

# Valerij G Kiselev

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4956927/publications.pdf>

Version: 2024-02-01

93  
papers

5,652  
citations

109321

35  
h-index

88630

70  
g-index

94  
all docs

94  
docs citations

94  
times ranked

5860  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gibbs's ringing artifact removal based on local subvoxel shifts. <i>Magnetic Resonance in Medicine</i> , 2016, 76, 1574-1581.	3.0	918
2	Enhancement of BOLD-contrast sensitivity by single-shot multi-echo functional MR imaging. <i>Magnetic Resonance in Medicine</i> , 1999, 42, 87-97.	3.0	336
3	Quantifying brain microstructure with diffusion MRI: Theory and parameter estimation. <i>NMR in Biomedicine</i> , 2019, 32, e3998.	2.8	335
4	On modeling. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 3172-3193.	3.0	286
5	Global fiber reconstruction becomes practical. <i>NeuroImage</i> , 2011, 54, 955-962.	4.2	277
6	Analytical model of susceptibility-induced MR signal dephasing: Effect of diffusion in a microvascular network. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 499-509.	3.0	182
7	Vessel size imaging in humans. <i>Magnetic Resonance in Medicine</i> , 2005, 53, 553-563.	3.0	181
8	On the theoretical basis of perfusion measurements by dynamic susceptibility contrast MRI. <i>Magnetic Resonance in Medicine</i> , 2001, 46, 1113-1122.	3.0	169
9	Structural Connectivity for Visuospatial Attention: Significance of Ventral Pathways. <i>Cerebral Cortex</i> , 2010, 20, 121-129.	2.9	155
10	Disentangling micro from mesostructure by diffusion MRI: A Bayesian approach. <i>NeuroImage</i> , 2017, 147, 964-975.	4.2	138
11	Gibbs tracking: A novel approach for the reconstruction of neuronal pathways. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 953-963.	3.0	133
12	Is the brain cortex a fractal?. <i>NeuroImage</i> , 2003, 20, 1765-1774.	4.2	128
13	Is the "biexponential diffusion" biexponential?. <i>Magnetic Resonance in Medicine</i> , 2007, 57, 464-469.	3.0	120
14	Theoretical model of intravascular paramagnetic tracers effect on tissue relaxation. <i>Magnetic Resonance in Medicine</i> , 2006, 56, 187-197.	3.0	119
15	Effective medium theory of a diffusion-weighted signal. <i>NMR in Biomedicine</i> , 2010, 23, 682-697.	2.8	119
16	Effect of graded hypo- and hypercapnia on fMRI contrast in visual cortex: Quantification of $T_2^*$ changes by multiecho EPI. <i>Magnetic Resonance in Medicine</i> , 2001, 46, 264-271.	3.0	97
17	Fundamentals of diffusion MRI physics. <i>NMR in Biomedicine</i> , 2017, 30, e3602.	2.8	84
18	Analytical Theory of Susceptibility Induced NMR Signal Dephasing in a Cerebrovascular Network. <i>Physical Review Letters</i> , 1998, 81, 5696-5699.	7.8	82

#	ARTICLE	IF	CITATIONS
19	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.	3.6	78
20	Reduced anterior internal capsule white matter integrity in primary insomnia. Human Brain Mapping, 2014, 35, 3431-3438.	3.6	72
21	Intra-axonal diffusivity in brain white matter. NeuroImage, 2019, 189, 543-550.	4.2	71
22	Connecting and merging fibres: Pathway extraction by combining probability maps. NeuroImage, 2008, 43, 81-89.	4.2	64
23	Assessment of vascular remodeling under antiangiogenic therapy using DCE-MRI and vessel size imaging. Journal of Magnetic Resonance Imaging, 2009, 29, 1125-1133.	3.4	60
24	The absence of restricted water pool in brain white matter. NeuroImage, 2018, 182, 398-406.	4.2	59
25	One-loop corrections to the bubble nucleation rate at finite temperature. Physical Review D, 1993, 48, 5648-5654.	4.7	56
26	Extended phase graphs with anisotropic diffusion. Journal of Magnetic Resonance, 2010, 205, 276-285.	2.1	55
27	Transverse NMR relaxation in biological tissues. NeuroImage, 2018, 182, 149-168.	4.2	55
28	Fiber Continuity: An Anisotropic Prior for ODF Estimation. IEEE Transactions on Medical Imaging, 2011, 30, 1274-1283.	8.9	50
29	Surface-to-volume ratio with oscillating gradients. Journal of Magnetic Resonance, 2011, 210, 141-145.	2.1	50
30	Transverse NMR Relaxation as a Probe of Mesoscopic Structure. Physical Review Letters, 2002, 89, 278101.	7.8	48
31	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.	3.4	48
32	Effect of impermeable boundaries on diffusion-attenuated MR signal. Journal of Magnetic Resonance, 2006, 179, 223-233.	2.1	46
33	Single-shot T2* mapping with 3D compensation of local susceptibility gradients in multiple regions. NeuroImage, 2003, 18, 390-400.	4.2	45
34	Analysis of partial volume effects on arterial input functions using gradient echo: A simulation study. Magnetic Resonance in Medicine, 2009, 61, 1300-1309.	3.0	43
35	The Cumulant Expansion: An Overarching Mathematical Framework For Understanding Diffusion NMR. , 2010, , 152-168.		42
36	Attention-specific alterations of structural connectivity in the undamaged white matter in acute neglect. Human Brain Mapping, 2014, 35, 4678-4692.	3.6	40

