# Resource Summary Report

Generated by dkNET on May 17, 2025

## neuRosim

RRID:SCR_002154
Type: Tool

### Proper Citation

neuRosim (RRID:SCR_002154)

### Resource Information

**URL:** http://cran.r-project.org/web/packages/neuRosim/

**Proper Citation:** neuRosim (RRID:SCR_002154)

**Description:** Software package that allows users to generate fMRI time series or 4D data. Some high-level functions are created for fast data generation with only a few arguments and a diversity of functions to define activation and noise. For more advanced users it is possible to use the low-level functions and manipulate the arguments.

**Abbreviations:** neuRosim

**Synonyms:** neuRosim: Functions to Generate fMRI Data Including Activated Data Noise Data and Resting State Data

**Resource Type:** software resource

**Keywords:** r, fmri, time series, 4d

**Funding:**

**Availability:** GNU General Public License, v2, v3

**Resource Name:** neuRosim

**Resource ID:** SCR_002154

**Alternate IDs:** SciRes_000194

**Record Creation Time:** 20220129T080211+0000

**Record Last Update:** 20250420T014052+0000

## Ratings and Alerts

No rating or validation information has been found for neuRosim.

No alerts have been found for neuRosim.

## 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 dkNET.


Sung J, et al. (2024) Unveiling the Role of Side Chain for Improving Nonvolatile Characteristics of Conjugated Polymers-Based Artificial Synapse. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(16), e2400304.

Song HW, et al. (2024) A pattern recognition artificial olfactory system based on human olfactory receptors and organic synaptic devices. Science advances, 10(21), eadl2882.

Jeong BH, et al. (2024) RGB Color-Discriminable Photonic Synapse for Neuromorphic Vision System. Nano-micro letters, 17(1), 78.

Liu X, et al. (2023) An Optoelectronic Synapse Based on Two-Dimensional Violet Phosphorus Heterostructure. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 10(22), e2301851.

Sahu DP, et al. (2023) Linear and symmetric synaptic weight update characteristics by controlling filament geometry in oxide/suboxide HfOx bilayer memristive device for neuromorphic computing. Scientific reports, 13(1), 9592.

Yook CG, et al. (2023) Design Strategies of 40 nm Split-Gate NOR Flash Memory Device for Low-Power Compute-in-Memory Applications. Micromachines, 14(9).

Zhao Y, et al. (2022) Group linear non-Gaussian component analysis with applications to neuroimaging. Computational statistics & data analysis, 171.

Hossen I, et al. (2022) Data-driven RRAM device models using Kriging interpolation. Scientific reports, 12(1), 5963.

Kazemi A, et al. (2022) Achieving software-equivalent accuracy for hyperdimensional

computing with ferroelectric-based in-memory computing. Scientific reports, 12(1), 19201.

Choi Y, et al. (2020) Vertical organic synapse expandable to 3D crossbar array. Nature communications, 11(1), 4595.

Degryse J, et al. (2020) A likelihood ratio approach for functional localization in fMRI. Journal of neuroscience methods, 330, 108417.

Olszowy W, et al. (2019) Accurate autocorrelation modeling substantially improves fMRI reliability. Nature communications, 10(1), 1220.

Saggar M, et al. (2018) Towards a new approach to reveal dynamical organization of the brain using topological data analysis. Nature communications, 9(1), 1399.

Nicolini C, et al. (2017) Community detection in weighted brain connectivity networks beyond the resolution limit. NeuroImage, 146, 28.

Degryse J, et al. (2017) Introducing Alternative-Based Thresholding for Defining Functional Regions of Interest in fMRI. Frontiers in neuroscience, 11, 222.

Bordier C, et al. (2017) Graph Analysis and Modularity of Brain Functional Connectivity Networks: Searching for the Optimal Threshold. Frontiers in neuroscience, 11, 441.

Schildknecht K, et al. (2016) More Specific Signal Detection in Functional Magnetic Resonance Imaging by False Discovery Rate Control for Hierarchically Structured Systems of Hypotheses. PloS one, 11(2), e0149016.