Resource Summary Report

Generated by Kravitz on Sep 10, 2026

HHsim: Graphical Hodgkin-Huxley Simulator

RRID:SCR_008087
Type: Tool

Proper Citation

HHsim: Graphical Hodgkin-Huxley Simulator (RRID:SCR_008087)

Resource Information

URL: http://www.cs.cmu.edu/~dst/HHsim/

Proper Citation: HHsim: Graphical Hodgkin-Huxley Simulator (RRID:SCR_008087)

Description: A graphical simulation of a section of excitable neuronal membrane using the Hodgkin-Huxley equations. It provides full access to the Hodgkin-Huxley parameters, membrane parameters, stimulus parameters, and ion concentrations. In contrast with NEURON or GENESIS, which are vastly more sophisticated research tools, HHsim is simple educational software designed specifically for graduate or undergraduate neurophysiology courses. The user interface can be mastered in a couple of minutes and provides many ways for the student to experiment. Also included are sample exercises that use the simulator. HHsim is available as a Windows, Mac, or Unix executable file that does not require a Matlab license. Source code is included. It is also available in source-only form if you have Matlab R2007a or later. The latest release of HHsim is version 3.1, released February 16, 2008.

Synonyms: HHsim

Resource Type: simulation software, software application, software resource, training resource

Keywords: hodgkin-huxley, ion concentrations, membrane, neuronal membrane, neurophysiology, parameters, stimulus, educational resource

Availability: Free software distributed under the GNU General Public License.

Resource Name: HHsim: Graphical Hodgkin-Huxley Simulator

Resource ID: SCR_008087

Alternate IDs: nif-0000-10760

Record Creation Time: 20220129T080245+0000

Record Last Update: 20260905T132617+0000

Ratings and Alerts

No rating or validation information has been found for HHsim: Graphical Hodgkin-Huxley Simulator.

No alerts have been found for HHsim: Graphical Hodgkin-Huxley Simulator.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Rajbanshi B, et al. (2022) Panama: An Open-Source Educational App for Ion Channel Biophysics Simulation. Frontiers in neuroinformatics, 16, 813940.