Resource Summary Report

Generated by SPARC SAWG on Aug 9, 2026

Subject Order-Independent Group ICA

RRID:SCR_009514
Type: Tool

Proper Citation

Subject Order-Independent Group ICA (RRID:SCR_009514)

Resource Information

URL: http://www.nitrc.org/projects/cogicat/

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Description: While the traditional temporally concatenated Group ICA (TC-GICA) adopting three steps of PCA reduction, it could result in inconsistent and variable components when different subject orders were used, both for the group- and individual-level results. Such instability can further cause instable and thus unreliable statistical results. Subject Order-Independent Group ICA (SOI-GICA) aims to fix this problem by producing stable and reliable GICA results. For details please see the paper Subject Order-Independent Group ICA (SOI-GICA) for Functional MRI Data Analysis (Zhang et al., 2010, NeuroImage)(http://dx.doi.org/10.1016/j.neuroimage.2010.03.039). MICA is the toolbox inplemented SOI-GICA for convenience of usage.

Abbreviations: SOI-GICA

Resource Type: software resource

Defining Citation: PMID:20338245

Keywords: analyze, gnome, independent component analysis, kde, linux, matlab, microsoft, magnetic resonance, nifti, posix/unix-like, software, statistical operation, win32 (ms windows), windows

Availability: GNU General Public License

Resource Name: Subject Order-Independent Group ICA

Resource ID: SCR_009514

Alternate IDs: nlx_155676

Record Creation Time: 20220129T080253+0000

Record Last Update: 20260808T185921+0000

Ratings and Alerts

No rating or validation information has been found for Subject Order-Independent Group ICA.

No alerts have been found for Subject Order-Independent Group ICA.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 18 mentions in open access literature.

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

Liu N, et al. (2026) DMN function changes on resting state fMRI in perimenopausal women. Open medicine (Warsaw, Poland), 21(1), 20261455.

Zhang D, et al. (2021) Right Frontoinsular Cortex: A Potential Imaging Biomarker to Evaluate T2DM-Induced Cognitive Impairment. Frontiers in aging neuroscience, 13, 674288.

Tian T, et al. (2021) Effects of childhood trauma experience and BDNF Val66Met polymorphism on brain plasticity relate to emotion regulation. Behavioural brain research, 398, 112949.

Lv H, et al. (2021) Sound therapy can modulate the functional connectivity of the auditory network. Progress in neuro-psychopharmacology & biological psychiatry, 110, 110323.

Cao J, et al. (2020) Altered resting-state functional network connectivity is associated with suicide attempt in young depressed patients. Psychiatry research, 285, 112713.

Li CL, et al. (2019) The development of brain functional connectivity networks revealed by resting-state functional magnetic resonance imaging. Neural regeneration research, 14(8), 1419.

Qian A, et al. (2018) Effects of the 2-Repeat Allele of the DRD4 Gene on Neural Networks Associated With the Prefrontal Cortex in Children With ADHD. Frontiers in human neuroscience, 12, 279.

Lv H, et al. (2018) Lateralization effects on functional connectivity of the auditory network in patients with unilateral pulsatile tinnitus as detected by functional MRI. Progress in neuro-psychopharmacology & biological psychiatry, 81, 228.

Karunanayaka PR, et al. (2016) Default mode network differences between rigidity- and tremor-predominant Parkinson's disease. Cortex; a journal devoted to the study of the nervous system and behavior, 81, 239.

Chen H, et al. (2016) Increased frontal functional networks in adult survivors of childhood brain tumors. NeuroImage. Clinical, 11, 339.

Zhang S, et al. (2016) Association between abnormal default mode network activity and suicidality in depressed adolescents. BMC psychiatry, 16(1), 337.

Zhang H, et al. (2015) Engineering E. coli-E. coli cocultures for production of muconic acid from glycerol. Microbial cell factories, 14, 134.

Xia W, et al. (2015) Disrupted resting-state attentional networks in T2DM patients. Scientific reports, 5, 11148.

Li X, et al. (2015) Exploring Dynamic Brain Functional Networks Using Continuous "State-Related" Functional MRI. BioMed research international, 2015, 824710.

Liang P, et al. (2015) Disruption of cortical integration during midazolam-induced light sedation. Human brain mapping, 36(11), 4247.

Wang DZ, et al. (2013) Comparative proteomic analysis reveals proteins putatively involved in toxin biosynthesis in the marine dinoflagellate Alexandrium catenella. Marine drugs, 11(1), 213.

Song J, et al. (2013) Aberrant functional organization within and between resting-state networks in AD. PloS one, 8(5), e63727.

Sang L, et al. (2012) Resting-state functional connectivity of the vermal and hemispheric subregions of the cerebellum with both the cerebral cortical networks and subcortical structures. NeuroImage, 61(4), 1213.