

Resource Summary Report

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Wave Surfer

RRID:SCR_021529

Type: Tool

Proper Citation

Wave Surfer (RRID:SCR_021529)

Resource Information

URL: <https://wavesurfer.janelia.org/>

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Description: Open source software application for neurophysiology data acquisition and analysis. Program is based in MatLab, and evolved from earlier open source software package called Ephus.

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

Keywords: neurophysiology data acquisition, neurophysiology data analysis, neurophysiology data, MATLAB, OpenBehavior

Availability: Free, Available for download, Freely Available

Resource Name: Wave Surfer

Resource ID: SCR_021529

Alternate URLs: <https://edspace.american.edu/openbehavior/project/wave-surfer/>

License: Howard Hughes Medical Institute

Record Creation Time: 20220129T080356+0000

Record Last Update: 20260821T194210+0000

Ratings and Alerts

No rating or validation information has been found for Wave Surfer.

No alerts have been found for Wave Surfer.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 53 mentions in open access literature.

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

Tasaka GI, et al. (2026) Submedius thalamic inputs shape the presynaptic architecture of layer 5 orbitofrontal cortex in mice. *iScience*, 29(2), 114828.

Miller-Hansen AJ, et al. (2026) Thalamus orchestrates local acetylcholine-dependent dopamine release in the learning striatum. *bioRxiv : the preprint server for biology*.

Zhang TR, et al. (2026) Unconstrained Plasticity Disrupts Memory Consolidation in a Mouse Model of Rett Syndrome. *bioRxiv : the preprint server for biology*.

Wyche IS, et al. (2026) Whisker-based pre-neuronal and peripheral encoding of surface stickiness. *bioRxiv : the preprint server for biology*.

Croke H, et al. (2026) Drosophila DNp03 descending neurons serve as a hub within a flight saccade network. *Current biology : CB*, 36(1), 133.

Bender PTR, et al. (2026) Context-dependent effects of SOM neurons to enhance the responses of corticocollicular neurons to repetitive sounds. *iScience*, 29(5), 115536.

Yu Z, et al. (2025) Activity-dependent synapse elimination requires caspase-3 activation. *eLife*, 13.

Kim DW, et al. (2025) Decoding gene networks controlling hypothalamic and prethalamic neuron development. *Cell reports*, 44(6), 115858.

Kim DW, et al. (2025) Decoding Gene Networks Controlling Hypothalamic and Prethalamic Neuron Development. *bioRxiv : the preprint server for biology*.

Moya MV, et al. (2025) A scalable, all-optical method for mapping synaptic connectivity with cell-type specificity. *bioRxiv : the preprint server for biology*.

Tyssowski KM, et al. (2025) Evolutionary expansion of the corticospinal system is linked to dexterity in *Peromyscus* mice. *bioRxiv : the preprint server for biology*.

Mohar B, et al. (2025) DELTA: a method for brain-wide measurement of synaptic protein turnover reveals localized plasticity during learning. *Nature neuroscience*, 28(5), 1089.

Vaidya SP, et al. (2025) Formation of an expanding memory representation in the hippocampus. *Nature neuroscience*, 28(7), 1510.

Piña Novo D, et al. (2025) Cortical dynamics in hand/forelimb S1 and M1 evoked by brief photostimulation of the mouse's hand. *eLife*, 14.

Dombrovski M, et al. (2025) Gradients of Cell Recognition Molecules Wire Visuomotor Transformation. *bioRxiv : the preprint server for biology*.

Tasaka GI, et al. (2025) Orbitofrontal cortex influences dopamine dynamics associated with alloparental behavioral acquisition in female mice. *Science advances*, 11(27), eadr4620.

Kühn NK, et al. (2025) Dendritic architecture enables de novo computation of salient motion in the superior colliculus. *Current biology : CB*, 35(16), 3799.

Noorman M, et al. (2024) Maintaining and updating accurate internal representations of continuous variables with a handful of neurons. *Nature neuroscience*, 27(11), 2207.

Park SB, et al. (2024) Repeated exposure to multiple concurrent stressors alters visual processing in the adult posterior parietal cortex. *Neurobiology of stress*, 31, 100660.

Yaguchi K, et al. (2024) Flexible adjustment of oxytocin neuron activity in mouse dams revealed by microendoscopy. *Science advances*, 10(50), eadt1555.