Robert E Smith

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8921921/publications.pdf

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28 papers	5,633 citations	331670 21 h-index	501196 28 g-index
36 all docs	36 docs citations	36 times ranked	5073 citing authors

#	Article	IF	Citations
1	MRtrix3: A fast, flexible and open software framework for medical image processing and visualisation. NeuroImage, 2019, 202, 116137.	4.2	1,555
2	Anatomically-constrained tractography: Improved diffusion MRI streamlines tractography through effective use of anatomical information. NeuroImage, 2012, 62, 1924-1938.	4.2	897
3	SIFT: Spherical-deconvolution informed filtering of tractograms. NeuroImage, 2013, 67, 298-312.	4.2	573
4	SIFT2: Enabling dense quantitative assessment of brain white matter connectivity using streamlines tractography. NeuroImage, 2015, 119, 338-351.	4.2	506
5	Investigating white matter fibre density and morphology using fixel-based analysis. NeuroImage, 2017, 144, 58-73.	4.2	437
6	Connectivity-based fixel enhancement: Whole-brain statistical analysis of diffusion MRI measures in the presence of crossing fibres. NeuroImage, 2015, 117, 40-55.	4.2	276
7	BIDS apps: Improving ease of use, accessibility, and reproducibility of neuroimaging data analysis methods. PLoS Computational Biology, 2017, 13, e1005209.	3.2	218
8	The effects of SIFT on the reproducibility and biological accuracy of the structural connectome. NeuroImage, 2015, 104, 253-265.	4.2	213
9	The contribution of geometry to the human connectome. NeuroImage, 2016, 124, 379-393.	4.2	181
10	Quantitative mapping of the brainâ€™s structural connectivity using diffusion MRI tractography: A review. NeuroImage, 2022, 249, 118870.	4.2	95
11	A generalised framework for super-resolution track-weighted imaging. NeuroImage, 2012, 59, 2494-2503.	4.2	77
12	Reduced White Matter Fiber Density in Autism Spectrum Disorder. Cerebral Cortex, 2019, 29, 1778-1788.	2.9	67
13	Development of white matter fibre density and morphology over childhood: A longitudinal fixel-based analysis. NeuroImage, 2018, 183, 666-676.	4.2	66
14	Correction for diffusion MRI fibre tracking biases: The consequences for structural connectomic metrics. NeuroImage, 2016, 142, 150-162.	4.2	65
15	Early childhood development of white matter fiber density and morphology. NeuroImage, 2020, 210, 116552.	4.2	52
16	The efficacy of different preprocessing steps in reducing motion-related confounds in diffusion MRI connectomics. NeuroImage, 2020, 222, 117252.	4.2	45
17	Quantification of voxel-wise total fibre density: Investigating the problems associated with track-count mapping. NeuroImage, 2015, 117, 284-293.	4.2	44
18	Track-weighted functional connectivity (TW-FC): A tool for characterizing the structuralâ€“functional connections in the brain. NeuroImage, 2013, 70, 199-210.	4.2	40

#	Article	IF	Citations
19	Quantification of track-weighted imaging (TWI): Characterisation of within-subject reproducibility and between-subject variability. NeuroImage, 2014, 87, 18-31.	4.2	36
20	The role of wholeâ€brain diffusion MRI as a tool for studying human in vivo cortical segregation based on a measure of neurite density. Magnetic Resonance in Medicine, 2018, 79, 2738-2744.	3.0	33
21	Connectomes from streamlines tractography: Assigning streamlines to brain parcellations is not trivial but highly consequential. NeuroImage, 2019, 199, 160-171.	4.2	31
22	Characterisation of white matter asymmetries in the healthy human brain using diffusion MRI fixel-based analysis. NeuroImage, 2021, 225, 117505.	4.2	21
23	Track-weighted dynamic functional connectivity (TW-dFC): a new method to study time-resolved functional connectivity. Brain Structure and Function, 2017, 222, 3761-3774.	2.3	19
24	Mapping connectomes with diffusion MRI: Deterministic or probabilistic tractography?. Magnetic Resonance in Medicine, 2020, 83, 787-790.	3.0	11
25	Maturation and interhemispheric asymmetry in neurite density and orientation dispersion in early childhood. NeuroImage, 2020, 221, 117168.	4.2	8
26	Adrenarcheal hormone-related development of white matter during late childhood. NeuroImage, 2020, 223, 117320.	4.2	7
27	Connectome spatial smoothing (CSS): Concepts, methods, and evaluation. NeuroImage, 2022, 250, 118930.	4.2	5
28	Notes on â€œA cautionary note on the use of SIFT in pathological connectomesâ€• Magnetic Resonance in Medicine, 2020, 84, 2303-2307.	3.0	3