Evren Ozarslan

List of Publications by Year
in descending order

76 papers	4,057 citations	136950 32 h-index	123424 61 g-index
82 all docs	82 docs citations	82 times ranked	2367 citing authors

#	Article	IF	Citations
1	Generalized diffusion tensor imaging and analytical relationships between diffusion tensor imaging and high angular resolution diffusion imaging. Magnetic Resonance in Medicine, 2003, 50, 955-965.	3.0	367
2	Resolution of complex tissue microarchitecture using the diffusion orientation transform (DOT). NeuroImage, 2006, 31, 1086-1103.	4.2	346
3	Mean apparent propagator (MAP) MRI: A novel diffusion imaging method for mapping tissue microstructure. NeuroImage, 2013, 78, 16-32.	4.2	320
4	Q-space trajectory imaging for multidimensional diffusion MRI of the human brain. NeuroImage, 2016, 135, 345-362.	4.2	256
5	A novel tensor distribution model for the diffusion-weighted MR signal. NeuroImage, 2007, 37, 164-176.	4.2	204
6	Conventions and nomenclature for double diffusion encoding NMR and MRI. Magnetic Resonance in Medicine, 2016, 75, 82-87.	3.0	154
7	Generalized scalar measures for diffusion MRI using trace, variance, and entropy. Magnetic Resonance in Medicine, 2005, 53, 866-876.	3.0	138
8	A signal transformational framework for breaking the noise floor and its applications in MRI. Journal of Magnetic Resonance, 2009, 197, 108-119.	2.1	129
9	Microscopic anisotropy revealed by NMR double pulsed field gradient experiments with arbitrary timing parameters. Journal of Chemical Physics, 2008, 128, 154511.	3.0	116
10	Compartment shape anisotropy (CSA) revealed by double pulsed field gradient MR. Journal of Magnetic Resonance, 2009, 199, 56-67.	2.1	115
11	Clinical feasibility of using mean apparent propagator (MAP) MRI to characterize brain tissue microstructure. NeuroImage, 2016, 127, 422-434.	4.2	101
12	Observation of anomalous diffusion in excised tissue by characterizing the diffusion-time dependence of the MR signal. Journal of Magnetic Resonance, 2006, 183, 315-323.	2.1	96
13	From singleâ€pulsed field gradient to doubleâ€pulsed field gradient MR: gleaning new microstructural information and developing new forms of contrast in MRI. NMR in Biomedicine, 2010, 23, 757-780.	2.8	95
14	A general framework to quantify the effect of restricted diffusion on the NMR signal with applications to double pulsed field gradient NMR experiments. Journal of Chemical Physics, 2009, 130, 104702.	3.0	93
15	MR diffusionâ€"â€œdiffractionâ€•phenomenon in multi-pulse-field-gradient experiments. Journal of Magnetic Resonance, 2007, 188, 285-294.	2.1	89
16	Noninvasive bipolar double-pulsed-field-gradient NMR reveals signatures for pore size and shape in polydisperse, randomly oriented, inhomogeneous porous media. Journal of Chemical Physics, 2010, 133, 044705.	3.0	71
17	Pore diameter mapping using double pulsed-field gradient MRI and its validation using a novel glass capillary array phantom. Journal of Magnetic Resonance, 2011, 208, 128-135.	2.1	70
18	Structural insights from high-resolution diffusion tensor imaging and tractography of the isolated rat hippocampus. NeuroImage, 2006, 32, 1499-1509.	4.2	69

