

# Filip Szczepankiewicz

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

2,401  
citations

279487

23  
h-index

223531

46  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1659  
citing authors

#	ARTICLE	IF	CITATIONS
1	Q-space trajectory imaging for multidimensional diffusion MRI of the human brain. <i>NeuroImage</i> , 2016, 135, 345-362.	2.1	256
2	Quantification of microscopic diffusion anisotropy disentangles effects of orientation dispersion from microstructure: Applications in healthy volunteers and in brain tumors. <i>NeuroImage</i> , 2015, 104, 241-252.	2.1	216
3	Neurite density imaging versus imaging of microscopic anisotropy in diffusion MRI: A model comparison using spherical tensor encoding. <i>NeuroImage</i> , 2017, 147, 517-531.	2.1	177
4	Microanisotropy imaging: quantification of microscopic diffusion anisotropy and orientational order parameter by diffusion MRI with magic-angle spinning of the q-vector. <i>Frontiers in Physics</i> , 2014, 2, .	1.0	163
5	The link between diffusion MRI and tumor heterogeneity: Mapping cell eccentricity and density by diffusional variance decomposition (DIVIDE). <i>NeuroImage</i> , 2016, 142, 522-532.	2.1	141
6	Constrained optimization of gradient waveforms for generalized diffusion encoding. <i>Journal of Magnetic Resonance</i> , 2015, 261, 157-168.	1.2	106
7	Searching for the neurite density with diffusion MRI: Challenges for biophysical modeling. <i>Human Brain Mapping</i> , 2019, 40, 2529-2545.	1.9	103
8	Maxwell-compensated design of asymmetric gradient waveforms for tensor-valued diffusion encoding. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1424-1437.	1.9	81
9	Extrapolation-Based References Improve Motion and Eddy-Current Correction of High B-Value DWI Data: Application in Parkinson's Disease Dementia. <i>PLoS ONE</i> , 2015, 10, e0141825.	1.1	75
10	Optimal experimental design for filter exchange imaging: Apparent exchange rate measurements in the healthy brain and in intracranial tumors. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 1104-1114.	1.9	67
11	Tensor-valued diffusion encoding for diffusional variance decomposition (DIVIDE): Technical feasibility in clinical MRI systems. <i>PLoS ONE</i> , 2019, 14, e0214238.	1.1	67
12	Towards unconstrained compartment modeling in white matter using diffusion-relaxation MRI with tensor-valued diffusion encoding. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 1605-1623.	1.9	67
13	The dot-compartment revealed? Diffusion MRI with ultra-strong gradients and spherical tensor encoding in the living human brain. <i>NeuroImage</i> , 2020, 210, 116534.	2.1	64
14	Variability in diffusion kurtosis imaging: Impact on study design, statistical power and interpretation. <i>NeuroImage</i> , 2013, 76, 145-154.	2.1	62
15	Imaging brain tumour microstructure. <i>NeuroImage</i> , 2018, 182, 232-250.	2.1	62
16	Tensor-valued diffusion MRI in under 3 minutes: an initial survey of microscopic anisotropy and tissue heterogeneity in intracranial tumors. <i>Magnetic Resonance in Medicine</i> , 2020, 83, 608-620.	1.9	55
17	Disentangling white-matter damage from physiological fibre orientation dispersion in multiple sclerosis. <i>Brain Communications</i> , 2020, 2, fcaa077.	1.5	55
18	Measurement Tensors in Diffusion MRI: Generalizing the Concept of Diffusion Encoding. <i>Lecture Notes in Computer Science</i> , 2014, 17, 209-216.	1.0	55

