

Resource Summary Report

Generated by SPARC SAWG on Sep 18, 2026

MATLAB

RRID:SCR_001622

Type: Tool

Proper Citation

MATLAB (RRID:SCR_001622)

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

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: 20260912T200007+0000

Ratings and Alerts

No rating or validation information has been found for MATLAB.

No alerts have been found for MATLAB.

Data and Source Information

Source: [SciCrunch Registry](#)

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.

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

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.

van Dort W, et al. (2026) Can unsupervised machine learning gain new insights into urodynamic pressure flow pattern analysis? *BJU international*, 137(1), 112.

Acosta-Batlle J, et al. (2026) An AI-based pipeline for osteoporosis/osteopenia prediction using hip radiographs. *Skeletal radiology*, 55(2), 415.

Bayat S, et al. (2026) Relationship between Ventilation/Perfusion Ratio Mismatch and Capnogram Phase III Slope in Acute Bronchoconstriction and Its Modulation by Salbutamol Assessed by Synchrotron Imaging in Rabbit Lung. *Anesthesiology*, 144(2), 419.

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.

Ghaderi H, et al. (2026) Opto-biomechanical simulation of keratoconus development in emmetropic eyes. *Journal of optometry*, 19(1), 100587.

van der Stam AH, et al. (2026) Haemodynamic determinants of supine hypertension in patients with classical orthostatic hypotension. *Journal of hypertension*, 44(2), 360.

Wang F, et al. (2026) Cortical latency predicts reading fluency from late childhood to early adolescence. *Developmental cognitive neuroscience*, 77, 101616.

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

Liao R, et al. (2026) Efficiency Recalibrates Social-Emotional Trade-Offs Behind Partner Choice in Direct Reciprocity through Intention-Specific Neural Bases. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(5), e16509.

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⁺ Proton Magnetization Exchange With Water Using Downfield 1H MRS in the Human Brain at 7 T. *Magnetic resonance in medicine*, 95(3), 1336.

Shrestha P, et al. (2026) Marginal Stability of the YB1 Cold-Shock Domain in Cells Enables Binding of Multiple Nucleic Acids. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(1), e12966.

Broughton J, et al. (2026) Suppression of bacterial cell death underlies the antagonistic interaction between ciprofloxacin and tetracycline. *Molecular systems biology*, 22(1), 102.

Maung JN, et al. (2026) Altered lipid metabolism and inflammatory programs associate with adipocyte loss in familial partial lipodystrophy 2. *The Journal of clinical investigation*, 136(1).

Mareckova K, et al. (2026) Functional Impact Score of Mitochondrial Variants and Its Relationship With Functional Connectivity of the Brain: Potential Origins of Premature Aging in Young Adulthood. *Human brain mapping*, 47(1), e70447.

Zhao H, et al. (2026) A predictive model of joint dynamics and ground reaction force using only leg length, body mass, and walking cadence. *PloS one*, 21(1), e0338041.