Filip Szczepankiewicz

List of Publications by Year
in descending order

52	2,401	279798 23	223800 46
papers	citations	h-index	g-index

57	57	57	1659
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Q-space trajectory imaging for multidimensional diffusion MRI of the human brain. NeuroImage, 2016, 135, 345-362.	4.2	256
2	Quantification of microscopic diffusion anisotropy disentangles effects of orientation dispersion from microstructure: Applications in healthy volunteers and in brain tumors. NeuroImage, 2015, 104, 241-252.	4.2	216
3	Neurite density imaging versus imaging of microscopic anisotropy in diffusion MRI: A model comparison using spherical tensor encoding. NeuroImage, 2017, 147, 517-531.	4.2	177
4	Microanisotropy imaging: quantification of microscopic diffusion anisotropy and orientational order parameter by diffusion MRI with magic-angle spinning of the q-vector. Frontiers in Physics, 2014, 2, .	2.1	163
5	The link between diffusion MRI and tumor heterogeneity: Mapping cell eccentricity and density by diffusional variance decomposition (DIVIDE). NeuroImage, 2016, 142, 522-532.	4.2	141
6	Constrained optimization of gradient waveforms for generalized diffusion encoding. Journal of Magnetic Resonance, 2015, 261, 157-168.	2.1	106
7	Searching for the neurite density with diffusion MRI: Challenges for biophysical modeling. Human Brain Mapping, 2019, 40, 2529-2545.	3.6	103
8	Maxwellâ€compensated design of asymmetric gradient waveforms for tensorâ€valued diffusion encoding. Magnetic Resonance in Medicine, 2019, 82, 1424-1437.	3.0	81
9	Extrapolation-Based References Improve Motion and Eddy-Current Correction of High B-Value DWI Data: Application in Parkinsonâ€™s Disease Dementia. PLoS ONE, 2015, 10, e0141825.	2.5	75
10	Optimal experimental design for filter exchange imaging: Apparent exchange rate measurements in the healthy brain and in intracranial tumors. Magnetic Resonance in Medicine, 2017, 77, 1104-1114.	3.0	67
11	Tensor-valued diffusion encoding for diffusional variance decomposition (DIVIDE): Technical feasibility in clinical MRI systems. PLoS ONE, 2019, 14, e0214238.	2.5	67
12	Towards unconstrained compartment modeling in white matter using diffusionâ€relaxation MRI with tensorâ€valued diffusion encoding. Magnetic Resonance in Medicine, 2020, 84, 1605-1623.	3.0	67
13	The dot-compartment revealed? Diffusion MRI with ultra-strong gradients and spherical tensor encoding in the living human brain. NeuroImage, 2020, 210, 116534.	4.2	64
14	Variability in diffusion kurtosis imaging: Impact on study design, statistical power and interpretation. NeuroImage, 2013, 76, 145-154.	4.2	62
15	Imaging brain tumour microstructure. NeuroImage, 2018, 182, 232-250.	4.2	62
16	Tensorâ€valued diffusion MRI in under 3 minutes: an initial survey of microscopic anisotropy and tissue heterogeneity in intracranial tumors. Magnetic Resonance in Medicine, 2020, 83, 608-620.	3.0	55
17	Disentangling white-matter damage from physiological fibre orientation dispersion in multiple sclerosis. Brain Communications, 2020, 2, fcaa077.	3.3	55
18	Measurement Tensors in Diffusion MRI: Generalizing the Concept of Diffusion Encoding. Lecture Notes in Computer Science, 2014, 17, 209-216.	1.3	55

