## **Resource Summary Report**

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# **MVGC Multivariate Granger Causality Matlab Toolbox**

RRID:SCR\_015755 Type: Tool

#### **Proper Citation**

MVGC Multivariate Granger Causality Matlab Toolbox (RRID:SCR\_015755)

#### **Resource Information**

URL: http://users.sussex.ac.uk/~lionelb/MVGC/

**Proper Citation:** MVGC Multivariate Granger Causality Matlab Toolbox (RRID:SCR\_015755)

**Description:** Matlab software toolkit designed to facilitate Granger-causal analysis with multivariate and possibly multi-trial time series data. Annotated demonstration scripts are available which may be used as templates to assist in this the toolbox's functions.

Abbreviations: MVGC

Synonyms: MVGC Matlab® Toolbox, MVGC Matlab Toolbox

Resource Type: software resource, software toolkit

Defining Citation: PMID:24200508

**Keywords:** granger causality, statistical inference, statistical analysis, time-series, multivariate, multi-trial, Matlab

Funding: EPSRC G/700543/1

Availability: GNU General Public License

**Resource Name:** MVGC Multivariate Granger Causality Matlab Toolbox

Resource ID: SCR\_015755

License: GNU General Public License

License URLs: http://users.sussex.ac.uk/~lionelb/MVGC/license.txt

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### **Ratings and Alerts**

No rating or validation information has been found for MVGC Multivariate Granger Causality Matlab Toolbox.

No alerts have been found for MVGC Multivariate Granger Causality Matlab Toolbox.

#### Data and Source Information

Source: SciCrunch Registry

#### **Usage and Citation Metrics**

We found 10 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Qiao X, et al. (2025) Exploring the neural mechanisms underlying cooperation and competition behavior: Insights from stereo-electroencephalography hyperscanning. iScience, 28(2), 111506.

Zhang Y, et al. (2024) Long-term mesoscale imaging of 3D intercellular dynamics across a mammalian organ. Cell, 187(21), 6104.

Steiner F, et al. (2022) Affective speech modulates a cortico-limbic network in real time. Progress in neurobiology, 214, 102278.

Varga NL, et al. (2021) Delta-modulated cortical alpha oscillations support new knowledge generation through memory integration. NeuroImage, 244, 118600.

Jung DH, et al. (2020) Therapeutic effects of anodal transcranial direct current stimulation in a rat model of ADHD. eLife, 9.

Lopes-Aguiar C, et al. (2020) Long-term potentiation prevents ketamine-induced aberrant neurophysiological dynamics in the hippocampus-prefrontal cortex pathway in vivo. Scientific reports, 10(1), 7167.

García-García R, et al. (2020) Hyperammonemia alters the mismatch negativity in the auditory evoked potential by altering functional connectivity and neurotransmission. Journal of neurochemistry, 154(1), 56.

Billeke P, et al. (2020) Human Anterior Insula Encodes Performance Feedback and Relays Prediction Error to the Medial Prefrontal Cortex. Cerebral cortex (New York, N.Y. : 1991), 30(7), 4011.

Thyme SB, et al. (2019) Phenotypic Landscape of Schizophrenia-Associated Genes Defines Candidates and Their Shared Functions. Cell, 177(2), 478.

Taub AH, et al. (2018) Oscillations Synchronize Amygdala-to-Prefrontal Primate Circuits during Aversive Learning. Neuron, 97(2), 291.