## **Resource Summary Report**

Generated by <u>NIF</u> on Apr 20, 2025

# **Stimfit**

RRID:SCR\_016050 Type: Tool

**Proper Citation** 

Stimfit (RRID:SCR\_016050)

#### **Resource Information**

URL: https://github.com/neurodroid/stimfit

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**Description:** Software for viewing and analyzing electrophysiological data. It features an embedded Python shell that allows you to extend the program functionality by using numerical libraries such as NumPy and SciPy.

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

Defining Citation: PMID:24600389

Keywords: electrophysiology, python, numpy, scipy, numerical, library, stimulus, analysis

**Funding:** European Research Council ; Wellcome Trust ; Gatsby Charitable Foundation

Availability: Free, Available for download

Resource Name: Stimfit

Resource ID: SCR\_016050

License: GNU GPL 2.0

Record Creation Time: 20220129T080328+0000

Record Last Update: 20250420T014755+0000

### **Ratings and Alerts**

No rating or validation information has been found for Stimfit.

No alerts have been found for Stimfit.

#### Data and Source Information

Source: SciCrunch Registry

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

We found 34 mentions in open access literature.

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

Chen C, et al. (2024) Neural circuit basis of placebo pain relief. Nature, 632(8027), 1092.

Barbieri M, et al. (2024) A deep learning approach for fast muscle water T2 mapping with subject specific fat T2 calibration from multi-spin-echo acquisitions. Scientific reports, 14(1), 8253.

Breyer M, et al. (2024) In vitro characterization of cells derived from a patient with the GLA variant c.376A>G (p.S126G) highlights a non-pathogenic role in Fabry disease. Molecular genetics and metabolism reports, 38, 101029.

Watson TC, et al. (2024) Somatostatin Interneurons Recruit Pre- and Postsynaptic GABAB Receptors in the Adult Mouse Dentate Gyrus. eNeuro, 11(8).

Kim O, et al. (2024) Presynaptic cAMP-PKA-mediated potentiation induces reconfiguration of synaptic vesicle pools and channel-vesicle coupling at hippocampal mossy fiber boutons. PLoS biology, 22(11), e3002879.

Carbonell-Roig J, et al. (2024) Dysregulated acetylcholine-mediated dopamine neurotransmission in the eIF4E Tg mouse model of autism spectrum disorders. Cell reports, 43(12), 114997.

Bonnycastle K, et al. (2023) Reversal of cell, circuit and seizure phenotypes in a mouse model of DNM1 epileptic encephalopathy. Nature communications, 14(1), 5285.

Traunmüller L, et al. (2023) A cell-type-specific alternative splicing regulator shapes synapse properties in a trans-synaptic manner. Cell reports, 42(3), 112173.

Grigoryan G, et al. (2023) Synaptic plasticity at the dentate gyrus granule cell to somatostatin-expressing interneuron synapses supports object location memory. Proceedings of the National Academy of Sciences of the United States of America, 120(51), e2312752120.

Degro CE, et al. (2022) Interneuron diversity in the rat dentate gyrus: An unbiased in vitro classification. Hippocampus, 32(4), 310.

Ingram RJ, et al. (2022) Increased GABA transmission to GnRH neurons after intrahippocampal kainic acid injection in mice is sex-specific and associated with estrous cycle disruption. Neurobiology of disease, 172, 105822.

Elmasri M, et al. (2022) Common synaptic phenotypes arising from diverse mutations in the human NMDA receptor subunit GluN2A. Communications biology, 5(1), 174.

Hauser D, et al. (2022) Targeted proteoform mapping uncovers specific Neurexin-3 variants required for dendritic inhibition. Neuron, 110(13), 2094.

Fleming W, et al. (2022) Cholinergic interneurons mediate cocaine extinction in male mice through plasticity across medium spiny neuron subtypes. Cell reports, 39(9), 110874.

Asiminas A, et al. (2022) Experience-dependent changes in hippocampal spatial activity and hippocampal circuit function are disrupted in a rat model of Fragile X Syndrome. Molecular autism, 13(1), 49.

Fumagalli L, et al. (2021) C9orf72-derived arginine-containing dipeptide repeats associate with axonal transport machinery and impede microtubule-based motility. Science advances, 7(15).

Compans B, et al. (2021) NMDAR-dependent long-term depression is associated with increased short term plasticity through autophagy mediated loss of PSD-95. Nature communications, 12(1), 2849.

Lodge M, et al. (2021) Sparsification of AP firing in adult-born hippocampal granule cells via voltage-dependent ?5-GABAA receptors. Cell reports, 37(1), 109768.

Chang CW, et al. (2021) Tau reduction affects excitatory and inhibitory neurons differently, reduces excitation/inhibition ratios, and counteracts network hypersynchrony. Cell reports, 37(3), 109855.

Booker SA, et al. (2020) Input-Output Relationship of CA1 Pyramidal Neurons Reveals Intact Homeostatic Mechanisms in a Mouse Model of Fragile X Syndrome. Cell reports, 32(6), 107988.