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19	The effect of the diffusion time and pulse gradient duration ratio on the diffraction pattern and the structural information estimated from q-space diffusion MR: Experiments and simulations. Journal of Magnetic Resonance, 2008, 194, 230-236.	2.1	65
20	Detecting diffusion-diffraction patterns in size distribution phantoms using double-pulsed field gradient NMR: Theory and experiments. Journal of Chemical Physics, 2010, 132, 034703.	3.0	65
21	Analysis of the effects of noise, DWI sampling, and value of assumed parameters in diffusion MRI models. Magnetic Resonance in Medicine, 2017, 78, 1767-1780.	3.0	63
22	Measuring small compartmental dimensions with low-q angular double-PGSE NMR: The effect of experimental parameters on signal decay. Journal of Magnetic Resonance, 2009, 198, 15-23.	2.1	62
23	In vivo detection of microscopic anisotropy using quadruple pulsed-field gradient (qPFG) diffusion MRI on a clinical scanner. NeuroImage, 2013, 64, 229-239.	4.2	60
24	Measurement Tensors in Diffusion MRI: Generalizing the Concept of Diffusion Encoding. Lecture Notes in Computer Science, 2014, 17, 209-216.	1.3	55
25	The sensitivity of diffusion MRI to microstructural properties and experimental factors. Journal of Neuroscience Methods, 2021, 347, 108951.	2.5	53
26	Probabilistic Identification and Estimation of Noise (PIESNO): A self-consistent approach and its applications in MRI. Journal of Magnetic Resonance, 2009, 199, 94-103.	2.1	52
27	Accurate noninvasive measurement of cell size and compartment shape anisotropy in yeast cells using doubleâ€pulsed field gradient MR. NMR in Biomedicine, 2012, 25, 236-246.	2.8	51
28	Threeâ€dimensional analytical magnetic resonance imaging phantom in the Fourier domain. Magnetic Resonance in Medicine, 2007, 58, 430-436.	3.0	45
29	Mapping average axon diameters in porcine spinal cord white matter and rat corpus callosum using d-PFG MRI. NeuroImage, 2013, 78, 210-216.	4.2	45
30	Threeâ€dimensional water diffusion in impermeable cylindrical tubes: theory versus experiments. NMR in Biomedicine, 2008, 21, 888-898.	2.8	44
31	Temporal scaling characteristics of diffusion as a new MRI contrast: Findings in rat hippocampus. NeuroImage, 2012, 60, 1380-1393.	4.2	38
32	Observation of restricted diffusion in the presence of a free diffusion compartment: Single- and double-PFG experiments. Journal of Magnetic Resonance, 2009, 200, 214-225.	2.1	36
33	Sparse and optimal acquisition design for diffusion MRI and beyond. Medical Physics, 2012, 39, 2499-2511.	3.0	35
34	Nuclear magnetic resonance characterization of general compartment size distributions. New Journal of Physics, 2011, 13, 015010.	2.9	31
35	Parsimonious Model Selection for Tissue Segmentation and Classification Applications: A Study Using Simulated and Experimental DTI Data. IEEE Transactions on Medical Imaging, 2007, 26, 1576-1584.	8.9	28
36	Anisotropy Induced by Macroscopic Boundaries: Surface-Normal Mapping using Diffusion-Weighted Imaging. Biophysical Journal, 2008, 94, 2809-2818.	0.5	24

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37	Remarks on q-space MR propagator in partially restricted, axially-symmetric, and isotropic environments. Magnetic Resonance Imaging, 2009, 27, 834-844.	1.8	24
38	Detecting compartmental nonâ€Gaussian diffusion with symmetrized doubleâ€PFG MRI. NMR in Biomedicine, 2015, 28, 1550-1556.	2.8	23
39	Influence of the Size and Curvedness of Neural Projections on the Orientationally Averaged Diffusion MR Signal. Frontiers in Physics, 2018, 6, .	2.1	22
40	NMR signal for particles diffusing under potentials: From path integrals and numerical methods to a model of diffusion anisotropy. Physical Review E, 2016, 93, 052602.	2.1	21
41	Variational denoising of diffusion weighted MRI. Inverse Problems and Imaging, 2009, 3, 625-648.	1.1	21
42	Double pulsed field gradient (doubleâ€PFG) MR imaging (MRI) as a means to measure the size of plant cells. Magnetic Resonance in Chemistry, 2011, 49, S79-84.	1.9	19
43	Precise Inference and Characterization of Structural Organization (PICASO) of tissue from molecular diffusion. NeuroImage, 2017, 146, 452-473.	4.2	17
44	A system and mathematical framework to model shear flow effects in biomedical DWâ€imaging and spectroscopy. NMR in Biomedicine, 2010, 23, 734-744.	2.8	15
45	Dynamics of local magnetization in the eigenbasis of the Bloch-Torrey operator. Journal of Chemical Physics, 2017, 146, 124201.	3.0	14
46	Bayesian uncertainty quantification in linear models for diffusion MRI. NeuroImage, 2018, 175, 272-285.	4.2	14
47	Orientationally-averaged diffusion-attenuated magnetic resonance signal for locally-anisotropic diffusion. Scientific Reports, 2019, 9, 4899.	3.3	14
48	Enforcing necessary non-negativity constraints for common diffusion MRI models using sum of squares programming. NeuroImage, 2020, 209, 116405.	4.2	13
49	Effective Potential for Magnetic Resonance Measurements of Restricted Diffusion. Frontiers in Physics, 2017, 5, .	2.1	12
50	Multi-Fiber Reconstruction Using Probabilistic Mixture Models for Diffusion MRI Examinations of the Brain. Mathematics and Visualization, 2017, , 283-308.	0.6	11
51	Computing the orientational-average of diffusion-weighted MRI signals: a comparison of different techniques. Scientific Reports, 2021, 11, 14345.	3.3	10
52	Q-space trajectory imaging with positivity constraints (QTI+). NeuroImage, 2021, 238, 118198.	4.2	10
53	On the generalizability of diffusion MRI signal representations across acquisition parameters, sequences and tissue types: Chronicles of the MEMENTO challenge. NeuroImage, 2021, 240, 118367.	4.2	10
54	Asymmetric Orientation Distribution Functions (AODFs) revealing intravoxel geometry in diffusion MRI. Magnetic Resonance Imaging, 2018, 49, 145-158.	1.8	9

