

Resource Summary Report

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DPARSF

RRID:SCR_002372

Type: Tool

Proper Citation

DPARSF (RRID:SCR_002372)

Resource Information

URL: <http://rfmri.org/DPARSF>

Proper Citation: DPARSF (RRID:SCR_002372)

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

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: 20260821T193642+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 696 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Baracchini G, et al. (2026) The biological role of local and global fMRI BOLD signal variability in multiscale human brain organization. *Nature communications*, 17(1).

Huang D, et al. (2026) Dynamic frontoparietal flexibility and cognitive dysfunction in schizophrenia: disentangling the roles of symptom burden and childhood trauma. *Psychological medicine*, 56, e93.

Hua J, et al. (2026) Structural-functional connectivity coupling in motor-brain networks following acute ischemic stroke. *Journal of neuroengineering and rehabilitation*, 23(1).

Li J, et al. (2026) Elevation in network dynamics amplifies amyloid-dependent tau pathology. *Alzheimer's & dementia : the journal of the Alzheimer's Association*, 22(4), e71354.

Zhang X, et al. (2026) How blindness shapes personality: a neuro-ecological account. *Frontiers in neuroscience*, 20, 1759728.

Liu C, et al. (2026) Increased Glymphatic System Activity and Hypothalamic Connectivity in Patients With Premenstrual Dysphoric Disorder. *Depression and anxiety*, 2026, 3641238.

Hou C, et al. (2026) State-dependent modulation of brain co-activation patterns induced by individually targeted VLPFC stimulation during viewing emotional film clips. *Frontiers in human neuroscience*, 20, 1824753.

- Zhang S, et al. (2026) Distinct Trajectories of Amygdala Connectivity Patterns Characterize Remission vs. Non-Remission in Patients With Major Depressive Disorder. *Depression and anxiety*, 2026, 4701907.
- Wang YL, et al. (2026) The relationship between abnormalities in amygdala functional connectivity and emotion regulation difficulties in problematic smartphone users. *BMC psychology*, 14(1), 240.
- Hong W, et al. (2026) Motor-related reorganization in left inferior frontal gyrus after subcortical stroke: neurochemical basis and response to targeted neuromodulation. *BMC medicine*, 24(1).
- Ding Y, et al. (2026) Novel associations of VPS13C with phenotype and conversion of idiopathic REM sleep behavior disorder. *NPJ Parkinson's disease*, 12(1).
- Lin Y, et al. (2026) Predicting apathy using connectome-based models derived from static and dynamic brain connectivity. *Social cognitive and affective neuroscience*, 21(1).
- Yang YL, et al. (2026) Changes in regional homogeneity of the social brain in individuals with autism spectrum disorder after social skills training. *Frontiers in psychiatry*, 17, 1674370.
- Liu J, et al. (2026) Aberrant local and global neural activation patterns in pediatric Prader-Willi syndrome. *Frontiers in neuroscience*, 20, 1696114.
- Song M, et al. (2026) Characteristics of striatal changes in diabetic retinopathy and type 2 diabetes: a resting-state functional magnetic resonance imaging study. *Frontiers in human neuroscience*, 20, 1765793.
- Zhan Y, et al. (2026) Beyond the cerebral cortex: cerebellar language-related subregions contributions to fluency in post-stroke aphasia. *NeuroImage. Clinical*, 50, 103999.
- Zheng K, et al. (2026) Beyond depression symptoms: the default mode network as a predictor of antidepressant response. *Npj mental health research*, 5(1), 2.
- Qin Y, et al. (2026) Analysis of correlation between structural changes and functional response in post-stroke motor recovery after cM1 LF-rTMS: an exploratory randomized trial. *Scientific reports*, 16(1), 4460.
- Guo H, et al. (2026) Large-scale neural network compensation associated with camouflaging in trait autism and its potential mental health costs. *Molecular autism*, 17(1).
- Zheng K, et al. (2026) Functional connectivity-based classification and subtyping of major depression for precision mental health: An ensemble graph neural network approach. *PLOS digital health*, 5(3), e0001261.