Dmitry S Novikov

List of Publications by Year
in descending order

91	7,623	81743	60497
papers	citations	39 h-index	81 g-index

94	94	94	7170
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Reproducibility of the Standard Model of diffusion in white matter on clinical MRI systems. NeuroImage, 2022, 257, 119290.	2.1	15
2	Neurite Exchange Imaging (NEXI): A minimal model of diffusion in gray matter with inter-compartment water exchange. NeuroImage, 2022, 256, 119277.	2.1	46
3	Training a neural network for Gibbs and noise removal in diffusion MRI. Magnetic Resonance in Medicine, 2021, 85, 413-428.	1.9	35
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.	3.6	19
5	The present and the future of microstructure MRI: From a paradigm shift to normal science. Journal of Neuroscience Methods, 2021, 351, 108947.	1.3	22
6	Measurement of cellularâ€interstitial water exchange time in tumors based on diffusionâ€timeâ€dependent diffusional kurtosis imaging. NMR in Biomedicine, 2021, 34, e4496.	1.6	15
7	Realistic Microstructure Simulator (RMS): Monte Carlo simulations of diffusion in three-dimensional cell segmentations of microscopy images. Journal of Neuroscience Methods, 2021, 350, 109018.	1.3	19
8	Assessment of myofiber microstructure changes due to atrophy and recovery with timeâ€dependent diffusion MRI. NMR in Biomedicine, 2021, 34, e4534.	1.6	5
9	Nanostructure-specific X-ray tomography reveals myelin levels, integrity and axon orientations in mouse and human nervous tissue. Nature Communications, 2021, 12, 2941.	5.8	33
10	Removal of partial Fourierâ€induced Gibbs (RPG) ringing artifacts in MRI. Magnetic Resonance in Medicine, 2021, 86, 2733-2750.	1.9	12
11	Connectome 2.0: Developing the next-generation ultra-high gradient strength human MRI scanner for bridging studies of the micro-, meso- and macro-connectome. NeuroImage, 2021, 243, 118530.	2.1	58
12	Effect of intravoxel incoherent motion on diffusion parameters in normal brain. NeuroImage, 2020, 204, 116228.	2.1	14
13	Retrieving neuronal orientations using 3D scanning SAXS and comparison with diffusion MRI. NeuroImage, 2020, 204, 116214.	2.1	20
14	The impact of realistic axonal shape on axon diameter estimation using diffusion MRI. NeuroImage, 2020, 223, 117228.	2.1	40
15	In vivo observation and biophysical interpretation of time-dependent diffusion in human cortical gray matter. NeuroImage, 2020, 222, 117054.	2.1	48
16	Multi-parametric quantitative in vivo spinal cord MRI with unified signal readout and image denoising. NeuroImage, 2020, 217, 116884.	2.1	34
17	A time-dependent diffusion MRI signature of axon caliber variations and beading. Communications Biology, 2020, 3, 354.	2.0	60
18	Diffusion MRI biomarkers of white matter microstructure vary nonmonotonically with increasing cerebral amyloid deposition. Neurobiology of Aging, 2020, 89, 118-128.	1.5	48

#	Article	IF	Citations
19	Noninvasive quantification of axon radii using diffusion MRI. ELife, 2020, 9, .	2.8	137
20	Altered Relationship between Working Memory and Brain Microstructure after Mild Traumatic Brain Injury. American Journal of Neuroradiology, 2019, 40, 1438-1444.	1.2	15
21	Hybrid-state free precession in nuclear magnetic resonance. Communications Physics, 2019, 2, .	2.0	22
22	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.	1.2	77
23	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.	1.1	49
24	Quantifying brain microstructure with diffusion MRI: Theory and parameter estimation. NMR in Biomedicine, 2019, 32, e3998.	1.6	335
25	Genomic kinship construction to enhance genetic analyses in the human connectome project data. Human Brain Mapping, 2019, 40, 1677-1688.	1.9	14
26	On the scaling behavior of water diffusion in human brain white matter. NeuroImage, 2019, 185, 379-387.	2.1	109
27	On modeling. Magnetic Resonance in Medicine, 2018, 79, 3172-3193.	1.9	286
28	Working Memory And Brain Tissue Microstructure: White Matter Tract Integrity Based On Multi-Shell Diffusion MRI. Scientific Reports, 2018, 8, 3175.	1.6	32
29	Early aseptic loosening of the Tritanium primary acetabular component with screw fixation. Arthroplasty Today, 2018, 4, 169-174.	0.8	33
30	Miniature pig model of human adolescent brain white matter development. Journal of Neuroscience Methods, 2018, 296, 99-108.	1.3	22
31	Rotationally-invariant mapping of scalar and orientational metrics of neuronal microstructure with diffusion MRI. NeuroImage, 2018, 174, 518-538.	2.1	173
32	TE dependent Diffusion Imaging (TEdDI) distinguishes between compartmental T2 relaxation times. NeuroImage, 2018, 182, 360-369.	2.1	160
33	Integration of routine QA data into megaâ€analysis may improve quality and sensitivity of multisite diffusion tensor imaging studies. Human Brain Mapping, 2018, 39, 1015-1023.	1.9	20
34	White Matter Tract Integrity: An Indicator of Axonal Pathology after Mild Traumatic Brain Injury. Journal of Neurotrauma, 2018, 35, 1015-1020.	1.7	30
35	What dominates the time dependence of diffusion transverse to axons: Intra- or extra-axonal water?. NeuroImage, 2018, 182, 500-510.	2.1	65
36	Characterization of Prostate Microstructure Using Water Diffusion and NMR Relaxation. Frontiers in Physics, 2018, 6, .	1.0	40

