Resource Summary Report

Generated by SPARC SAWG on Aug 9, 2026

CellExplorer

RRID:SCR_022358
Type: Tool

Proper Citation

CellExplorer (RRID:SCR_022358)

Resource Information

URL: https://cellexplorer.org/

Proper Citation: CellExplorer (RRID:SCR_022358)

Description: Open source framework for single cell characterization and visualization.Graphical user interface, standardized processing module and data structure for exploring and classifying single cells acquired using extracellular electrodes.

Resource Type: data analysis software, 1d time-series analysis software, data processing software, software application, time-series analysis software, software resource

Defining Citation: DOI:10.1016/j.neuron.2021.09.002

Keywords: OpenBehavior, single cell characterization and visualization, classifying single cells, extracellular electrodes

Availability: Free, Available for download, Freely available

Resource Name: CellExplorer

Resource ID: SCR_022358

Alternate URLs: https://edspace.american.edu/openbehavior/project/cellexplorer/, https://github.com/petersenpeter/CellExplorer

License: BSD 3-Clause "New" or "Revised" License

Record Creation Time: 20220602T050140+0000

Record Last Update: 20260810T040753+0000

Ratings and Alerts

No rating or validation information has been found for CellExplorer.

No alerts have been found for CellExplorer.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 21 mentions in open access literature.

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

Lee EK, et al. (2026) A multimodal approach for visualizing and identifying electrophysiological cell types in vivo. Nature communications, 17(1).

Tong J, et al. (2026) Long-Term Memory Updating Parallels Altered Awake and Sleep Hippocampal Replays. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(3), e16480.

Li J, et al. (2026) Flexible goal learning involves coordinated population activity in dCA1 and medial orbitofrontal cortex. PLoS biology, 24(5), e3003824.

Dong YP, et al. (2026) GluN2A-NMDA receptor inhibition disinhibits the prefrontal cortex, reduces forced swim immobility, and impairs sensorimotor gating. Acta pharmacologica Sinica, 47(1), 53.

Zheng Y, et al. (2026) Parvalbumin-positive neurons in the medial septum participate in the formation of hippocampal-dependent spatial memory. Nature communications, 17(1).

Zhu H, et al. (2025) Temporal coding carries more stable cortical visual representations than firing rate over time. Nature communications, 16(1), 7162.

Ferrero JJ, et al. (2025) Closed-loop electrical stimulation prevents focal epilepsy progression and long-term memory impairment. Nature neuroscience, 28(8), 1753.

Woo J, et al. (2025) Dynamic changes in chloride homeostasis coordinate midbrain inhibitory network activity during reward learning. Nature communications, 16(1), 10903.

Abad-Perez P, et al. (2025) Evidence of spatial periodic firing in the subiculum of mice. Frontiers in neural circuits, 19, 1648844.

Zhu H, et al. (2025) Temporal coding carries more stable cortical visual representations than firing rate over time. bioRxiv : the preprint server for biology.

Prince SM, et al. (2025) New information triggers prospective codes to adapt for flexible navigation. Nature communications, 16(1), 4822.

Jeong N, et al. (2025) Goal-specific hippocampal inhibition gates learning. Nature, 642(8069), 1007.

Gao Y, et al. (2025) A dataset of expression profile of certain microRNAs in Caenorhabditis elegans. Scientific data, 12(1), 1143.

Marin-Llobet A, et al. (2025) An AI Agent for cell-type specific brain computer interfaces. bioRxiv : the preprint server for biology.

Purple RJ, et al. (2025) Short- and long-term modulation of rat prefrontal cortical activity following single doses of psilocybin. Molecular psychiatry, 30(12), 5889.

Valbuena S, et al. (2025) Early time window for memory ensemble allocation specifically depending on activity in Syt2+ early-born parvalbumin interneurons. Cell reports, 44(8), 116144.

Wang Y, et al. (2024) Ventral Hippocampal CA1 Pyramidal Neurons Encode Nociceptive Information. Neuroscience bulletin, 40(2), 201.

Hou R, et al. (2024) Coordinated Interactions between the Hippocampus and Retrosplenial Cortex in Spatial Memory. Research (Washington, D.C.), 7, 0521.

Bhandari K, et al. (2024) Selective vulnerability of the ventral hippocampus-prelimbic cortex axis parvalbumin interneuron network underlies learning deficits of fragile X mice. Cell reports, 43(5), 114124.

Prince SM, et al. (2023) New information triggers prospective codes to adapt for flexible navigation. bioRxiv : the preprint server for biology.