#	ARTICLE	IF	CITATIONS
37	Distinct white matter alterations following severe stroke. <i>Neurology</i> , 2017, 88, 1546-1555.	1.1	40
38	Effect of magnetic field gradients induced by microvasculature on NMR measurements of molecular self-diffusion in biological tissues. <i>Journal of Magnetic Resonance</i> , 2004, 170, 228-235.	2.1	35
39	Vessel Size Imaging Reveals Pathological Changes of Microvessel Density and Size in Acute Ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 1687-1695.	4.3	35
40	A unique analytical solution of the white matter standard model using linear and planar encodings. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3819-3825.	3.0	35
41	About the Geometry of Asymmetric Fiber Orientation Distributions. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 1240-1249.	8.9	30
42	Dynamic hysteresis between gradient echo and spin echo attenuations in dynamic susceptibility contrast imaging. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 981-991.	3.0	30
43	MesoFT: Unifying Diffusion Modelling and Fiber Tracking. <i>Lecture Notes in Computer Science</i> , 2014, 17, 201-208.	1.3	30
44	Transverse NMR relaxation in magnetically heterogeneous media. <i>Journal of Magnetic Resonance</i> , 2008, 195, 33-39.	2.1	28
45	Effects of mesoscopic susceptibility and transverse relaxation on diffusion NMR. <i>Journal of Magnetic Resonance</i> , 2018, 293, 134-144.	2.1	24
46	Diffusion properties of conventional and calcium-sensitive MRI contrast agents in the rat cerebral cortex. <i>Contrast Media and Molecular Imaging</i> , 2014, 9, 71-82.	0.8	22
47	Quantum correction to the monopole mass. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1988, 213, 165-167.	4.1	21
48	Arterial input function measurements for bolus tracking perfusion imaging in the brain. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 771-780.	3.0	21
49	Vascular changes after stroke in the rat: a longitudinal study using optimized magnetic resonance imaging. <i>Contrast Media and Molecular Imaging</i> , 2013, 8, 383-392.	0.8	21
50	Calculation of diffusion effect for arbitrary pulse sequences. <i>Journal of Magnetic Resonance</i> , 2003, 164, 205-211.	2.1	20
51	Theory of susceptibility-induced transverse relaxation in the capillary network in the diffusion narrowing regime. <i>Magnetic Resonance in Medicine</i> , 2005, 53, 564-573.	3.0	20
52	Integrative Diffusion-Weighted Imaging and Radiogenomic Network Analysis of Glioblastoma multiforme. <i>Scientific Reports</i> , 2017, 7, 43523.	3.3	20
53	Fully automated classification of HARDI in vivo data using a support vector machine. <i>NeuroImage</i> , 2009, 46, 642-651.	4.2	19
54	Local and Global Fiber Tractography in Patients with Epilepsy. <i>American Journal of Neuroradiology</i> , 2014, 35, 291-296.	2.4	19

