

Resource Summary Report

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[Ilastik](#)

RRID:SCR_015246

Type: Tool

Proper Citation

Ilastik (RRID:SCR_015246)

Resource Information

URL: <http://ilastik.org/>

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Description: Tool for interactive image classification, segmentation and analysis, built as a modular software framework, which currently has workflows for automated (supervised) pixel- and object-level classification, automated and semi-automated object tracking, semi-automated segmentation and object counting without detection.

Synonyms: ilastik, Interactive Learning And Segmentation Toolkit (Ilastik), Interactive Learning And Segmentation Toolkit

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

Defining Citation: [DOI:10.1109/ISBI.2011.5872394](https://doi.org/10.1109/ISBI.2011.5872394), [DOI:10.1038/s41592-019-0582-9](https://doi.org/10.1038/s41592-019-0582-9)

Keywords: machine learning, supervised learning, beginner software, image classification, image segmentation, image analysis

Funding: Heidelberg Collaboratory for Image Processing ;
HHMI Janelia Farm Research Campus ;
CellNetworks Excellence Cluster

Availability: Free, Freely available, Available for download

Resource Name: Ilastik

Resource ID: SCR_015246

License: GNU General Public License

Record Creation Time: 20220129T080324+0000

Record Last Update: 20260912T195826+0000

Ratings and Alerts

No rating or validation information has been found for Ilastik.

No alerts have been found for Ilastik.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 755 mentions in open access literature.

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

Olsen ML, et al. (2026) Breeding Chlorophyll-Deficient Mutants of *Chlorella vulgaris* to Enhance Consumer Acceptance. *Bioengineering (Basel, Switzerland)*, 13(3).

Ramsby BD, et al. (2026) Coral larval aquaculture: Species-specific survival and microbial dynamics in flow-through systems. *PloS one*, 21(2), e0340422.

Valle-Tenney R, et al. (2026) Pharmacological HIF activation protects against diet-induced obesity, glucose intolerance, and skeletal dysfunction by exerting dual beneficial effects on energy metabolism and bone. *Bone research*, 14(1), 21.

Halder B, et al. (2026) ER tethering and active transport govern condensate diffusion during hyperosmotic stress. *Genome biology*, 27(1).

Van Eyken R, et al. (2026) Engineering non-exponential proliferation in *Escherichia coli* using functionalized protein aggregates. *Nature communications*, 17(1).

Cohen JG, et al. (2026) Imaging biomarkers of post-COVID dyspnea: insights from machine learning CT patterns and parametric response mapping. *Respiratory research*, 27(1).

Barragan-Leal C, et al. (2026) Assessment of particulate embolic agent distribution comparing two delivery techniques in a porcine model. *CVIR endovascular*, 9(1).

Xie W, et al. (2026) Caspase-3/7 deficiency results in enhanced intestinal inflammation and reduced tumorigenesis. *Science advances*, 12(12), eadz5906.

Zhu J, et al. (2026) Spatial immune atlas of breast cancer brain metastasis reveals CD163+ macrophage reprogramming associated with immune escape. *Journal for immunotherapy of cancer*, 14(6).

King BC, et al. (2026) Beta-cell-specific C3 deficiency exacerbates metabolic dysregulation and insulin resistance in obesity. *Molecular metabolism*, 103, 102302.

Aubry G, et al. (2026) A Facile Method Based on Faster R-CNN for Cell Detection in Microfluidic Devices. *Analytical chemistry*, 98(5), 3557.

Mundhe G, et al. (2026) Spatial patterning of contractility by a self-organized mechanogen activity gradient underlies *Drosophila* gastrulation. *Nature communications*, 17(1), 1721.

Ayyadhury S, et al. (2026) Glioblastoma stem cells show transcriptionally correlated spatial organization. *Communications biology*, 9(1), 208.

Cresens C, et al. (2026) Deciphering Stiffness-Driven Changes in Colorectal Cancer by Proteomics. *Molecular & cellular proteomics : MCP*, 25(3), 101515.

Sandhi S, et al. (2026) Sexually Dimorphic Response to Dietary Restriction-induced Longevity and Muscle Rejuvenation in *Nothobranchius furzeri*. *bioRxiv : the preprint server for biology*.

Nasr MM, et al. (2026) PRDM16 Regulates Prostate Cancer Cell Dormancy and Prevents Bone Metastatic Outgrowth. *Cancer research*, 86(3), 604.

Dang A, et al. (2026) Graded opsin co-expression along the butterfly retina fine tunes the spectral sensitivity of a colour-opponent cell across the visual field. *Journal of comparative physiology. A, Neuroethology, sensory, neural, and behavioral physiology*, 212(2), 245.

Saei H, et al. (2026) Splice modulation of COL4A5 reinstates collagen IV assembly in an organoid model of Alport syndrome. *JCI insight*, 11(3).

O'Brien SL, et al. (2026) Intracrine FFA4 signaling controls lipolysis at lipid droplets. *Nature chemical biology*, 22(1), 109.

Yamamoto S, et al. (2026) Dorsoventral-mediated Shh induction is required for axolotl limb regeneration. *eLife*, 14.