine, 2018, 79, 1101-1110.	1.9	16
16	The absence of restricted water pool in brain white matter. NeuroImage, 2018, 182, 398-406.	2.1	59
17	Calculation of Larmor precession frequency in magnetically heterogeneous media. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2018, 47A, .	0.2	7
18	Effects of mesoscopic susceptibility and transverse relaxation on diffusion NMR. Journal of Magnetic Resonance, 2018, 293, 134-144.	1.2	24

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19	Transverse NMR relaxation in biological tissues. NeuroImage, 2018, 182, 149-168.	2.1	55
20	Fundamentals of diffusion MRI physics. NMR in Biomedicine, 2017, 30, e3602.	1.6	84
21	Distinct white matter alterations following severe stroke. Neurology, 2017, 88, 1546-1555.	1.5	40
22	Integrative Diffusion-Weighted Imaging and Radiogenomic Network Analysis of Glioblastoma multiforme. Scientific Reports, 2017, 7, 43523.	1.6	20
23	Automated Infarct Core Volumetry Within the Hypoperfused Tissue. Journal of Computer Assisted Tomography, 2017, 41, 515-520.	0.5	11
24	Mesoscopic imaging of glioblastomas: Are diffusion, perfusion and spectroscopic measures influenced by the radiogenetic phenotype?. Neuroradiology Journal, 2017, 30, 36-47.	0.6	11
25	Disentangling micro from mesostructure by diffusion MRI: A Bayesian approach. NeuroImage, 2017, 147, 964-975.	2.1	138
26	Molecular differences between cerebral blood volume and vessel size in glioblastoma multiforme. Oncotarget, 2017, 8, 11083-11093.	0.8	18
27	Gibbsâ€ringing artifact removal based on local subvoxelâ€shifts. Magnetic Resonance in Medicine, 2016, 76, 1574-1581.	1.9	918
28	Do twisted laser beams evoke nuclear hyperpolarization?. Journal of Magnetic Resonance, 2016, 268, 58-67.	1.2	7
29	MR evaluation of vessel size imaging of human gliomas: Validation by histopathology. Journal of Magnetic Resonance Imaging, 2015, 42, 1117-1125.	1.9	17
30	A higher order visual neuron tuned to the spatial amplitude spectra of natural scenes. Nature Communications, 2015, 6, 8522.	5.8	18
31	Blood Tracer Kinetics in the Arterial Tree. PLoS ONE, 2014, 9, e109230.	1.1	7
32	Reduced anterior internal capsule white matter integrity in primary insomnia. Human Brain Mapping, 2014, 35, 3431-3438.	1.9	72
33	Quantitative cerebral blood flow with bolus tracking perfusion MRI: Measurements in porcine model and comparison with PET. Magnetic Resonance in Medicine, 2014, 72, 1723-1734.	1.9	5
34	Attentionâ€network specific alterations of structural connectivity in the undamaged white matter in acute neglect. Human Brain Mapping, 2014, 35, 4678-4692.	1.9	40
35	Diffusion properties of conventional and calciumâ€sensitive MRI contrast agents in the rat cerebral cortex. Contrast Media and Molecular Imaging, 2014, 9, 71-82.	0.4	22
36	Local and Global Fiber Tractography in Patients with Epilepsy. American Journal of Neuroradiology, 2014, 35, 291-296.	1.2	19

