Resource Summary Report

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NeuronJ: An ImageJ Plugin for Neurite Tracing and Quantification

RRID:SCR_002074 Type: Tool

Proper Citation

NeuronJ: An ImageJ Plugin for Neurite Tracing and Quantification (RRID:SCR_002074)

Resource Information

URL: http://www.imagescience.org/meijering/software/neuronj/

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Description: NeuronJ is an ImageJ plugin to facilitate the tracing and quantification of elongated structures in two-dimensional (2D) images (8-bit gray-scale and indexed color), in particular neurites in fluorescence microscopy images. Sponsors: The development of NeuronJ started while the primary developer (Dr. Erik Meijering, PhD) was with the Biomedical Imaging Group (collaborating with people from the Laboratory of Cellular Neurobiology) of the Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland, and was finished while Dr. Meijering was with the Biomedical Imaging Group Rotterdam in the Netherlands.

Synonyms: NeuronJ

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

Keywords: fluorescence, application, imaging processing software, java, measurement, microscope, microscopy, neurite, neuroinformatics, neuron, plugin, statistic, two-dimentional, image

Funding:

Resource Name: NeuronJ: An ImageJ Plugin for Neurite Tracing and Quantification

Resource ID: SCR_002074

Alternate IDs: nif-0000-00108

Alternate URLs: http://www.nitrc.org/projects/neuronj

Record Creation Time: 20220129T080211+0000

Record Last Update: 20250430T055135+0000

Ratings and Alerts

No rating or validation information has been found for NeuronJ: An ImageJ Plugin for Neurite Tracing and Quantification.

No alerts have been found for NeuronJ: An ImageJ Plugin for Neurite Tracing and Quantification.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 82 mentions in open access literature.

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

Hertzog N, et al. (2025) Hypoxia-induced conversion of sensory Schwann cells into repair cells is regulated by HDAC8. Nature communications, 16(1), 515.

Tecuatl C, et al. (2024) Accelerating the continuous community sharing of digital neuromorphology data. FASEB bioAdvances, 6(7), 207.

Kochan SMV, et al. (2024) Enhanced mitochondrial fusion during a critical period of synaptic plasticity in adult-born neurons. Neuron, 112(12), 1997.

Grüter T, et al. (2023) Propionate exerts neuroprotective and neuroregenerative effects in the peripheral nervous system. Proceedings of the National Academy of Sciences of the United States of America, 120(4), e2216941120.

Abbouda A, et al. (2023) Identifying Meibomian Gland Dysfunction Biomarkers in a Cohort of Patients Affected by DM Type II. Vision (Basel, Switzerland), 7(2).

Ravindran P, et al. (2023) An isoform-specific function of Cdc42 in regulating mammalian Exo70 during axon formation. Life science alliance, 6(3).

Xie C, et al. (2023) Characteristics of the ocular surface in neurotrophic keratitis induced by trigeminal nerve injury following neurosurgery. International ophthalmology, 43(4), 1229.

Miguel-Quesada C, et al. (2023) Astrocytes adjust the dynamic range of cortical network activity to control modality-specific sensory information processing. Cell reports, 42(8), 112950.

Kechid M, et al. (2022) Arabidopsis Growth-Promotion and Root Architecture Responses to the Beneficial Rhizobacterium Phyllobacterium brassicacearum Strain STM196 Are Independent of the Nitrate Assimilatory Pathway. Plants (Basel, Switzerland), 11(1).

Gatford NJF, et al. (2022) Neuroligin-3 and neuroligin-4X form nanoscopic clusters and regulate growth cone organization and size. Human molecular genetics, 31(5), 674.

Bekircan-Kurt CE, et al. (2022) The functional and structural evaluation of small fibers in asymptomatic carriers of TTR p.Val50Met (Val30Met) mutation. Neuromuscular disorders : NMD, 32(1), 50.

Qiao H, et al. (2022) Role of the DUB enzyme USP7 in dendritic arborization, neuronal migration, and autistic-like behaviors in mice. iScience, 25(7), 104595.

Boonekamp FJ, et al. (2022) Full humanization of the glycolytic pathway in Saccharomyces cerevisiae. Cell reports, 39(13), 111010.

Cañadas P, et al. (2021) Ocular Surface Pathology in Patients Suffering from Mercury Intoxication. Diagnostics (Basel, Switzerland), 11(8).

Wu F, et al. (2021) Genetic and pharmacological inhibition of two-pore domain potassium channel TREK-1 alters depression-related behaviors and neuronal plasticity in the hippocampus in mice. CNS neuroscience & therapeutics, 27(2), 220.

Dikmetas O, et al. (2021) The relationship between corneal subbasal nerve density and corneal sensitivity in patients with Fuchs endothelial corneal dystrophy. Indian journal of ophthalmology, 69(7), 1730.

Wang L, et al. (2021) Characteristics of Toxic Keratopathy, an In Vivo Confocal Microscopy Study. Translational vision science & technology, 10(11), 11.

Anees A, et al. (2021) Knock-Down of Heterogeneous Nuclear Ribonucleoprotein A1 Results in Neurite Damage, Altered Stress Granule Biology, and Cellular Toxicity in Differentiated Neuronal Cells. eNeuro, 8(6).

Tyrtyshnaia A, et al. (2021) Synaptamide Improves Cognitive Functions and Neuronal Plasticity in Neuropathic Pain. International journal of molecular sciences, 22(23).

Moein HR, et al. (2021) Herpes simplex virus-1 KOS-63 strain is virulent and causes titer-

dependent corneal nerve damage and keratitis. Scientific reports, 11(1), 4267.