DPARSF
RRID:SCR_002372
Type: Tool

Proper Citation

DPARSF (RRID:SCR_002372)

Resource Information

URL: http://rfmri.org/DPARSF

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Description: A MATLAB toolbox for pipeline data analysis of resting-state fMRI that is based on Statistical Parametric Mapping (SPM) and a plug-in software within DPABI. After the user arranges the Digital Imaging and Communications in Medicine (DICOM) files and click a few buttons to set parameters, DPARSF will then give all the preprocessed (slice timing, realign, normalize, smooth) data and results for functional connectivity, regional homogeneity, amplitude of low-frequency fluctuation (ALFF), fractional ALFF, degree centrality, voxel-mirrored homotopic connectivity (VMHC) results. DPARSF can also create a report for excluding subjects with excessive head motion and generate a set of pictures for easily checking the effect of normalization. In addition, users can also use DPARSF to extract time courses from regions of interest. DPARSF basic edition is very easy to use while DPARSF advanced edition (alias: DPARSFA) is much more flexible and powerful. DPARSFA can parallel the computation for each subject, and can be used to reorient images interactively or define regions of interest interactively. Users can skip or combine the processing steps in DPARSF advanced edition freely.

Abbreviations: DPARSF

Synonyms: Data Processing Assistant for Resting-State fMRI

Resource Type: software resource, data processing software, software toolkit, software application

Defining Citation: PMID:20577591
Keywords: magnetic resonance, fmri, resting-state fmri, matlab, analysis, brain

Availability: GNU General Public License

Resource Name: DPARSF

Resource ID: SCR_002372

Alternate IDs: nlx_155735

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

Record Creation Time: 20220129T080213+0000

Record Last Update: 20240822T053142+0000

Ratings and Alerts

No rating or validation information has been found for DPARSF.

No alerts have been found for DPARSF.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 472 mentions in open access literature.

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

Huang J, et al. (2024) Unraveling the link: white matter damage, gray matter atrophy and memory impairment in patients with subcortical ischemic vascular disease. Frontiers in neuroscience, 18, 1355207.


Dai P, et al. (2024) Classification of MDD using a Transformer classifier with large-scale multisite resting-state fMRI data. Human brain mapping, 45(1), e26542.

Hashimoto T, et al. (2024) Enhanced memory and hippocampal connectivity in humans 2 days after brief resistance exercise. Brain and behavior, 14(2), e3436.


Tan Q, et al. (2023) Relationship between carotid intima-media thickness (cIMT) and dual-system imbalance in tobacco dependence: An rs-fMRI research. Brain and behavior, 13(7), e3059.

Zhu W, et al. (2023) Genes associated with spontaneous brain activity changes in clinically
different patients with major depressive disorder: A transcription-neuroimaging association study. CNS neuroscience & therapeutics, 29(12), 3913.


Sun Q, et al. (2023) Altered spontaneous brain activities in maintenance hemodialysis patients with cognitive impairment and the construction of cognitive function prediction models. Renal failure, 45(1), 2217276.