#	Article	IF	Citations
19	Separating blood and water: Perfusion and free water elimination from diffusion MRI in the human brain. NeuroImage, 2017, 156, 423-434.	4.2	46
20	Gradient waveform design for tensor-valued encoding in diffusion MRI. Journal of Neuroscience Methods, 2021, 348, 109007.	2.5	44
21	Computing and visualising intraâ€voxel orientationâ€specific relaxationâ€“diffusion features in the human brain. Human Brain Mapping, 2021, 42, 310-328.	3.6	35
22	Assessment of Global and Regional Diffusion Changes along White Matter Tracts in Parkinsonian Disorders by MR Tractography. PLoS ONE, 2013, 8, e66022.	2.5	29
23	Joint RElaxation-Diffusion Imaging Moments to Probe Neurite Microstructure. IEEE Transactions on Medical Imaging, 2020, 39, 668-677.	8.9	29
24	Tensorâ€valued diffusion MRI differentiates cortex and white matter in malformations of cortical development associated with epilepsy. Epilepsia, 2020, 61, 1701-1713.	5.1	28
25	Linear, planar and spherical tensor-valued diffusion MRI data by free waveform encoding in healthy brain, water, oil and liquid crystals. Data in Brief, 2019, 25, 104208.	1.0	24
26	In vivo demonstration of microscopic anisotropy in the human kidney using multidimensional diffusion MRI. Magnetic Resonance in Medicine, 2019, 82, 2160-2168.	3.0	24
27	Motionâ€compensated gradient waveforms for tensorâ€valued diffusion encoding by constrained numerical optimization. Magnetic Resonance in Medicine, 2021, 85, 2117-2126.	3.0	23
28	Transferring principles of solid-state and Laplace NMR to the field of in vivo brain MRI. Magnetic Resonance, 2020, 1, 27-43.	1.9	22
29	Motionâ€compensated bâ€tensor encoding for in vivo cardiac diffusionâ€weighted imaging. NMR in Biomedicine, 2020, 33, e4213.	2.8	20
30	Neural networks for parameter estimation in microstructural MRI: Application to a diffusion-relaxation model of white matter. NeuroImage, 2021, 244, 118601.	4.2	20
31	Liquid crystal phantom for validation of microscopic diffusion anisotropy measurements on clinical MRI systems. Magnetic Resonance in Medicine, 2018, 79, 1817-1828.	3.0	18
32	Improved fibre dispersion estimation using b-tensor encoding. NeuroImage, 2020, 215, 116832.	4.2	17
33	A Pilot Study of Multidimensional Diffusion MRI for Assessment of Tissue Heterogeneity in Prostate Cancer. Investigative Radiology, 2021, 56, 845-853.	6.2	15
34	Glioma grading, molecular feature classification, and microstructural characterization using MR diffusional variance decomposition (DIVIDE) imaging. European Radiology, 2021, 31, 8197-8207.	4.5	12
35	Mapping prostatic microscopic anisotropy using linear and spherical bâ€tensor encoding: A preliminary study. Magnetic Resonance in Medicine, 2021, 86, 2025-2033.	3.0	12
36	Accuracy and precision in super-resolution MRI: Enabling spherical tensor diffusion encoding at ultra-high b-values and high resolution. NeuroImage, 2021, 245, 118673.	4.2	11

#	Article	IF	Citations
37	Histogram analysis of tensor-valued diffusion MRI in meningiomas: Relation to consistency, histological grade and type. NeuroImage: Clinical, 2022, 33, 102912.	2.7	11
38	<scp>MR</scp> Fingerprinting with bâ€Tensor Encoding for Simultaneous Quantification of Relaxation and Diffusion in a Single Scan. Magnetic Resonance in Medicine, 2022, 88, 2043-2057.	3.0	11
39	The association of matrix metalloproteinase 9 (MMP9) with hippocampal volume in schizophrenia: a preliminary MRI study. Neuropsychopharmacology, 2022, 47, 524-530.	5.4	10
40	Cross-term-compensated gradient waveform design for tensor-valued diffusion MRI. Journal of Magnetic Resonance, 2021, 328, 106991.	2.1	10
41	Magic DIAMOND: Multi-fascicle diffusion compartment imaging with tensor distribution modeling and tensor-valued diffusion encoding. Medical Image Analysis, 2021, 70, 101988.	11.6	9
42	Multi-tissue spherical deconvolution of tensor-valued diffusion MRI. NeuroImage, 2021, 245, 118717.	4.2	9
43	Probing tissue microstructure by diffusion skewness tensor imaging. Scientific Reports, 2021, 11, 135.	3.3	6
44	Emotional Awareness in Schizophrenia Is Associated With Gray Matter Volume of Right Precuneus. Frontiers in Psychiatry, 2021, 12, 601742.	2.6	6
45	Comparative analysis of signal models for microscopic fractional anisotropy estimation using q-space trajectory encoding. NeuroImage, 2021, 242, 118445.	4.2	6
46	Clinical experience of tensor-valued diffusion encoding for microstructure imaging by diffusional variance decomposition in patients with breast cancer. Quantitative Imaging in Medicine and Surgery, 2022, 12, 2002-2017.	2.0	6
47	Stay on the Beat With Tensor-Valued Encoding: Time-Dependent Diffusion and Cell Size Estimation in ex vivo Heart. Frontiers in Physics, 2022, 10, .	2.1	3
48	Optimal experimental design for filter exchange imaging: Apparent exchange rate measurements in the healthy brain and in intracranial tumors. Magnetic Resonance in Medicine, 2017, 77, C1-C1.	3.0	2
49	Quantification of Tissue Microstructure Using Tensor-Valued Diffusion Encoding: Brain and Body. Frontiers in Physics, 2022, 10, .	2.1	2
50	NIMG-16. EXPLORATORY EVALUATION OF Q-SPACE TRAJECTORY IMAGING PARAMETERS AS NOVEL IMAGING BIOMARKERS FOR GLIOMAS. Neuro-Oncology, 2020, 22, ii150-ii150.	1.2	1
51	Microstructure Imaging by Diffusion MRI. , 2020, , 55-69.		0
52	Separating Glioma Hyperintensities From White Matter by Diffusion-Weighted Imaging With Spherical Tensor Encoding. Frontiers in Neuroscience, 2022, 16, 842242.	2.8	0