

Resource Summary Report

Generated by [RRID](#) on Aug 9, 2026

PCSIM

RRID:SCR_014770

Type: Tool

Proper Citation

PCSIM (RRID:SCR_014770)

Resource Information

URL: <http://www.lsm.tugraz.at/pcsim/>

Proper Citation: PCSIM (RRID:SCR_014770)

Description: Software tool for simulating heterogeneous networks composed of different model neurons and synapses. It is intended to simulate networks containing up to millions of neurons and on the order of billions of synapses by distributing the network over different nodes of a computing cluster by using MPI.

Synonyms: Parallel neural Circuit SIMulator, Parallel Neural Circuit Simulator (PCSIM), Parallel Neural Circuit Simulator

Resource Type: software resource, software application, simulation software

Defining Citation: [DOI:10.3389/neuro.11.011.2009](https://doi.org/10.3389/neuro.11.011.2009)

Keywords: simulation software, simulator, heterogenous network, model, neuron, synapse

Availability: Available for download

Resource Name: PCSIM

Resource ID: SCR_014770

License: GNU General Public License

Record Creation Time: 20220129T080322+0000

Record Last Update: 20260808T190017+0000

Ratings and Alerts

No rating or validation information has been found for PCSIM.

No alerts have been found for PCSIM.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Parekh R, et al. (2013) Neuronal morphology goes digital: a research hub for cellular and system neuroscience. *Neuron*, 77(6), 1017.

Holt AB, et al. (2013) Computational modeling of epilepsy for an experimental neurologist. *Experimental neurology*, 244, 75.

Bill J, et al. (2010) Compensating Inhomogeneities of Neuromorphic VLSI Devices Via Short-Term Synaptic Plasticity. *Frontiers in computational neuroscience*, 4, 129.

Legenstein R, et al. (2008) A learning theory for reward-modulated spike-timing-dependent plasticity with application to biofeedback. *PLoS computational biology*, 4(10), e1000180.