

Resource Summary Report

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[gCCA](#)

RRID:SCR_014113

Type: Tool

Proper Citation

gCCA (RRID:SCR_014113)

Resource Information

URL: <http://www.nitrc.org/projects/gcca>

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Description: A multivariate method for fMRI data analysis based on generalized canonical correlation analysis (gCCA) to maximize SPM reproducibility without adopting any model for the hemodynamic response or other temporal brain responses. For multiple subjects, gCCA explores a broad range of temporal responses in fMRI time-series space while maximizing the mean of correlation coefficients between the pair-wise spatial maps of the subjects.

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

Keywords: data analysis software, multivariate method, fmri data analysis

Funding: University of Tehran 8101079/01/01;
CIHR MOP 84483;
Heart and Stroke Foundation of Ontario

Availability: Available for download

Resource Name: gCCA

Resource ID: SCR_014113

License: GNU General Public License

Record Creation Time: 20220129T080319+0000

Record Last Update: 20260905T132743+0000

Ratings and Alerts

No rating or validation information has been found for gCCA.

No alerts have been found for gCCA.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

Alberti F, et al. (2025) Understanding the Link Between Functional Profiles and Intelligence Through Dimensionality Reduction and Graph Analysis. Human brain mapping, 46(3), e70149.

Zhang Z, et al. (2025) Integrating single-cell RNA-Seq and machine learning to dissect a novel Palmitoylation-related prognostic signature of glioblastoma. BMC neurology, 26(1), 20.

Martini RM, et al. (2024) Characterization of S-glycosylated glycocins containing three disulfides. Journal of industrial microbiology & biotechnology, 52.

Reuben RC, et al. (2022) Novel mono- and multi-strain probiotics supplementation modulates growth, intestinal microflora composition and haemato-biochemical parameters in broiler chickens. Veterinary medicine and science, 8(2), 668.

Razzak MA, et al. (2020) Overexpression and Purification of Gracilariopsis chorda Carbonic Anhydrase (GcCA??3) in Nicotiana benthamiana, and Its Immobilization and Use in CO₂ Hydration Reactions. Frontiers in plant science, 11, 563721.

Bodein A, et al. (2019) A Generic Multivariate Framework for the Integration of Microbiome Longitudinal Studies With Other Data Types. Frontiers in genetics, 10, 963.

Liu Y, et al. (2018) Speech Recognition via fNIRS Based Brain Signals. Frontiers in neuroscience, 12, 695.

Pereda E, et al. (2018) The blessing of Dimensionality: Feature Selection outperforms functional connectivity-based feature transformation to classify ADHD subjects from EEG patterns of phase synchronisation. PloS one, 13(8), e0201660.

Liu Z, et al. (2017) Effective Connectivity Analysis of the Brain Network in Drivers during Actual Driving Using Near-Infrared Spectroscopy. Frontiers in behavioral neuroscience, 11, 211.

Si X, et al. (2017) Cooperative cortical network for categorical processing of Chinese lexical tone. Proceedings of the National Academy of Sciences of the United States of America, 114(46), 12303.

Joensson M, et al. (2015) Making sense: Dopamine activates conscious self-monitoring through medial prefrontal cortex. *Human brain mapping*, 36(5), 1866.

Wei J, et al. (2015) Functional connectivity changes during a working memory task in rat via NMF analysis. *Frontiers in behavioral neuroscience*, 9, 2.

Pan L, et al. (2015) An in vitro method to manipulate the direction and functional strength between neural populations. *Frontiers in neural circuits*, 9, 32.

Fuhrmann D, et al. (2014) Synchrony and motor mimicking in chimpanzee observational learning. *Scientific reports*, 4, 5283.

Choi JW, et al. (2013) Fronto-temporal interactions in the theta-band during auditory deviant processing. *Neuroscience letters*, 548, 120.

Hampshire A, et al. (2013) Hypoconnectivity and hyperfrontality in retired American football players. *Scientific reports*, 3, 2972.

Nicolaou N, et al. (2012) EEG-based automatic classification of 'awake' versus 'anesthetized' state in general anesthesia using Granger causality. *PloS one*, 7(3), e33869.