

# 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:** programming language, software resource, software application, data processing software, image processing software

**Defining Citation:** [PMID:30609523](#), [PMID: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:** 20250424T064502+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 [dkNET](#).

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.

Naumann S, et al. (2025) Enhanced neural sensitivity to brief changes of happy over angry facial expressions in preschoolers: A fast periodic visual stimulation study. *Psychophysiology*, 62(1), e14725.

Karamanlis D, et al. (2025) Nonlinear receptive fields evoke redundant retinal coding of natural scenes. *Nature*, 637(8045), 394.

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

Lopes L, et al. (2025) Dopaminergic PET to SPECT domain adaptation: a cycle GAN translation approach. *European journal of nuclear medicine and molecular imaging*, 52(3), 851.

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.

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

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 ( $^2\text{H}$ ) and oxygen-17 ( $^{17}\text{O}$ ) 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.

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.

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.

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

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.

Chuang CF, et al. (2025) Ultrasound-triggered drug release and cytotoxicity of microbubbles with diverse drug attributes. *Ultrasonics sonochemistry*, 112, 107182.

Liu X, et al. (2025) Negative Pressure Smart Patch to Sense and Heal the Wound. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(3), e2408077.

Petro NM, et al. (2025) Interactive effects of social media use and puberty on resting-state cortical activity and mental health symptoms. *Developmental cognitive neuroscience*, 71, 101479.

Throm E, et al. (2025) Combining Real-Time Neuroimaging With Machine Learning to Study Attention to Familiar Faces During Infancy: A Proof of Principle Study. *Developmental science*, 28(1), e13592.