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37	MesoFT: Unifying Diffusion Modelling and Fiber Tracking. Lecture Notes in Computer Science, 2014, 17, 201-208.	1.0	30
38	The Diffusion Dictionary in the Human Brain Is Short: Rotation Invariant Learning of Basis Functions. Mathematics and Visualization, 2014, , 47-55.	0.4	6
39	Arterial input function measurements for bolus tracking perfusion imaging in the brain. Magnetic Resonance in Medicine, 2013, 69, 771-780.	1.9	21
40	Dynamic hysteresis between gradient echo and spin echo attenuations in dynamic susceptibility contrast imaging. Magnetic Resonance in Medicine, 2013, 69, 981-991.	1.9	30
41	Global Tracking in Human Gliomas: A Comparison with Established Tracking Methods. Clinical Neuroradiology, 2013, 23, 263-275.	1.0	7
42	Fiber density estimation from single q-shell diffusion imaging by tensor divergence. NeuroImage, 2013, 77, 166-176.	2.1	15
43	Vascular changes after stroke in the rat: a longitudinal study using optimized magnetic resonance imaging. Contrast Media and Molecular Imaging, 2013, 8, 383-392.	0.4	21
44	Comment on â€œMagnetic resonance imaging by synergistic diffusion-diffraction patternsâ€• Physical Review Letters, 2013, 110, 109801.	2.9	10
45	The Potential of Microvessel Density in Prediction of Infarct Growth: A Two-Month Experimental Study in Vessel Size Imaging. Cerebrovascular Diseases, 2012, 33, 303-309.	0.8	10
46	About the Geometry of Asymmetric Fiber Orientation Distributions. IEEE Transactions on Medical Imaging, 2012, 31, 1240-1249.	5.4	30
47	Fiber Density Estimation by Tensor Divergence. Lecture Notes in Computer Science, 2012, 15, 297-304.	1.0	0
48	Global fiber reconstruction becomes practical. NeuroImage, 2011, 54, 955-962.	2.1	277
49	Vessel Size Imaging Reveals Pathological Changes of Microvessel Density and Size in Acute Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1687-1695.	2.4	35
50	Fiber Continuity: An Anisotropic Prior for ODF Estimation. IEEE Transactions on Medical Imaging, 2011, 30, 1274-1283.	5.4	50
51	Tissueâ€“blood exchange of extravascular longitudinal magnetization with account of intracompartmental diffusion. Magnetic Resonance in Medicine, 2011, 66, 1445-1455.	1.9	1
52	Surface-to-volume ratio with oscillating gradients. Journal of Magnetic Resonance, 2011, 210, 141-145.	1.2	50
53	On the design of filters for fourier and oSVD-based deconvolution in bolus tracking perfusion MRI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2010, 23, 187-195.	1.1	16
54	Effective medium theory of a diffusionâ€weighted signal. NMR in Biomedicine, 2010, 23, 682-697.	1.6	119

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55	Extended phase graphs with anisotropic diffusion. Journal of Magnetic Resonance, 2010, 205, 276-285.	1.2	55
56	Structural Connectivity for Visuospatial Attention: Significance of Ventral Pathways. Cerebral Cortex, 2010, 20, 121-129.	1.6	155
57	The Cumulant Expansion: An Overarching Mathematical Framework For Understanding Diffusion NMR. , 2010, , 152-168.		42
58	Assessment of vascular remodeling under antiangiogenic therapy using DCEâ€MRI and vessel size imaging. Journal of Magnetic Resonance Imaging, 2009, 29, 1125-1133.	1.9	60
59	Analysis of partial volume effects on arterial input functions using gradient echo: A simulation study. Magnetic Resonance in Medicine, 2009, 61, 1300-1309.	1.9	43
60	Extraction of the first bolus passage in dynamic susceptibility contrast perfusion measurements. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2009, 22, 241-249.	1.1	14
61	Fully automated classification of HARDI in vivo data using a support vector machine. NeuroImage, 2009, 46, 642-651.	2.1	19
62	Transverse NMR relaxation in magnetically heterogeneous media. Journal of Magnetic Resonance, 2008, 195, 33-39.	1.2	28
63	Gibbs tracking: A novel approach for the reconstruction of neuronal pathways. Magnetic Resonance in Medicine, 2008, 60, 953-963.	1.9	133
64	The effect of impermeable boundaries of arbitrary geometry on the apparent diffusion coefficient. Journal of Magnetic Resonance, 2008, 194, 128-135.	1.2	16
65	Connecting and merging fibres: Pathway extraction by combining probability maps. NeuroImage, 2008, 43, 81-89.	2.1	64
66	Is the â€œbiexponential diffusionâ€•biexponential?. Magnetic Resonance in Medicine, 2007, 57, 464-469.	1.9	120
67	Effect of impermeable boundaries on diffusion-attenuated MR signal. Journal of Magnetic Resonance, 2006, 179, 223-233.	1.2	46
68	Theoretical model of intravascular paramagnetic tracers effect on tissue relaxation. Magnetic Resonance in Medicine, 2006, 56, 187-197.	1.9	119
69	Transverse relaxation effect of MRI contrast agents: A crucial issue for quantitative measurements of cerebral perfusion. Journal of Magnetic Resonance Imaging, 2005, 22, 693-696.	1.9	48
70	Vessel size imaging in humans. Magnetic Resonance in Medicine, 2005, 53, 553-563.	1.9	181
71	Theory of susceptibility-induced transverse relaxation in the capillary network in the diffusion narrowing regime. Magnetic Resonance in Medicine, 2005, 53, 564-573.	1.9	20
72	Effect of impermeable interfaces on apparent diffusion coefficient in heterogeneous media. Applied Magnetic Resonance, 2005, 29, 123-137.	0.6	6

