Resource Summary Report

Generated by ASWG on Aug 3, 2026

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 forpipeline 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 toolkit, software resource, software application, data processing software

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: 20260804T043140+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 564 mentions in open access literature.

Listed below are recent publications. The full list is available at ASWG .

He Y, et al. (2025) Diverse Frontoparietal Connectivity Supports Semantic Prediction and Integration in Sentence Comprehension. The Journal of neuroscience : the official journal of the Society for Neuroscience, 45(5).

Wei M, et al. (2025) Differences in Glucose Metabolism Between Single Memory Domain and Multidomain Subjective Cognitive Decline: A Longitudinal Study From SILCODE. CNS neuroscience & therapeutics, 31(5), e70264.

Han X, et al. (2025) Leveraging unified multi-view hypergraph learning for neurodevelopmental disorders diagnosis. Frontiers in medicine, 12, 1654199.

Liu Q, et al. (2025) Multilevel brain functional connectivity and task-based representations explaining heterogeneity in major depressive disorder. Translational psychiatry, 15(1), 199.

Wang Y, et al. (2025) Role of baseline resting-state functional connectivity of the nucleus accumbens subregions in antidepressant treatment in major depressive disorder. NeuroImage. Clinical, 48, 103842.

Zimmermann J, et al. (2025) Total cerebral blood volume changes drive macroscopic cerebrospinal fluid flux in humans. PLoS biology, 23(4), e3003138.

Mehmood A, et al. (2025) From brain to behavior: Psychological resilience mediates associations between whole-brain resting-state connectivity and NSSI. Dialogues in

clinical neuroscience, 27(1), 265.

Hu K, et al. (2025) GWM-HFN, a Gray-White Matter heterogeneous fusion network for functional connectomes. Communications biology, 8(1), 1825.

Feng Y, et al. (2025) Diffusion trajectory of atypical morphological development in autism spectrum disorder. Communications biology, 8(1), 1476.

Yin T, et al. (2025) Functional Brain Connectivity Patterns of Headache-Mental Disorder Comorbidity in Patients With Migraine. CNS neuroscience & therapeutics, 31(12), e70710.

Wang X, et al. (2025) Biomarkers of Suicidal Ideation in Depression: Insights From VMHC Analysis and Machine Learning. Neuropsychiatric disease and treatment, 21, 855.

Trojsi F, et al. (2025) Brain neurovascular coupling in amyotrophic lateral sclerosis: Correlations with disease progression and cognitive impairment. European journal of neurology, 32(1), e16540.

Li Y, et al. (2025) White matter dysfunction in Alzheimer's disease is associated with disease-related transcriptomic signatures. Communications biology, 8(1), 820.

Tapia-Medina MG, et al. (2025) Hidden Rhythms of a Developing Brain: Multimetric rs-fMRI Insights Into Typical Youth Maturation. Human brain mapping, 46(13), e70320.

Lin X, et al. (2025) Impaired neural activity and functional connectivity in the hippocampus of adolescents with non-suicidal self-injury addiction. BMC psychiatry, 25(1), 895.

Wu S, et al. (2025) The Role of the Complement C3-Hippocampus Pathway in Relation With Mood Symptoms in Offspring of Parents With Bipolar Disorder. Bipolar disorders, 27(6), 461.

Yan X, et al. (2025) Neural correlates of foreign speech imitation: The effects of age and music. Imaging neuroscience (Cambridge, Mass.), 3.

Zeng W, et al. (2025) Hippocampal functional imaging-derived radiomics features for diagnosing cognitively impaired patients with Parkinson's disease. BMC neuroscience, 26(1), 27.

Alpheis S, et al. (2025) Increased functional connectivity of motor regions and dorsolateral prefrontal cortex in musicians with focal hand dystonia. Journal of neurology, 272(4), 281.

Wang W, et al. (2025) Concurrent brain structural and functional alterations related to cognition in patients with cerebral small vessel disease. Neuroradiology, 67(4), 833.