

Resource Summary Report

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ORCA

RRID:SCR_012097

Type: Tool

Proper Citation

ORCA (RRID:SCR_012097)

Resource Information

URL: <http://sourceforge.net/projects/exorca/>

Proper Citation: ORCA (RRID:SCR_012097)

Description: A Matlab package extending the scope of established COBRA metabolic modelling.

Resource Type: software resource

Defining Citation: [PMID:24336807](#)

Keywords: software package, matlab

Availability: Free for academic use

Resource Name: ORCA

Resource ID: SCR_012097

Alternate IDs: OMICS_05191

Record Creation Time: 20220129T080308+0000

Record Last Update: 20260808T185957+0000

Ratings and Alerts

No rating or validation information has been found for ORCA.

No alerts have been found for ORCA.

Data and Source Information

Usage and Citation Metrics

We found 1540 mentions in open access literature.

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

Sordyl D, et al. (2026) MODOMICS: a database of RNA modifications and related information. 2025 update and 20th anniversary. Nucleic acids research, 54(D1), D219.

Bollmeyer MM, et al. (2026) Insights into the initial steps of the thiamin pyrimidine synthase (ThiC)-catalyzed reaction through EPR spectroscopic characterization of radical intermediates. Chemical science, 17(3), 1624.

Williams LJ, et al. (2026) Can ferric-oxyl excited states explain elongated iron-oxygen bonds in heme peroxidase catalytic intermediates? Nature communications, 17(1).

Cappelletti M, et al. (2026) How Does Adenine Form from Hydrogen Cyanide? Journal of the American Chemical Society, 148(4), 3949.

Martyka M, et al. (2026) Gradients not needed: ML-driven propagation of nonadiabatic molecular dynamics without reference gradients. Chemical science, 17(12), 6043.

Zheng Z, et al. (2026) Permeable intimate membrane electrode interface with optimized micro-environment for CO₂ electroreduction in pure water. Nature communications, 17(1).

Choi Y, et al. (2026) Design of Optical Transducer for Recognition of Biomolecular Interactions between Bacterial Lipopolysaccharides and Amino Acids. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(29), e23658.

Schmerwitz YLA, et al. (2026) Freeze-and-Release Direct Optimization Method for Variational Calculations of Excited Electronic States. Journal of chemical theory and computation, 22(7), 3571.

Marafante M, et al. (2026) Chemical Speciation of Vanadium(IV/V)/8-Hydroxyquinoline-2-Carboxylic Acid System in Aqueous Solution: A Multitechnique Study. Inorganic chemistry, 65(12), 6657.

Poddutoori PK, et al. (2026) Electronically Coupled, Cofacially Linked, Hypervalent Antimony(V) Porphyrin Homodimer: Synthesis, Spectroscopy, and Photochemistry. Inorganic chemistry, 65(13), 7257.

Pugliese ER, et al. (2026) Inverse-Sandwich Rare Earth Metal Complexes Comprising a Planar Toluene Dianion. Inorganic chemistry, 65(2), 1172.

Mates-Torres E, et al. (2026) Low-energy glycine formation and spectral masking in star-forming regions. Communications chemistry, 9(1), 68.

Filimonov DA, et al. (2026) Structural Descriptors and Antioxidant Activity Markers of 4-[4-(2-Aminoethoxy)benzyl]aniline. Antioxidants (Basel, Switzerland), 15(2).

??lvarez-Barajas JJ, et al. (2026) Synthesis, Antioxidant Activity, and Structure Analysis Relationship Study of Silyl-Alkylthioethers from 2-Mercaptobenzimidazole. *Molecules* (Basel, Switzerland), 31(4).

Beliaeva M, et al. (2026) Crystallization-Induced Coordination Diversity of Cu(I)-Pyridine Halide Complexes Resulting in Optical Tunability. *Inorganic chemistry*, 65(10), 5507.

Pagliero MC, et al. (2026) Investigating Cu(II) Complexes for MRI: A Comprehensive Approach Using EPR, Relaxometry, and Computational Modeling. *Inorganic chemistry*, 65(10), 5639.

El-Saghier AM, et al. (2026) Synthesis, characterization, molecular docking and in vitro anti-arthritis activity of some novel spiro [1,3,4] thiadiazole derivatives based on thioacetamides. *BMC chemistry*, 20(1).

Glasovac Z, et al. (2026) DFT Investigation into the Role of Superbases as the Auxiliary Groups in CO₂ Reduction. *Molecules* (Basel, Switzerland), 31(7).

Damante JVJ, et al. (2026) Decoding Polyether-Cation Interactions: Computational Strategies for Agricultural Applications. *Polymers*, 18(7).

Timmer D, et al. (2026) Direct Observation of Franck-Condon Stimulated Emission and Sub-20 fs Relaxation in Photoexcited Flavins. *The journal of physical chemistry letters*, 17(14), 4114.