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73	Effect of magnetic field gradients induced by microvasculature on NMR measurements of molecular self-diffusion in biological tissues. Journal of Magnetic Resonance, 2004, 170, 228-235.	1.2	35
74	Calculation of diffusion effect for arbitrary pulse sequences. Journal of Magnetic Resonance, 2003, 164, 205-211.	1.2	20
75	Single-shot T2* mapping with 3D compensation of local susceptibility gradients in multiple regions. NeuroImage, 2003, 18, 390-400.	2.1	45
76	Is the brain cortex a fractal?. NeuroImage, 2003, 20, 1765-1774.	2.1	128
77	Kiselev and Novikov Reply:. Physical Review Letters, 2003, 91, .	2.9	2
78	Transverse NMR Relaxation as a Probe of Mesoscopic Structure. Physical Review Letters, 2002, 89, 278101.	2.9	48
79	Effect of graded hypo- and hypercapnia on fMRI contrast in visual cortex: Quantification ofT*2 changes by multiecho EPI. Magnetic Resonance in Medicine, 2001, 46, 264-271.	1.9	97
80	On the theoretical basis of perfusion measurements by dynamic susceptibility contrast MRI. Magnetic Resonance in Medicine, 2001, 46, 1113-1122.	1.9	169
81	A new approach to measure single-event related brain activity using real-time fMRI: Feasibility of sensory, motor, and higher cognitive tasks. Human Brain Mapping, 2001, 12, 25-41.	1.9	78
82	Analytical model of susceptibility-induced MR signal dephasing: Effect of diffusion in a microvascular network. Magnetic Resonance in Medicine, 1999, 41, 499-509.	1.9	182
83	Enhancement of BOLD-contrast sensitivity by single-shot multi-echo functional MR imaging. Magnetic Resonance in Medicine, 1999, 42, 87-97.	1.9	336
84	Analytical Theory of Susceptibility Induced NMR Signal Dephasing in a Cerebrovascular Network. Physical Review Letters, 1998, 81, 5696-5699.	2.9	82
85	Forced topological nontrivial field configurations. Physical Review D, 1998, 57, 5174-5183.	1.6	17
86	What is the lightest excited state of the strongly selfcoupled Higgs field?. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1995, 342, 270-276.	1.5	0
87	False-vacuum decay induced by dense matter in two dimensions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 304, 214-219.	1.5	8
88	One-loop corrections to the bubble nucleation rate at finite temperature. Physical Review D, 1993, 48, 5648-5654.	1.6	56
89	False-vacuum decay induced by a two-particle collision in two dimensions. Physical Review D, 1992, 45, 2929-2932.	1.6	14
90	On quantum mechanical tunneling at high energy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 278, 454-456.	1.5	2

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91	Monopole in the Coleman-Weinberg model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 249, 269-272.	1.5	4
92	On kink dynamics in media with increasing absorption optical bistability. Physica Status Solidi (B): Basic Research, 1989, 152, 667-674.	0.7	6
93	Quantum correction to the monopole mass. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 213, 165-167.	1.5	21