#	ARTICLE	IF	CITATIONS
55	A higher order visual neuron tuned to the spatial amplitude spectra of natural scenes. <i>Nature Communications</i> , 2015, 6, 8522.	12.8	18
56	Molecular differences between cerebral blood volume and vessel size in glioblastoma multiforme. <i>Oncotarget</i> , 2017, 8, 11083-11093.	1.8	18
57	Forced topological nontrivial field configurations. <i>Physical Review D</i> , 1998, 57, 5174-5183.	4.7	17
58	MR evaluation of vessel size imaging of human gliomas: Validation by histopathology. <i>Journal of Magnetic Resonance Imaging</i> , 2015, 42, 1117-1125.	3.4	17
59	The effect of impermeable boundaries of arbitrary geometry on the apparent diffusion coefficient. <i>Journal of Magnetic Resonance</i> , 2008, 194, 128-135.	2.1	16
60	On the design of filters for fourier and oSVD-based deconvolution in bolus tracking perfusion MRI. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2010, 23, 187-195.	2.0	16
61	The Larmor frequency shift in magnetically heterogeneous media depends on their mesoscopic structure. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1101-1110.	3.0	16
62	Fiber density estimation from single q-shell diffusion imaging by tensor divergence. <i>NeuroImage</i> , 2013, 77, 166-176.	4.2	15
63	Microstructure with diffusion MRI: what scale we are sensitive to?. <i>Journal of Neuroscience Methods</i> , 2021, 347, 108910.	2.5	15
64	False-vacuum decay induced by a two-particle collision in two dimensions. <i>Physical Review D</i> , 1992, 45, 2929-2932.	4.7	14
65	Extraction of the first bolus passage in dynamic susceptibility contrast perfusion measurements. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2009, 22, 241-249.	2.0	14
66	Larmor frequency in heterogeneous media. <i>Journal of Magnetic Resonance</i> , 2019, 299, 168-175.	2.1	12
67	Automated Infarct Core Volumetry Within the Hypoperfused Tissue. <i>Journal of Computer Assisted Tomography</i> , 2017, 41, 515-520.	0.9	11
68	Mesoscopic imaging of glioblastomas: Are diffusion, perfusion and spectroscopic measures influenced by the radiogenetic phenotype?. <i>Neuroradiology Journal</i> , 2017, 30, 36-47.	1.2	11
69	The Potential of Microvessel Density in Prediction of Infarct Growth: A Two-Month Experimental Study in Vessel Size Imaging. <i>Cerebrovascular Diseases</i> , 2012, 33, 303-309.	1.7	10
70	Comment on "Magnetic resonance imaging by synergistic diffusion-diffraction patterns". <i>Physical Review Letters</i> , 2013, 110, 109801.	7.8	10
71	Larmor frequency dependence on structural anisotropy of magnetically heterogeneous media. <i>Journal of Magnetic Resonance</i> , 2019, 307, 106584.	2.1	10
72	Toward Quantification. <i>Investigative Radiology</i> , 2021, 56, 1-9.	6.2	9

#	ARTICLE	IF	CITATIONS
73	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.	4.1	8
74	Global Tracking in Human Gliomas: A Comparison with Established Tracking Methods. Clinical Neuroradiology, 2013, 23, 263-275.	1.9	7
75	Blood Tracer Kinetics in the Arterial Tree. PLoS ONE, 2014, 9, e109230.	2.5	7
76	Do twisted laser beams evoke nuclear hyperpolarization?. Journal of Magnetic Resonance, 2016, 268, 58-67.	2.1	7
77	Model-free global tractography. NeuroImage, 2018, 174, 576-586.	4.2	7
78	Calculation of Larmor precession frequency in magnetically heterogeneous media. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2018, 47A, .	0.5	7
79	On kink dynamics in media with increasing absorption optical bistability. Physica Status Solidi (B): Basic Research, 1989, 152, 667-674.	1.5	6
80	Effect of impermeable interfaces on apparent diffusion coefficient in heterogeneous media. Applied Magnetic Resonance, 2005, 29, 123-137.	1.2	6
81	Comparison of automated and visual DWI ASPECTS in acute ischemic stroke. Journal of Neuroradiology, 2019, 46, 288-293.	1.1	6
82	The Diffusion Dictionary in the Human Brain Is Short: Rotation Invariant Learning of Basis Functions. Mathematics and Visualization, 2014, , 47-55.	0.6	6
83	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.	3.0	5
84	Monopole in the Coleman-Weinberg model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 249, 269-272.	4.1	4
85	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.	2.0	4
86	Three-dimensional spatially resolved phase graph framework. Magnetic Resonance in Medicine, 2021, 86, 551-560.	3.0	4
87	Discrimination of epileptogenic lesions and perilesional white matter using diffusion tensor magnetic resonance imaging. Neuroradiology Journal, 2019, 32, 10-16.	1.2	3
88	On quantum mechanical tunneling at high energy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 278, 454-456.	4.1	2
89	Kiselev and Novikov Reply:. Physical Review Letters, 2003, 91, .	7.8	2
90	Tissue "blood exchange of extravascular longitudinal magnetization with account of intracompartmental diffusion. Magnetic Resonance in Medicine, 2011, 66, 1445-1455.	3.0	1

#	ARTICLE	IF	CITATIONS
91	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.	4.1	0
92	Response to Comment on "Larmor Frequency in Heterogeneous Media". Journal of Magnetic Resonance, 2019, 308, 106556.	2.1	0
93	Fiber Density Estimation by Tensor Divergence. Lecture Notes in Computer Science, 2012, 15, 297-304.	1.3	0