Resource Summary Report

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Numerical Fibre Generator

RRID:SCR_002457
Type: Tool

Proper Citation

Numerical Fibre Generator (RRID:SCR_002457)

Resource Information

URL: http://www.brain.org.au/software/

Proper Citation: Numerical Fibre Generator (RRID:SCR_002457)

Description: A collection of tools that generate numerical fiber structures with the complexity of human white matter and simulate Diffusion-Weighted MR images that would arise from them. Its primary use is to enable the testing of tracking algorithms

Abbreviations: NFG

Synonyms: Numerical Fibre Generator (NFG)

Resource Type: software resource

Keywords: analyze, c, console (text based), macos, microsoft, magnetic resonance, posix/unix-like, tractography, windows, dw-mri

Funding:

Availability: GNU General Public License

Resource Name: Numerical Fibre Generator

Resource ID: SCR_002457

Alternate IDs: nlx_155832

Alternate URLs: http://www.nitrc.org/projects/nfg

Record Creation Time: 20220129T080213+0000

Record Last Update: 20250410T064912+0000

Ratings and Alerts

No rating or validation information has been found for Numerical Fibre Generator.

No alerts have been found for Numerical Fibre Generator.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 58 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Krijnen EA, et al. (2024) Intrinsic and extrinsic contributors to subregional thalamic volume loss in multiple sclerosis. Annals of clinical and translational neurology, 11(6), 1405.

Chen Q, et al. (2023) Structural connectome alterations in anxious dogs: a DTI-based study. Scientific reports, 13(1), 9946.

Takeshige-Amano H, et al. (2022) White matter microstructures in Parkinson's disease with and without impulse control behaviors. Annals of clinical and translational neurology, 9(3), 253.

Walker MR, et al. (2021) Peripheral Nerve Focused Ultrasound Lesioning-Visualization and Assessment Using Diffusion Weighted Imaging. Frontiers in neurology, 12, 673060.

Yasaka K, et al. (2021) Parkinson's disease: deep learning with a parameter-weighted structural connectome matrix for diagnosis and neural circuit disorder investigation. Neuroradiology, 63(9), 1451.

Soni N, et al. (2020) Combined Diffusion Tensor Imaging and Quantitative Susceptibility Mapping Discern Discrete Facets of White Matter Pathology Post-injury in the Rodent Brain. Frontiers in neurology, 11, 153.

Cafiero R, et al. (2019) The Concurrence of Cortical Surface Area Expansion and White Matter Myelination in Human Brain Development. Cerebral cortex (New York, N.Y. : 1991), 29(2), 827.

Fortanier E, et al. (2019) Structural Connectivity Alterations in Amyotrophic Lateral Sclerosis: A Graph Theory Based Imaging Study. Frontiers in neuroscience, 13, 1044.

Kamagata K, et al. (2019) MR g-ratio-weighted connectome analysis in patients with multiple sclerosis. Scientific reports, 9(1), 13522.

Kamagata K, et al. (2018) Connectome analysis with diffusion MRI in idiopathic Parkinson's disease: Evaluation using multi-shell, multi-tissue, constrained spherical deconvolution. NeuroImage. Clinical, 17, 518.

Woodworth DC, et al. (2018) Changes in brain white matter structure are associated with urine proteins in urologic chronic pelvic pain syndrome (UCPPS): A MAPP Network study. PloS one, 13(12), e0206807.

Perlbarg V, et al. (2018) Alterations of the nigrostriatal pathway in a 6-OHDA rat model of Parkinson's disease evaluated with multimodal MRI. PloS one, 13(9), e0202597.

Tsai PH, et al. (2017) Early white matter injuries in patients with acute carbon monoxide intoxication: A tract-specific diffusion kurtosis imaging study and STROBE compliant article. Medicine, 96(5), e5982.

Wirsich J, et al. (2017) Complementary contributions of concurrent EEG and fMRI connectivity for predicting structural connectivity. NeuroImage, 161, 251.

Liu C, et al. (2016) Altered structural connectome in adolescent socially isolated mice. NeuroImage, 139, 259.

Wright DK, et al. (2016) Behavioral, blood, and magnetic resonance imaging biomarkers of experimental mild traumatic brain injury. Scientific reports, 6, 28713.

Nowell M, et al. (2016) Meyer's loop asymmetry and language lateralisation in epilepsy. Journal of neurology, neurosurgery, and psychiatry, 87(8), 836.

Moseley RL, et al. (2016) Reduced Volume of the Arcuate Fasciculus in Adults with High-Functioning Autism Spectrum Conditions. Frontiers in human neuroscience, 10, 214.

Zhong J, et al. (2016) An In vivo Multi-Modal Structural Template for Neonatal Piglets Using High Angular Resolution and Population-Based Whole-Brain Tractography. Frontiers in neuroanatomy, 10, 92.

Caspers S, et al. (2015) Target sites for transcallosal fibers in human visual cortex - A combined diffusion and polarized light imaging study. Cortex; a journal devoted to the study of the nervous system and behavior, 72, 40.