Resource Summary Report

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Multiscale Object Orientation Simulation Environment

RRID:SCR_008031
Type: Tool

Proper Citation

Multiscale Object Orientation Simulation Environment (RRID:SCR_008031)

Resource Information

URL: http://moose.sourceforge.net/

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Description: MOOSE is the Multiscale Object-Oriented Simulation Environment. It is the base and numerical core for large, detailed simulations including Computational Neuroscience and Systems Biology. MOOSE spans the range from single molecules to subcellular networks, from single cells to neuronal networks, and to still larger systems. it is backwards-compatible with GENESIS, and forward compatible with Python and XML-based model definition standards like SBML and MorphML. MOOSE is coordinating with the GENESIS-3 project towards the goals of developing educational resources for modeling. MOOSE is open source software, licensed under the LGPL (Lesser GNU Public License). It has absolutely no warranty. Sponsors: - National Center of Biological Sciences (NCBS) - National Institutes of Health (NIH) Collaboration - EU-India grid - Department of Atomic Energy Science Research Council (DAE/SRC) - Department of Biotechnology (DBT)

Synonyms: MOOSE

Resource Type: software application, simulation software, software resource

Keywords: cell, computational, molecule, network, neuronal, neuroscience, simulation, subcellular, systems biology

Resource Name: Multiscale Object Orientation Simulation Environment

Resource ID: SCR_008031

Alternate IDs: nif-0000-10307

Alternate URLs: http://www.nitrc.org/projects/moose

Record Creation Time: 20220129T080245+0000

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Ratings and Alerts

No rating or validation information has been found for Multiscale Object Orientation Simulation Environment.

No alerts have been found for Multiscale Object Orientation Simulation Environment.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 302 mentions in open access literature.

Listed below are recent publications. The full list is available at nidm-terms .

Sun Q, et al. (2025) Comparative effectiveness of colonic stenting alone and with neoadjuvant chemotherapy for patients with left-sided obstructive colon cancer: a meta-analysis. International journal of surgery (London, England), 111(10), 7168.

Bianchi G, et al. (2025) The dilemma of chronic kidney disease and end-stage kidney disease following pre-eclampsia: a literature review and meta-analysis. International urology and nephrology, 57(12), 4131.

Lindqwister W, et al. (2025) Predicting compressive stress-strain behavior of elasto-plastic porous media via morphology-informed neural networks. Communications engineering, 4(1), 73.

Zaragoza JJ, et al. (2025) Prevalence of acute kidney injury in Mexico; a systematic review and meta-analysis of pre-pandemic reports. Renal failure, 47(1), 2449573.

Feng H, et al. (2025) Cerebrospinal fluid biomarkers of neuroinflammation and postoperative neurocognitive disorders in patients undergoing orthopedic surgery: a systematic review and meta-analysis. International journal of surgery (London, England), 111(5), 3573.

Quirk SE, et al. (2025) Mental disorders and excess mortality: a systematic review protocol. BMJ open, 15(3), e084797.

Lin Y, et al. (2025) Occurrence of Dumping Syndrome After Esophageal Cancer Surgery: Systematic Review and Meta-analysis. Annals of surgical oncology, 32(2), 791.

Hu J, et al. (2025) Influence of dosimetry accuracy on the correlation with treatment outcome in a preliminary PSMA radiopharmaceutical therapy study. European journal of nuclear medicine and molecular imaging, 52(5), 1649.

Zhang H, et al. (2025) The Impact of Preoperative Risk Factors on Unplanned Readmission After Day Surgery: A Meta-Analysis. Journal of personalized medicine, 15(7).

Gutschmayer S, et al. (2025) Whole-Body [18F]FDG-PET/CT Imaging of Healthy Controls: Test/Retest Data for Systemic, Multi-Organ Analysis. Scientific data, 12(1), 1707.

Pili N, et al. (2025) Harnessing 3D microarchitecture of pterosaur bone using multi-scale X-ray CT for aerospace material design. Scientific reports, 15(1), 5719.

Salimi Y, et al. (2025) Deep learning-based segmentation of ultra-low-dose CT images using an optimized nnU-Net model. La Radiologia medica, 130(5), 723.

Dowling GP, et al. (2025) Prognostic significance of receptor conversion following neoadjuvant therapy in breast cancer: a systematic review & meta-analysis. Breast (Edinburgh, Scotland), 82, 104516.

Auriac J, et al. (2025) Comparison of organ volumes and standardized uptake values in [18F]FDG-PET/CT images using MOOSE and TotalSegmentator to segment CT images. Medical physics, 52(10), e70025.

Li Q, et al. (2025) Risk of cardiovascular disease among cancer survivors: systematic review and meta-analysis. EClinicalMedicine, 84, 103274.

Bharech S, et al. (2025) ML-extendable framework for multiphysics-multiscale simulation workflow and data management using Kadi4Mat. Scientific data, 12(1), 962.

Chen Y, et al. (2025) Modality-projection universal model for comprehensive full-body medical imaging segmentation. Nature communications, 16(1), 9423.

Zhang Y, et al. (2024) Sarcopenia Is a Prognostic Factor of Adverse Effects and Mortality in Patients With Tumour: A Systematic Review and Meta-Analysis. Journal of cachexia, sarcopenia and muscle, 15(6), 2295.

K?pi?ska AP, et al. (2024) Association of Parental Prenatal Mental Health on Offspring Neurodevelopmental Disorders: A Systematic Review and Meta-Analysis. medRxiv : the preprint server for health sciences.

Ponzoni M, et al. (2024) Tricuspid Valve Repair Can Restore the Prognosis of Patients with Hypoplastic Left Heart Syndrome and Tricuspid Valve Regurgitation: A Meta-analysis. Pediatric cardiology, 45(8), 1702.