Peter F Neher

List of Publications by Year
in descending order

24 papers	2,549 citations	471509 17 h-index	552781 26 g-index
30 all docs	30 docs citations	30 times ranked	3701 citing authors

#	Article	IF	Citations
1	The challenge of mapping the human connectome based on diffusion tractography. Nature Communications, 2017, 8, 1349.	12.8	956
2	TractSeg - Fast and accurate white matter tract segmentation. NeuroImage, 2018, 183, 239-253.	4.2	362
3	Limits to anatomical accuracy of diffusion tractography using modern approaches. NeuroImage, 2019, 185, 1-11.	4.2	200
4	Why rankings of biomedical image analysis competitions should be interpreted with care. Nature Communications, 2018, 9, 5217.	12.8	198
5	The DTI Challenge: Toward Standardized Evaluation of Diffusion Tensor Imaging Tractography for Neurosurgery. Journal of Neuroimaging, 2015, 25, 875-882.	2.0	147
6	Combined tract segmentation and orientation mapping for bundle-specific tractography. Medical Image Analysis, 2019, 58, 101559.	11.6	104
7	Fiberfox: Facilitating the creation of realistic white matter software phantoms. Magnetic Resonance in Medicine, 2014, 72, 1460-1470.	3.0	91
8	MITK Diffusion Imaging. Methods of Information in Medicine, 2012, 51, 441-448.	1.2	71
9	Strengths and weaknesses of state of the art fiber tractography pipelines â€“ A comprehensive in-vivo and phantom evaluation study using Tractometer. Medical Image Analysis, 2015, 26, 287-305.	11.6	63
10	Fiber tractography using machine learning. NeuroImage, 2017, 158, 417-429.	4.2	46
11	Multiparametric mapping of white matter microstructure in catatonia. Neuropsychopharmacology, 2020, 45, 1750-1757.	5.4	44
12	Joint Imaging Platform for Federated Clinical Data Analytics. JCO Clinical Cancer Informatics, 2020, 4, 1027-1038.	2.1	39
13	Tractography reproducibility challenge with empirical data (TraCED): The 2017 ISMRM diffusion study group challenge. Journal of Magnetic Resonance Imaging, 2020, 51, 234-249.	3.4	38
14	OpenHELP (Heidelberg laparoscopy phantom): development of an open-source surgical evaluation and training tool. Surgical Endoscopy and Other Interventional Techniques, 2015, 29, 3338-3347.	2.4	30
15	Tract Orientation Mapping for Bundle-Specific Tractography. Lecture Notes in Computer Science, 2018, , 36-44.	1.3	22
16	MITK global tractography. Proceedings of SPIE, 2012, , .	0.8	20
17	A Machine Learning Based Approach to Fiber Tractography Using Classifier Voting. Lecture Notes in Computer Science, 2015, , 45-52.	1.3	20
18	Going Beyond Diffusion Tensor Imaging Tractography in Eloquent Glioma Surgeryâ€“High-Resolution Fiber Tractography: Q-Ball or Constrained Spherical Deconvolution?. World Neurosurgery, 2020, 134, e596-e609.	1.3	18

#	Article	IF	Citations
19	Comparing measured and simulated wave directions in the left atrium â€“ a workflow for model personalization and validation. Biomedizinische Technik, 2012, 57, 79-87.	0.8	13
20	Comparison of Diffusion Signal Models for Fiber Tractography in Eloquent Glioma Surgeryâ€“Determination of Accuracy Under Awake Craniotomy Conditions. World Neurosurgery, 2022, 158, e429-e440.	1.3	7
21	White matter microstructure alterations in cortico-striatal networks are associated with parkinsonism in schizophrenia spectrum disorders. European Neuropsychopharmacology, 2021, 50, 64-74.	0.7	6
22	Physical and digital phantoms for validating tractography and assessing artifacts. NeuroImage, 2021, 245, 118704.	4.2	5
23	Q-ball high-resolution fiber tractography of language associated tracts: quantitative evaluation of applicability for glioma resections. Journal of Neurosurgical Sciences, 2024, 68, .	0.6	4
24	Anchor-Constrained Plausibility (ACP): A Novel Concept for Assessing Tractography and Reducing False-Positives. Lecture Notes in Computer Science, 2018, , 20-27.	1.3	3