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55	Simple Harmonic Oscillator Based Reconstruction and Estimation for One-Dimensional q-Space Magnetic Resonance (1D-SHORE). Applied and Numerical Harmonic Analysis, 2013, , 373-399.	0.3	9
56	Characterization of Anomalous Diffusion from MR Signal may be a New Probe to Tissue Microstructure. , 2006, 2006, 2256-9.		8
57	Conceptual foundations of diffusion in magnetic resonance. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2013, 42, 116-129.	0.5	8
58	Characterizing magnetic resonance signal decay due to gaussian diffusion: The path integral approach and a convenient computational method. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2015, 44, 203-213.	0.5	8
59	Fast Orientation Mapping from HARDI. Lecture Notes in Computer Science, 2005, 8, 156-163.	1.3	7
60	Multimodal integration of diffusion MRI for better characterization of tissue biology. NMR in Biomedicine, 2019, 32, e3939.	2.8	6
61	Introduction to Diffusion MR. , 2014, , 3-9.		6
62	A multivariate hypothesis testing framework for tissue clustering and classification of DTI data. NMR in Biomedicine, 2009, 22, 716-729.	2.8	4
63	Gaussian process regression can turn non-uniform and undersampled diffusion MRI data into diffusion spectrum imaging. , 2017, , .		4
64	Magnetic Resonance Assessment of Effective Confinement Anisotropy with Orientationally-Averaged Single and Double Diffusion Encoding. Mathematics and Visualization, 2021, , 203-223.	0.6	4
65	Applying positivity constraints to q-space trajectory imaging: The QTI+ implementation. SoftwareX, 2022, 18, 101030.	2.6	4
66	Using the Wild Bootstrap to Quantify Uncertainty in Mean Apparent Propagator MRI. Frontiers in Neuroinformatics, 2019, 13, 43.	2.5	3
67	Elucidating Intravoxel Geometry in Diffusion-MRI: Asymmetric Orientation Distribution Functions (AODFs) Revealed by a Cone Model. Lecture Notes in Computer Science, 2015, , 231-238.	1.3	3
68	A Mixture of Wisharts (MOW) Model for Multifiber Reconstruction. Mathematics and Visualization, 2009, , 39-56.	0.6	3
69	The direction-dependence of apparent water exchange rate in human white matter. NeuroImage, 2022, 247, 118831.	4.2	3
70	Multidimensional Diffusion MRI Methods With Confined Subdomains. Frontiers in Physics, 2022, 10, .	2.1	3
71	Higher Rank Tensors in Diffusion MRI. Mathematics and Visualization, 2006, , 177-187.	0.6	2
72	A CONTINUOUS MIXTURE OF TENSORS MODEL FOR DIFFUSION-WEIGHTED MR SIGNAL RECONSTRUCTION. , 2007, 4, 772-775.		2

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73	Introduction to Diffusion MR. , 2009, , 2-10.		2
74	Diffusion-Weighted Magnetic Resonance Signal for General Gradient Waveforms: Multiple Correlation Function Framework, Path Integrals, and Parallels Between Them. Mathematics and Visualization, 2015, , 3-19.	0.6	1
75	Anatomical Connectivity in the Central Nervous System Revealed by Diffusion Tensor Magnetic Resonance Imaging (DT-MRI). Biocomputing, 2004, , 145-169.	0.2	0
76	Characterization of Anomalous Diffusion from MR Signal may be a New Probe to Tissue Microstructure. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0