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37	Effects of mesoscopic susceptibility and transverse relaxation on diffusion NMR. Journal of Magnetic Resonance, 2018, 293, 134-144.	1.2	24
38	Evaluation of the accuracy and precision of the diffusion parameter EStImation with Gibbs and NoisE removal pipeline. NeuroImage, 2018, 183, 532-543.	2.1	123
39	Comparison of heritability estimates on resting state fMRI connectivity phenotypes using the ENIGMA analysis pipeline. Human Brain Mapping, 2018, 39, 4893-4902.	1.9	45
40	Quantifying myofiber integrity using diffusion <scp>MRI</scp> and random permeable barrier modeling in skeletal muscle growth and Duchenne muscular dystrophy model in mice. Magnetic Resonance in Medicine, 2018, 80, 2094-2108.	1.9	21
41	Transverse NMR relaxation in biological tissues. NeuroImage, 2018, 182, 149-168.	2.1	55
42	Heritability estimates on resting state fMRI data using ENIGMA analysis pipeline. , 2018, , .		20
43	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
44	Time-Dependent Diffusion in Prostate Cancer. Investigative Radiology, 2017, 52, 405-411.	3.5	58
45	Validation of surfaceâ€toâ€volume ratio measurements derived from oscillating gradient spin echo on a clinical scanner using anisotropic fiber phantoms. NMR in Biomedicine, 2017, 30, e3708.	1.6	16
46	Lipid Metabolism, Abdominal Adiposity, and Cerebral Health in the Amish. Obesity, 2017, 25, 1876-1880.	1.5	8
47	Observation of structural universality in disordered systems using bulk diffusion measurement. Physical Review E, 2017, 96, 061101.	0.8	13
48	In vivo measurement of membrane permeability and myofiber size in human muscle using timeâ€dependent diffusion tensor imaging and the random permeable barrier model. NMR in Biomedicine, 2017, 30, e3612.	1.6	44
49	Optimal target VOI size for accurate 4D coregistration of DCE-MRI. Proceedings of SPIE, 2016, , .	0.8	0
50	Surfaceâ€toâ€volume ratio mapping of tumor microstructure using oscillating gradient diffusion weighted imaging. Magnetic Resonance in Medicine, 2016, 76, 237-247.	1.9	52
51	Diffusion <scp>MRI</scp> noise mapping using random matrix theory. Magnetic Resonance in Medicine, 2016, 76, 1582-1593.	1.9	541
52	P2â€266: Early Versus Late Changes in White Matter Microstructure with Increasing Amyloid Deposition. Alzheimer's and Dementia, 2016, 12, P729.	0.4	0
53	Gibbs ringing in diffusion MRI. Magnetic Resonance in Medicine, 2016, 76, 301-314.	1.9	108
54	Denoising of diffusion MRI using random matrix theory. NeuroImage, 2016, 142, 394-406.	2.1	1,208

