

# Resource Summary Report

Generated by SPARC SAWG on Aug 9, 2026

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

**Defining Citation:** [PMID:30609523](#), [PMID:21934110](#)

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

**Availability:** Restricted

**Resource Name:** MATLAB

**Resource ID:** SCR\_001622

**Alternate IDs:** nlx\_153890

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

**Record Last Update:** 20260808T190226+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 66533 mentions in open access literature.

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

He P, et al. (2027) Key molecular networks underlying retinol's biphasic effects on cell proliferation through multi-omics integrative analysis using genome-scale metabolic modeling. *Synthetic and systems biotechnology*, 15, 43.

Li C, et al. (2026) Enhancing interpretability of AI with radiomics-based deep neural network: proof of concept in the classification of Parkinsonian syndromes with 18F-FDG PET imaging. *European journal of nuclear medicine and molecular imaging*, 53(3), 1962.

Yang X, et al. (2026) Bidirectional crusher gradient method to estimate the labeling efficiency of pseudo-continuous arterial spin labeling MRI in mice. *Magnetic resonance in medicine*, 95(2), 912.

Gochberg DF, et al. (2026) Inverting CEST or  $R_1 \propto \rho$  data to generate solute spectra without a priori assumptions. *Magnetic resonance in medicine*, 95(2), 1239.

Swago S, et al. (2026) Quantification of Tryptophan and NAD<sup>+</sup> Proton Magnetization Exchange With Water Using Downfield 1H MRS in the Human Brain at 7 T. *Magnetic resonance in medicine*, 95(3), 1336.

Su TY, et al. (2026) Surfaced-based detection of focal cortical dysplasia using magnetic resonance fingerprinting and machine learning. *Epilepsia*, 67(1), 257.

Davies-Jenkins CW, et al. (2026) A data-driven algorithm to determine 1H-MRS basis set composition. *Magnetic resonance in medicine*, 95(1), 20.

Tolón Zardoya N, et al. (2026) A feasibility study of 3D printing technology for simulating rigid gas permeable contact lens fitting. *Journal of optometry*, 19(1), 100583.

Fuller A, et al. (2026) The Impact of Error-Related Brain Activity and Parental Attachment on Youth Posttraumatic Stress Symptoms. *Psychophysiology*, 63(4), e70295.

Pierrieau E, et al. (2026) Cortical beta coherence provides a stronger non-invasive predictor of movement vigor than local beta power. *Journal of neuroengineering and rehabilitation*, 23(1).

Chiu CH, et al. (2026) The effects of neoadjuvant chemoradiotherapy-related frailty by analytic morphomics in esophageal cancer. *Journal of cardiothoracic surgery*, 21(1).

Orlova A, et al. (2026) Assessing axitinib-induced differential responses in tumor vascularization and oxygenation with combined optoacoustic angiography and diffuse optical spectroscopy. *Neoplasia (New York, N.Y.)*, 76, 101303.

Westbrook C, et al. (2026) Identifying neurodevelopmental signatures of worry: An ultra-high field (7-Tesla) fMRI study among adolescents and young adults. *Developmental cognitive neuroscience*, 79, 101718.

Lee S, et al. (2026) Network-nodal tACS induces right-lateralization of thalamocortical connectivity. *Scientific reports*, 16(1).

Wirkus T, et al. (2026) The relationship between executive functions, decision-making, and changes in symptoms of gambling disorder in online sports bettors. *Scientific reports*, 16(1).

Schurman CA, et al. (2026) Alzheimer's Disease Risk Factor APOE4 Exerts Dimorphic Effects on Female Bone. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 13(28), e23511.

Papageorgopoulou E, et al. (2026) Theta Power at 10 Months of Age Predicts Developmental Change in Language in Infants With and Without an Elevated Likelihood for Autism. *Developmental science*, 29(3), e70194.

Delvenne M, et al. (2026) Overriding Bioprocess Perturbations With a Cell-Machine Interface for Reliable Microbial Stress-Response Control. *Microbial biotechnology*, 19(4), e70329.

Heerah KM, et al. (2026) The response of small boreal catchments to extreme weather event: Hurricane Larry. *PloS one*, 21(4), e0345113.

Gu S, et al. (2026) Electric current-driven heterogeneous microstructures in dual-phase titanium alloys. *Nature communications*, 17(1).