

# Resource Summary Report

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## MATLAB

RRID:SCR\_001622

Type: Tool

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### Proper Citation

MATLAB (RRID:SCR\_001622)

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### Resource Information

**URL:** <http://www.mathworks.com/products/matlab/>

**Proper Citation:** MATLAB (RRID:SCR\_001622)

**Description:** Multi paradigm numerical computing environment and fourth generation programming language developed by MathWorks. Allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces, and interfacing with programs written in other languages, including C, C++, Java, Fortran and Python. Used to explore and visualize ideas and collaborate across disciplines including signal and image processing, communications, control systems, and computational finance.

**Abbreviations:** MATLAB

**Synonyms:** matlab, MATLAB -The Language of Technical Computing, MATLAB, matrix laboratory

**Resource Type:** software application, programming language, software resource, image processing software, data processing software

**Defining Citation:** [PMID:30609523](https://pubmed.ncbi.nlm.nih.gov/30609523/), [PMID:21934110](https://pubmed.ncbi.nlm.nih.gov/21934110/)

**Keywords:** computing, analyze, visualization, algorithm, plot, vector, matrix

**Funding:**

**Availability:** Available for purchase

**Resource Name:** MATLAB

**Resource ID:** SCR\_001622

**Alternate IDs:** nlx\_153890

**Record Creation Time:** 20220129T080208+0000

**Record Last Update:** 20250330T060136+0000

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## Ratings and Alerts

No rating or validation information has been found for MATLAB.

No alerts have been found for MATLAB.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 53271 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [FDI Lab - SciCrunch.org](#).

Honkamäki L, et al. (2025) Hyaluronic Acid-Based 3D Bioprinted Hydrogel Structure for Directed Axonal Guidance and Modeling Innervation In Vitro. *Advanced healthcare materials*, 14(1), e2402504.

Zhang G, et al. (2025) Simultaneous assessment of cerebral glucose and oxygen metabolism and perfusion in rats using interleaved deuterium (2H) and oxygen-17 (17O) MRS. *NMR in biomedicine*, 38(1), e5284.

Cafri N, et al. (2025) Imaging blood-brain barrier dysfunction in drug-resistant epilepsy: A multi-center feasibility study. *Epilepsia*, 66(1), 195.

Dolatshahi M, et al. (2025) Relationships between abdominal adipose tissue and neuroinflammation with diffusion basis spectrum imaging in midlife obesity. *Obesity (Silver Spring, Md.)*, 33(1), 41.

Hullebus M, et al. (2025) Infant preference for specific phonetic cue relations in the contrast between voiced and voiceless stops. *Infancy : the official journal of the International Society on Infant Studies*, 30(1), e12630.

Maas EJ, et al. (2025) In vivo Multi-perspective 3D+t Ultrasound Imaging and Motion Estimation of Abdominal Aortic Aneurysms. *Ultrasonic imaging*, 47(1), 3.

Aslaksen AK, et al. (2025) Children had smaller brain volumes and cortical surface areas after prenatal opioid maintenance therapy exposure. *Acta paediatrica (Oslo, Norway : 1992)*, 114(2), 398.

Swinnen BEKS, et al. (2025) Tremor Is Highly Responsive to Levodopa in Advanced Parkinson's Disease. *Movement disorders clinical practice*, 12(1), 76.

Flowerday E, et al. (2025) Necrotizing Enterocolitis Detection in Premature Infants Using Broadband Optical Spectroscopy. *Journal of biophotonics*, 18(1), e202400273.

Scarano A, et al. (2025) The phobic brain: Morphometric features correctly classify individuals with small animal phobia. *Psychophysiology*, 62(1), e14716.

Szafran DA, et al. (2025) Two-color fluorescence-guided surgery for head and neck cancer resections. *Journal of biomedical optics*, 30(Suppl 1), S13707.

Maji S, et al. (2025) Ultrasound-generated bubbles enhance osteogenic differentiation of mesenchymal stromal cells in composite collagen hydrogels. *Bioactive materials*, 43, 82.

Ippersiel P, et al. (2025) Pain catastrophizing and trunk co-contraction during lifting in people with and without chronic low back pain: A cross sectional study. *European journal of pain (London, England)*, 29(2), e4717.

Jokivuolle M, et al. (2025) Assessing tumor microstructure with time-dependent diffusion imaging: Considerations and feasibility on clinical MRI and MRI-Linac. *Medical physics*, 52(1), 346.

Scuoppo R, et al. (2025) Generation of a virtual cohort of TAVI patients for in silico trials: a statistical shape and machine learning analysis. *Medical & biological engineering & computing*, 63(2), 467.

Muneer G, et al. (2025) Mapping Nanoscale-To-Single-Cell Phosphoproteomic Landscape by Chip-DIA. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(1), e2402421.

Sterzik H, et al. (2025) Impact of flow-dependent imposed work of breathing for optimising neonatal CPAP with a T-piece device. *Acta paediatrica (Oslo, Norway : 1992)*, 114(1), 208.

EI-Daher F, et al. (2025) Microglia are essential for tissue contraction in wound closure after brain injury in zebrafish larvae. *Life science alliance*, 8(1).

Kesdiren E, et al. (2025) Heterozygous variants in the teashirt zinc finger homeobox 3 (TSHZ3) gene in human congenital anomalies of the kidney and urinary tract. *European journal of human genetics : EJHG*, 33(1), 44.

Bessot A, et al. (2025) Humanized In Vivo Bone Tissue Engineering: In Vitro Preculture Conditions Control the Structural, Cellular, and Matrix Composition of Humanized Bone Organs. *Advanced healthcare materials*, 14(2), e2401939.