

Resource Summary Report

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NeuroExplorer

RRID:SCR_001818

Type: Tool

Proper Citation

NeuroExplorer (RRID:SCR_001818)

Resource Information

URL: <http://www.neuroexplorer.com/>

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Description: Data analysis software for neurophysiology with a multitude of features, including: * Import of native data files created by many popular data acquisition systems * All standard histogram and raster analyses * Shift predictors in crosscorrelograms and color markers in perievent rasters * Joint PSTH, burst analysis and many more analyses of timestamped data * Spectral analysis of spike and continuous data * 3D data view and animation * Fully customizable WYSIWYG graphics * Custom analysis and batch mode processing with internal scripting language * Direct data link to Matlab and Excel * Statistical tests via direct link to R-project

Abbreviations: NeuroExplorer

Synonyms: NeuroExplorer: Neurophysiological Data Analysis Package

Resource Type: commercial organization, data analysis software, data processing software, software application, software resource

Keywords: neurophysiology, spike train, spike, statistical test, analysis, windows, mac, 3d data, animation, burst analysis, channel, cross correlogram, electrophysiology, matlab, raster analysis, scripting

Availability: Free, Available for download, Freely available

Resource Name: NeuroExplorer

Resource ID: SCR_001818

Alternate IDs: nlx_158483, nif-0000-10382

Alternate URLs: <http://www.plexon.com/products/neuroexplorer>

License: Commercial license

Record Creation Time: 20220129T080209+0000

Record Last Update: 20260905T132953+0000

Ratings and Alerts

No rating or validation information has been found for NeuroExplorer.

No alerts have been found for NeuroExplorer.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1297 mentions in open access literature.

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

Feng X, et al. (2026) Slow-wave sleep engages brainstem circuitry to prevent stress-induced anxiety. *Neuron*.

Li R, et al. (2026) Hyperexcitable VTA-mPFC dopaminergic circuit disrupts sleep spindle and mediates sleep fragmentation after chronic social defeat stress. *Neuron*.

Gong Y, et al. (2026) Human retinal organoids functionally bridge a transected optic nerve in a rat model. *Cell stem cell*, 33(7), 1161.

Kodali M, et al. (2025) Residual microglia following short-term PLX5622 treatment in 5xFAD mice exhibit diminished NLRP3 inflammasome and mTOR signaling, and enhanced autophagy. *Aging cell*, 24(2), e14398.

Min F, et al. (2025) Impact of LITAF on Mitophagy and Neuronal Damage in Epilepsy via MCL-1 Ubiquitination. *CNS neuroscience & therapeutics*, 31(1), e70191.

Zhou S, et al. (2025) A midbrain circuit mechanism for noise-induced negative valence coding. *Nature communications*, 16(1), 4610.

Barzó P, et al. (2025) Electrophysiology and morphology of human cortical supragranular pyramidal cells in a wide age range. *eLife*, 13.

Yang D, et al. (2025) Linking altered neuronal and synaptic properties to nicotinic receptor Alpha5 subunit gene dysfunction: a translational investigation in rat mPFC and human cortical layer 6. *Translational psychiatry*, 15(1), 12.

Yu H, et al. (2025) Temporal Association Cortex Gates Sound-Evoked Arousal from NREM Sleep. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(12),

e2414271.

Minetti A, et al. (2025) Parkinsonism disrupts cortical function by dysregulating oscillatory, network and synaptic activity of parvalbumin positive interneurons. *NPJ Parkinson's disease*, 11(1), 194.

Ni H, et al. (2025) Impairment of theta oscillations in the hippocampal CA1 region may mediate age-dependent movement alternations in the 5xFAD mouse model of Alzheimer's disease. *Scientific reports*, 15(1), 10975.

Tuna T, et al. (2025) Associative coding of conditioned fear in the thalamic nucleus reuniens in rodents and humans. *bioRxiv : the preprint server for biology*.

Chrysostomou V, et al. (2025) The Effect of Advancing Age and Intraocular Pressure Injury on Retinal Ganglion Cell Function and Synaptic Connectivity. *Aging cell*, 24(6), e70005.

Köhler I, et al. (2025) Chemogenetic activation of Gq signaling modulates dendritic development of cortical neurons in a time- and layer-specific manner. *Frontiers in cellular neuroscience*, 19, 1524470.

Procyk CA, et al. (2025) Human cone photoreceptor transplantation stimulates remodeling and restores function in AIPL1 model of end-stage Leber congenital amaurosis. *Stem cell reports*, 20(4), 102470.

Shao WW, et al. (2025) Repetitive training enhances the pattern recognition capability of cultured neural networks. *PLoS computational biology*, 21(4), e1013043.

Xu XY, et al. (2025) A ventral pallidum-locus coeruleus-lateral hypothalamus pathway modulates brain arousal in freely behaving and isoflurane-anesthetized male mice. *Nature communications*, 16(1), 4560.

Fofie CK, et al. (2025) Profiling human iPSC-derived sensory neurons for analgesic drug screening using a multi-electrode array. *Cell reports methods*, 5(5), 101051.

Ma C, et al. (2025) The Effect of Acupuncture on the Morphology and Neural Coding Damage of the Central Amygdala in Mice with Chronic Inflammatory Pain and Depression. *Journal of inflammation research*, 18, 3255.

Tan B, et al. (2025) A glutamatergic innervation from medial area of secondary visual cortex to lateral posterior thalamic nucleus facilitates nociceptive and neuropathic pain. *Communications biology*, 8(1), 416.