

Resource Summary Report

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COMSOL Multiphysics

RRID:SCR_014767

Type: Tool

Proper Citation

COMSOL Multiphysics (RRID:SCR_014767)

Resource Information

URL: <https://www.comsol.com/comsol-multiphysics>

Proper Citation: COMSOL Multiphysics (RRID:SCR_014767)

Description: General-purpose software platform for modeling and simulating physics-based problems which accounts for coupled or multiphysics phenomena. The platform includes a set of core physics interfaces for common physics application areas such as structural analysis, laminar flow, pressure acoustics, transport of diluted species, electrostatics, electric currents, heat transfer, and Joule heating.

Resource Type: software resource, software application, simulation software

Keywords: simulation software, software platform, physics, problem solver

Availability: Commercially available

Resource Name: COMSOL Multiphysics

Resource ID: SCR_014767

License URLs: <https://www.comsol.com/company/privacy/>

Record Creation Time: 20220129T080322+0000

Record Last Update: 20260801T042734+0000

Ratings and Alerts

No rating or validation information has been found for COMSOL Multiphysics.

No alerts have been found for COMSOL Multiphysics.

Data and Source Information

Usage and Citation Metrics

We found 37 mentions in open access literature.

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

Nia HT, et al. (2025) Solid Stress Estimations via Intraoperative 3D Navigation in Patients with Brain Tumors. *Clinical cancer research : an official journal of the American Association for Cancer Research*, 31(16), 3571.

Cl  men  on P, et al. (2025) Perception of aerodynamical looming stimuli. *Current biology : CB*, 35(22), 5560.

Uppinakudru AP, et al. (2024) Comparison of radiant intensity in aqueous media using experimental and numerical simulation techniques. *Open research Europe*, 4, 18.

Dias T, et al. (2024) An electro-optical platform for the ultrasensitive detection of small extracellular vesicle sub-types and their protein epitope counts. *iScience*, 27(6), 109866.

Baek J, et al. (2024) All-dielectric polarization-sensitive metasurface for terahertz polarimetric imaging. *Scientific reports*, 14(1), 7544.

Zhang Y, et al. (2024) Penetrating the ultra-tough yeast cell wall with finite element analysis model-aided design of microtools. *iScience*, 27(4), 109503.

Sagalajev B, et al. (2024) Absence of paresthesia during high-rate spinal cord stimulation reveals importance of synchrony for sensations evoked by electrical stimulation. *Neuron*, 112(3), 404.

England SJ, et al. (2023) