

Resource Summary Report

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Australian ResearCH Enabling enviRonment

RRID:SCR_008390

Type: Tool

Proper Citation

Australian ResearCH Enabling enviRonment (RRID:SCR_008390)

Resource Information

URL: <http://www.archer.edu.au/>

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Description: The ARCHER project is built upon the prototype software developed by the DART (<http://dart.edu.au>) and ARROW (<http://arrow.edu.au>) projects to produce a robust set of software tools. These tools: - may be customised to suit the needs of diverse research areas - automate the collection and management of instrument generated data - enable the repository storage of research data and associated metadata - enable collection and tagging of research data in a collaborative environment, and - provide these capabilities in a secure end-to-end proces. :ARCHER developed a "production-ready" software tools, operating in a secure environment, to assist researchers to: - collect, capture and retain large data sets from a range of different sources including scientific instruments - deposit data files and data sets to eResearch storage repositories - populate these eResearch data repositories with associated metadata - permit data set annotation and discussion in a collaborative environment, and - support next-generation methods for research publication, dissemination and access.

Abbreviations: ARCHER

Resource Type: software resource

Keywords: research, prototype, software, software, tool, diverse, repository, data, metadata, environment, scientific, instrument, annotation

Funding: Australian Commonwealth Department of Education Science and Training DEST via the Research Information Infrastructure Framework for Australian Higher Education

Resource Name: Australian ResearCH Enabling enviRonment

Resource ID: SCR_008390

Alternate IDs: nif-0000-30038

Record Creation Time: 20220129T080247+0000

Record Last Update: 20260725T190651+0000

Ratings and Alerts

No rating or validation information has been found for Australian Research Enabling environment.

No alerts have been found for Australian Research Enabling environment.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Li S, et al. (2024) A GPU-based fast Monte Carlo code that supports proton transport in magnetic field for radiation therapy. Journal of applied clinical medical physics, 25(1), e14208.

Miranda-Román MA, et al. (2024) MEK Inhibitors Lead to PDGFR Pathway Upregulation and Sensitize Tumors to RAF Dimer Inhibitors in NF1-Deficient Malignant Peripheral Nerve Sheath Tumor. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(22), 5154.

Parkhurst JM, et al. (2024) Computational models of amorphous ice for accurate simulation of cryo-EM images of biological samples. Ultramicroscopy, 256, 113882.

McNamara DM, et al. (2024) Impact of cannabidiol on myocardial recovery in patients with acute myocarditis: Rationale & design of the ARCHER trial. ESC heart failure, 11(5), 3416.

Kuppili VSC, et al. (2024) Nanoscale imaging of Fe-rich inclusions in single-crystal zircon using X-ray ptycho-tomography. Scientific reports, 14(1), 5139.

Hazell P, et al. (2023) Association of urinary sex hormones with mood and behavior changes in a community adolescent cohort. PloS one, 18(10), e0293040.

Gupta K, et al. (2022) Structural insights in cell-type specific evolution of intra-host diversity by SARS-CoV-2. Nature communications, 13(1), 222.

Midgley SD, et al. (2021) Sulfate and Molybdate Incorporation at the Calcite-Water Interface: Insights from Ab Initio Molecular Dynamics. ACS earth & space chemistry, 5(8), 2066.

Jiang XZ, et al. (2020) Membrane Deformation of Endothelial Surface Layer Interspersed with Syndecan-4: A Molecular Dynamics Study. *Annals of biomedical engineering*, 48(1), 357.

Faulkner M, et al. (2020) Molecular simulations unravel the molecular principles that mediate selective permeability of carboxysome shell protein. *Scientific reports*, 10(1), 17501.

Bernabeu MO, et al. (2020) Abnormal morphology biases hematocrit distribution in tumor vasculature and contributes to heterogeneity in tissue oxygenation. *Proceedings of the National Academy of Sciences of the United States of America*, 117(45), 27811.

Fernandez-Musoles C, et al. (2019) Communication Sparsity in Distributed Spiking Neural Network Simulations to Improve Scalability. *Frontiers in neuroinformatics*, 13, 19.

Jiang XZ, et al. (2018) Regimes of Flow over Complex Structures of Endothelial Glycocalyx: A Molecular Dynamics Simulation Study. *Scientific reports*, 8(1), 5732.

Sacco F, et al. (2018) Left Ventricular Trabeculations Decrease the Wall Shear Stress and Increase the Intra-Ventricular Pressure Drop in CFD Simulations. *Frontiers in physiology*, 9, 458.

Bernabeu MO, et al. (2018) Estimation of Diabetic Retinal Microaneurysm Perfusion Parameters Based on Computational Fluid Dynamics Modeling of Adaptive Optics Scanning Laser Ophthalmoscopy. *Frontiers in physiology*, 9, 989.

Bhati AP, et al. (2018) Uncertainty Quantification in Alchemical Free Energy Methods. *Journal of chemical theory and computation*, 14(6), 2867.

Jiang XZ, et al. (2018) Reducing Salt Intake and Exercising Regularly: Implications From Molecular Dynamics Simulations of Endothelial Glycocalyx. *Frontiers in physiology*, 9, 1667.

Levrero-Florencio F, et al. (2018) Using Non-linear Homogenization to Improve the Performance of Macroscopic Damage Models of Trabecular Bone. *Frontiers in physiology*, 9, 545.

Beck RMD, et al. (2017) The Skull of *Epidolops ameghinoi* from the Early Eocene Itaboraí Fauna, Southeastern Brazil, and the Affinities of the Extinct Marsupialiform Order *Polydolopimorphia*. *Journal of mammalian evolution*, 24(4), 373.

Levrero-Florencio F, et al. (2017) Effect of including damage at the tissue level in the nonlinear homogenisation of trabecular bone. *Biomechanics and modeling in mechanobiology*, 16(5), 1681.