

Resource Summary Report

Generated by PRECISE-TBI on Jul 31, 2026

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: 20260725T190731+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 1315 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Chen Q, et al. (2025) Manipulating perovskite structural asymmetry for high-performing self-powered full-stokes polarimetry. *Science advances*, 11(9), eads6123.

Fiorucci L, et al. (2025) Not Just Another Crystal Field Software. *Journal of computational chemistry*, 46(6), e70063.

Chen L, et al. (2025) MORE-Q, a dataset for molecular olfactorial receptor engineering by quantum mechanics. *Scientific data*, 12(1), 324.

Kehl A, et al. (2025) Frequency and time domain ¹⁹F ENDOR spectroscopy: role of nuclear dipolar couplings to determine distance distributions. *Physical chemistry chemical physics : PCCP*, 27(3), 1415.

Wang C, et al. (2025) Metal-Catalyzed Abiotic Cleavage of C≡C Bonds for Effective Fluorescence Imaging of Cu(II) and Fe(III) in Living Systems. *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*, 12(8), e2412407.

Sugimori R, et al. (2025) Stacked-ring aromaticity from the viewpoint of the effective number of π-electrons. *Chemical science*, 16(4), 1707.

Barp M, et al. (2025) Quantifying hexafluoroisopropanol's hydrogen bond donor ability: infrared photodissociation spectroscopy of halide anion HFIP complexes. *Chemical science*, 16(12), 5174.

Murton PDF, et al. (2025) Blue-light photodegradation of ferricyanide under protein relevant conditions. *Dalton transactions (Cambridge, England : 2003)*, 54(11), 4735.

Morizumi T, et al. (2025) Structural insights into light-gating of potassium-selective channelrhodopsin. *Nature communications*, 16(1), 1283.

Cheregi MC, et al. (2025) Curcumin Electroanalysis at a Disposable Graphite Electrode. *Biosensors*, 15(3).

F?st?kç? M, et al. (2025) Revisiting Reaction Mechanism of Regioselective Disulfide-Catalyzed Photocatalytic Aerobic Oxidative Cleavage of 1-Arylbutadienes: A Computational Study. *Chemphyschem : a European journal of chemical physics and physical chemistry*, 26(11), e202401004.

Piccolo D, et al. (2025) Luminescent Manganese(II) Iminophosphorane Derivatives. *Molecules (Basel, Switzerland)*, 30(6).

Sun W, et al. (2025) Unraveling the Stereoisomer Configurations of 1,1'-bis(tert-butylphosphino)Ferrocene in the Gas Phase. *Chemphyschem : a European journal of*

chemical physics and physical chemistry, 26(5), e202400881.

Nová?ek M, et al. (2025) PM6-ML: The Synergy of Semiempirical Quantum Chemistry and Machine Learning Transformed into a Practical Computational Method. Journal of chemical theory and computation, 21(2), 678.

Yang C, et al. (2025) A multifunctional quasi-solid-state polymer electrolyte with highly selective ion highways for practical zinc ion batteries. Nature communications, 16(1), 183.

Chen L, et al. (2025) Manipulating Interfacial Stability via Preferential Absorption for Highly Stable and Safe 4.6 V LiCoO₂ Cathode. Nano-micro letters, 17(1), 181.

Harle J, et al. (2025) Benchmark CCSD(T) and Density Functional Theory Calculations of Biologically Relevant Catecholic Systems. The journal of physical chemistry. B, 129(20), 4879.

Eyyathiyil J, et al. (2025) Axial chirality-induced rigidification in aminoboranes enhances persistent room-temperature phosphorescence and circularly polarized luminescence. Communications chemistry, 8(1), 126.

Cao H, et al. (2025) Exploring the active ingredients of Banzhilian and its mechanism of action on diabetic Gastric cancer based on network pharmacology. Scientific reports, 15(1), 14808.

Muskan , et al. (2025) Strong Ferromagnetic Coupling between Co and Co²⁺ with Odd Electron (Anti)aromatic Radicals via Noncovalent Interaction. The journal of physical chemistry. A, 129(20), 4426.