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55	Pulsed and oscillating gradient MRI for assessment of cell size and extracellular space (POMACE) in mouse gliomas. NMR in Biomedicine, 2016, 29, 1350-1363.	1.6	60
56	Degeneracy in model parameter estimation for multiâ€compartmental diffusion in neuronal tissue. NMR in Biomedicine, 2016, 29, 33-47.	1.6	252
57	In vivo quantification of demyelination and recovery using compartment-specific diffusion MRI metrics validated by electron microscopy. NeuroImage, 2016, 132, 104-114.	2.1	156
58	In vivo observation and biophysical interpretation of time-dependent diffusion in human white matter. NeuroImage, 2016, 129, 414-427.	2.1	147
59	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.	2.1	179
60	N -acetyl-aspartate levels correlate with intra-axonal compartment parameters from diffusion MRI. NeuroImage, 2015, 118, 334-343.	2.1	40
61	Mesoscopic structure of neuronal tracts from time-dependent diffusion. NeuroImage, 2015, 114, 18-37.	2.1	199
62	Time-dependent diffusion in skeletal muscle with the random permeable barrier model (RPBM): application to normal controls and chronic exertional compartment syndrome patients. NMR in Biomedicine, 2014, 27, 519-528.	1.6	71
63	The Presence and Role of Iron in Mild Traumatic Brain Injury: An Imaging Perspective. Journal of Neurotrauma, 2014, 31, 301-307.	1.7	50
64	Revealing mesoscopic structural universality with diffusion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5088-5093.	3.3	266
65	Non-invasive, in vivo monitoring of neuronal transport impairment in a mouse model of tauopathy using MEMRI. NeuroImage, 2013, 64, 693-702.	2.1	28
66	Comment on â€œMagnetic resonance imaging by synergistic diffusion-diffraction patternsâ€. Physical Review Letters, 2013, 110, 109801.	2.9	10
67	Collective fluorescence enhancement in nanoparticle clusters. Nature Communications, 2011, 2, 364.	5.8	32
68	Random walks with barriers. Nature Physics, 2011, 7, 508-514.	6.5	181
69	Surface-to-volume ratio with oscillating gradients. Journal of Magnetic Resonance, 2011, 210, 141-145.	1.2	50
70	Monte Carlo study of a twoâ€compartment exchange model of diffusion. NMR in Biomedicine, 2010, 23, 711-724.	1.6	180
71	Effective medium theory of a diffusionâ€weighted signal. NMR in Biomedicine, 2010, 23, 682-697.	1.6	119
72	O2-04-01: Tract-tracing MEMRI study on a mouse model of tauopathy: Does manganese propagation reflect only axonal transport?. , 2010, 6, S102-S103.		0

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73	Temperature-dependent Drude transport in a two-dimensional electron gas. Physical Review B, 2009, 79, .	1.1	5
74	Mott Insulating State in Ultraclean Carbon Nanotubes. Science, 2009, 323, 106-110.	6.0	151
75	Transverse NMR relaxation in magnetically heterogeneous media. Journal of Magnetic Resonance, 2008, 195, 33-39.	1.2	28
76	Effect of disorder on a graphene<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>p</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>n</mml:mi></mml:mrow></mml:math>junc Physical Review B, 2008, 77, .	1.1	10
77	Blinking Statistics Correlated with Nanoparticle Number. Nano Letters, 2008, 8, 4020-4026.	4.5	43
78	Critical conductance of a one-dimensional doped Mott insulator. Physical Review B, 2008, 77, .	1.1	10
79	Elastic scattering theory and transport in graphene. Physical Review B, 2007, 76, .	1.1	226
80	Numbers of donors and acceptors from transport measurements in graphene. Applied Physics Letters, 2007, 91, 102102.	1.5	127
81	Screening of a hypercritical charge in graphene. Physical Review B, 2007, 76, .	1.1	129
82	Nonactivated transport of strongly interacting two-dimensional holes in GaAs. Physical Review B, 2006, 74, .	1.1	20
83	Anomalous transport and memory in quantun dot arrays (Invited Paper). , 2005, , .		0
84	LÃ©vy statistics and anomalous transport in quantum-dot arrays. Physical Review B, 2005, 72, .	1.1	34
85	Correlated electron states and transport in triangular arrays. Physical Review B, 2005, 72, .	1.1	9
86	Electron properties of carbon nanotubes in a periodic potential. Physical Review B, 2005, 72, .	1.1	20
87	Devilâ€™s Staircase of Incompressible Electron States in a Nanotube. Physical Review Letters, 2005, 95, 066401.	2.9	9
88	Supersymmetry in carbon nanotubes in a transverse magnetic field. Physical Review B, 2003, 68, .	1.1	48
89	Kiselev and Novikov Reply:. Physical Review Letters, 2003, 91, .	2.9	2
90	Transverse NMR Relaxation as a Probe of Mesoscopic Structure. Physical Review Letters, 2002, 89, 278101.	2.9	48

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91	Podocyte-Associated Molecules in Puromycin Aminonucleoside Nephrosis of the Rat. Laboratory Investigation, 2002, 82, 713-718.	1.7	74