#	ARTICLE	IF	CITATIONS
19	Separating blood and water: Perfusion and free water elimination from diffusion MRI in the human brain. <i>NeuroImage</i> , 2017, 156, 423-434.	2.1	46
20	Gradient waveform design for tensor-valued encoding in diffusion MRI. <i>Journal of Neuroscience Methods</i> , 2021, 348, 109007.	1.3	44
21	Computing and visualising intra-voxel orientation-specific relaxation diffusion features in the human brain. <i>Human Brain Mapping</i> , 2021, 42, 310-328.	1.9	35
22	Assessment of Global and Regional Diffusion Changes along White Matter Tracts in Parkinsonian Disorders by MR Tractography. <i>PLoS ONE</i> , 2013, 8, e66022.	1.1	29
23	Joint RELaxation-Diffusion Imaging Moments to Probe Neurite Microstructure. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 668-677.	5.4	29
24	Tensor-valued diffusion MRI differentiates cortex and white matter in malformations of cortical development associated with epilepsy. <i>Epilepsia</i> , 2020, 61, 1701-1713.	2.6	28
25	Linear, planar and spherical tensor-valued diffusion MRI data by free waveform encoding in healthy brain, water, oil and liquid crystals. <i>Data in Brief</i> , 2019, 25, 104208.	0.5	24
26	In vivo demonstration of microscopic anisotropy in the human kidney using multidimensional diffusion MRI. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 2160-2168.	1.9	24
27	Motion-compensated gradient waveforms for tensor-valued diffusion encoding by constrained numerical optimization. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 2117-2126.	1.9	23
28	Transferring principles of solid-state and Laplace NMR to the field of in vivo brain MRI. <i>Magnetic Resonance</i> , 2020, 1, 27-43.	0.8	22
29	Motion-compensated b-tensor encoding for in vivo cardiac diffusion-weighted imaging. <i>NMR in Biomedicine</i> , 2020, 33, e4213.	1.6	20
30	Neural networks for parameter estimation in microstructural MRI: Application to a diffusion-relaxation model of white matter. <i>NeuroImage</i> , 2021, 244, 118601.	2.1	20
31	Liquid crystal phantom for validation of microscopic diffusion anisotropy measurements on clinical MRI systems. <i>Magnetic Resonance in Medicine</i> , 2018, 79, 1817-1828.	1.9	18
32	Improved fibre dispersion estimation using b-tensor encoding. <i>NeuroImage</i> , 2020, 215, 116832.	2.1	17
33	A Pilot Study of Multidimensional Diffusion MRI for Assessment of Tissue Heterogeneity in Prostate Cancer. <i>Investigative Radiology</i> , 2021, 56, 845-853.	3.5	15
34	Glioma grading, molecular feature classification, and microstructural characterization using MR diffusional variance decomposition (DIVIDE) imaging. <i>European Radiology</i> , 2021, 31, 8197-8207.	2.3	12
35	Mapping prostatic microscopic anisotropy using linear and spherical b-tensor encoding: A preliminary study. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 2025-2033.	1.9	12
36	Accuracy and precision in super-resolution MRI: Enabling spherical tensor diffusion encoding at ultra-high b-values and high resolution. <i>NeuroImage</i> , 2021, 245, 118673.	2.1	11

#	ARTICLE	IF	CITATIONS
37	Histogram analysis of tensor-valued diffusion MRI in meningiomas: Relation to consistency, histological grade and type. <i>NeuroImage: Clinical</i> , 2022, 33, 102912.	1.4	11
38	<sc>MR</sc> Fingerprinting with b<sup>0</sup>-Tensor Encoding for Simultaneous Quantification of Relaxation and Diffusion in a Single Scan. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2043-2057.	1.9	11
39	The association of matrix metalloproteinase 9 (MMP9) with hippocampal volume in schizophrenia: a preliminary MRI study. <i>Neuropsychopharmacology</i> , 2022, 47, 524-530.	2.8	10
40	Cross-term-compensated gradient waveform design for tensor-valued diffusion MRI. <i>Journal of Magnetic Resonance</i> , 2021, 328, 106991.	1.2	10
41	Magic DIAMOND: Multi-fascicle diffusion compartment imaging with tensor distribution modeling and tensor-valued diffusion encoding. <i>Medical Image Analysis</i> , 2021, 70, 101988.	7.0	9
42	Multi-tissue spherical deconvolution of tensor-valued diffusion MRI. <i>NeuroImage</i> , 2021, 245, 118717.	2.1	9
43	Probing tissue microstructure by diffusion skewness tensor imaging. <i>Scientific Reports</i> , 2021, 11, 135.	1.6	6
44	Emotional Awareness in Schizophrenia Is Associated With Gray Matter Volume of Right Precuneus. <i>Frontiers in Psychiatry</i> , 2021, 12, 601742.	1.3	6
45	Comparative analysis of signal models for microscopic fractional anisotropy estimation using q-space trajectory encoding. <i>NeuroImage</i> , 2021, 242, 118445.	2.1	6
46	Clinical experience of tensor-valued diffusion encoding for microstructure imaging by diffusional variance decomposition in patients with breast cancer. <i>Quantitative Imaging in Medicine and Surgery</i> , 2022, 12, 2002-2017.	1.1	6
47	Stay on the Beat With Tensor-Valued Encoding: Time-Dependent Diffusion and Cell Size Estimation in ex vivo Heart. <i>Frontiers in Physics</i> , 2022, 10, .	1.0	3
48	Optimal experimental design for filter exchange imaging: Apparent exchange rate measurements in the healthy brain and in intracranial tumors. <i>Magnetic Resonance in Medicine</i> , 2017, 77, C1-C1.	1.9	2
49	Quantification of Tissue Microstructure Using Tensor-Valued Diffusion Encoding: Brain and Body. <i>Frontiers in Physics</i> , 2022, 10, .	1.0	2
50	NIMG-16. EXPLORATORY EVALUATION OF Q-SPACE TRAJECTORY IMAGING PARAMETERS AS NOVEL IMAGING BIOMARKERS FOR GLIOMAS. <i>Neuro-Oncology</i> , 2020, 22, ii150-ii150.	0.6	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. <i>Frontiers in Neuroscience</i> , 2022, 16, 842242.	1.4	0