Resource Summary Report

Generated by NIF on Sep 3, 2026

neuroelectro

RRID:SCR_006274
Type: Tool

Proper Citation

neuroelectro (RRID:SCR_006274)

Resource Information

URL: http://neuroelectro.org

Proper Citation: neuroelectro (RRID:SCR_006274)

Description: A database of elecrophysiological properties text-mined from the biomedical literature as a function of neuron type. Specifically, NeuroElectro seeks to extract information about the electrophysiological properties (e.g. resting membrane potentials and membrane time constants) of diverse neuron types from the existing literature and place it into a centralized database. There are 252 neurons currently available, with the naming convention established in NeuroLex.

Abbreviations: NeuroElectro

Synonyms: Neuro Electro, NeuroElectro: organizing information on cellular neurophysiology

Resource Type: data or information resource, database

Keywords: electrophysiology, text mining, cellular neurophysiology, neuron, neuron electrophysiology, bio.tools

Availability: Open unspecified license

Resource Name: neuroelectro

Resource ID: SCR_006274

Alternate IDs: nlx_151885, BioTools:neuroelectro, biotools:neuroelectro, r3d100011798

Alternate URLs: https://bio.tools/neuroelectro, https://bio.tools/neuroelectro, https://bio.tools/neuroelectro, https://doi.org/10.17616/R3BP7F

Record Creation Time: 20220129T080235+0000

Record Last Update: 20260904T000211+0000

Ratings and Alerts

No rating or validation information has been found for neuroelectro.

No alerts have been found for neuroelectro.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Shao B, et al. (2025) The role of MICOS in modulating mitochondrial dynamics and structural changes in vulnerable regions of Alzheimer's Disease. bioRxiv : the preprint server for biology.

Triplett MA, et al. (2025) Rapid learning of neural circuitry from holographic ensemble stimulation enabled by model-based compressed sensing. Nature neuroscience, 28(10), 2154.

Doherty DW, et al. (2025) Enhanced beta power emerges from simulated parkinsonian primary motor cortex. NPJ Parkinson's disease, 11(1), 230.

Doherty DW, et al. (2025) Self-organized and self-sustained ensemble activity patterns in simulation of mouse primary motor cortex. bioRxiv : the preprint server for biology.

Overwiening J, et al. (2024) A multi-scale study of thalamic state-dependent responsiveness. PLoS computational biology, 20(12), e1012262.

West TO, et al. (2023) When do bursts matter in the primary motor cortex? Investigating changes in the intermittencies of beta rhythms associated with movement states. Progress in neurobiology, 221, 102397.

Dura-Bernal S, et al. (2023) Multiscale model of primary motor cortex circuits predicts in vivo cell-type-specific, behavioral state-dependent dynamics. Cell reports, 42(6), 112574.

Gillespie TH, et al. (2022) The Neuron Phenotype Ontology: A FAIR Approach to Proposing and Classifying Neuronal Types. Neuroinformatics, 20(3), 793.

Perez-Nieves N, et al. (2021) Neural heterogeneity promotes robust learning. Nature communications, 12(1), 5791.

Burton SD, et al. (2021) Cell and circuit origins of fast network oscillations in the mammalian main olfactory bulb. eLife, 10.

Sáray S, et al. (2021) HippoUnit: A software tool for the automated testing and systematic comparison of detailed models of hippocampal neurons based on electrophysiological data. PLoS computational biology, 17(1), e1008114.

Jang J, et al. (2021) Studying Synaptically Evoked Cortical Responses ex vivo With Combination of a Single Neuron Recording (Whole-Cell) and Population Voltage Imaging (Genetically Encoded Voltage Indicator). Frontiers in neuroscience, 15, 773883.

Ray S, et al. (2020) Feedback inhibition and its control in an insect olfactory circuit. eLife, 9.

Casali S, et al. (2019) Reconstruction and Simulation of a Scaffold Model of the Cerebellar Network. Frontiers in neuroinformatics, 13, 37.

Bomkamp C, et al. (2019) Transcriptomic correlates of electrophysiological and morphological diversity within and across excitatory and inhibitory neuron classes. PLoS computational biology, 15(6), e1007113.

Ferrat LA, et al. (2018) Classifying dynamic transitions in high dimensional neural mass models: A random forest approach. PLoS computational biology, 14(3), e1006009.

van Wijk BCM, et al. (2018) Generic dynamic causal modelling: An illustrative application to Parkinson's disease. NeuroImage, 181, 818.

Tebaykin D, et al. (2018) Modeling sources of interlaboratory variability in electrophysiological properties of mammalian neurons. Journal of neurophysiology, 119(4), 1329.

Tripathy SJ, et al. (2017) Transcriptomic correlates of neuron electrophysiological diversity. PLoS computational biology, 13(10), e1005814.

Bezaire MJ, et al. (2016) Interneuronal mechanisms of hippocampal theta oscillations in a full-scale model of the rodent CA1 circuit. eLife, 5.