Resource Summary Report

Generated by kravitz2 on Sep 5, 2026

Chronux

RRID:SCR_005547
Type: Tool

Proper Citation

Chronux (RRID:SCR_005547)

Resource Information

URL: http://chronux.org

Proper Citation: Chronux (RRID:SCR_005547)

Description: Open-source software package for the analysis of neural data. Chronux routines may be employed in the analysis of both point process and continuous data, ranging from preprocessing, exploratory and confirmatory analysis. The current release is implemented as a MATLAB library. Chronux offers several routines for computing spectra and coherences for both point and continuous processes. In addition, it also offers several general purpose routines that were found useful such as a routine for extracting specified segments from data, or binning spike time data with bins of a specified size. Since the data can be continuous valued, point process times, or point processes that are binned, methods that apply to all these data types are given in routines whose names end with ""c"" for continuous, ""pb"" for binned point processes, and ""pt"" for point process times. Thus, mtspectrumc computes the spectrum of continuous data, mtspectrumpb computes a spectrum for binned point processes, and mtspectrumpt compute spectra for data consisting of point process times. Hybrid routines are also available and similarly named - for instance coherencycpb computes the coherency between continuous and binned point process data.

Abbreviations: Chronux

Synonyms: Chronux Analysis Software

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

Keywords: fmri, brain mapping, brain, matlab

Funding: NIMH

Availability: Open-source. Please cite.

Resource Name: Chronux

Resource ID: SCR_005547

Alternate IDs: nif-0000-00082

Record Creation Time: 20220129T080231+0000

Record Last Update: 20260903T235744+0000

Ratings and Alerts

No rating or validation information has been found for Chronux.

No alerts have been found for Chronux.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 571 mentions in open access literature.

Listed below are recent publications. The full list is available at kravitz2 .

Mour??o FAG, et al. (2026) Hippocampal-Prelimbic Coupling During Context-Dependent Extinction Retrieval in Rats. Hippocampus, 36(1), e70058.

Schoeberl T, et al. (2026) Perceptual rhythms by phase-aligned perceptual performance peaks across trials. Communications psychology, 4(1).

Wu L, et al. (2026) Non-Invasive Temporal Interference Electrical Stimulation Modulates Neurotransmitter Release and Improves Aberrant Neural Oscillations in Alzheimer's Disease. CNS neuroscience & therapeutics, 32(5), e70848.

Zhang Y, et al. (2026) Age-Dependent Entropic Features During Propofol Anesthesia in Developing Brain. Anesthesia and analgesia, 142(4), 769.

Agarwal G, et al. (2026) Deciphering hippocampal place codes in weak theta rhythms. Nature communications, 17(1).

Wang R, et al. (2026) Distinct origins of human low and high alpha rhythms revealed by simultaneous EEG-SEEG. Communications biology, 9(1).

Wang X, et al. (2026) Cortico-Striatal-Midbrain Circuit Dysregulation Underlying MK-801 Induced Impulsivity and the Ameliorative Effects of SEP. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(3), e02079.

You JC, et al. (2026) Long-term forgetting, sleep, and tau in autosomal-dominant Alzheimer's disease. Alzheimer's & dementia : the journal of the Alzheimer's Association,

22(2), e71235.

Galvan A, et al. (2026) Temporal Variability in the Spiking Activity of Neurons in the External Globus Pallidus in Healthy and Parkinsonian Monkeys. The Journal of neuroscience : the official journal of the Society for Neuroscience, 46(13).

Liu H, et al. (2026) Deciphering Neural Mechanisms Underlying Marmoset Dynamic Natural Behaviors Using a Miniaturized Wireless Large-Scale Coverage Neural Recorder. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(2), e07110.

Biswas A, et al. (2026) Simultaneous enhancement of stimulus-induced and stimulus-free gamma in open-eye meditators. Imaging neuroscience (Cambridge, Mass.), 4.

Ipata AE, et al. (2026) Correction of saccadic decisions during active visual search in the monkey. Journal of vision, 26(3), 10.

Wu JY, et al. (2026) Anesthetic State-Dependent Bidirectional Control of States of Consciousness via Heterogeneous Medial Septum to Ventral Tegmental Area Circuits under Sevoflurane in Mice. The Journal of neuroscience : the official journal of the Society for Neuroscience, 46(15).

Espinosa N, et al. (2026) Infraslow modulation of theta synchrony in the hippocampus circuit during REM sleep. Scientific reports, 16(1).

Berisha DE, et al. (2026) Longitudinal Alterations in Sleep EEG Biomarkers of Memory Consolidation in Middle-Aged and Older Adults. bioRxiv : the preprint server for biology.

Rotunno C, et al. (2026) Pragmatic representations of self- and others' action in the monkey putamen. Nature communications, 17(1), 608.

Djebari S, et al. (2026) Posterior parietal cortex oscillatory activity reflects persistent spatial memory impairments induced by early hippocampal amyloidosis in male mice. The Journal of physiology, 604(7), 3053.

Tabuena DR, et al. (2026) Neuronal APOE4-induced early hippocampal network hyperexcitability in Alzheimer's disease pathogenesis. Nature aging, 6(4), 886.

Hawthorn P, et al. (2026) Retrosplenial perineuronal nets support hippocampal-cortical coupling and spatial memory recall. Cell reports, 45(6), 117440.

Boyce AKJ, et al. (2025) Contralesional hippocampal spreading depolarization promotes functional recovery after stroke. Nature communications, 16(1), 3428.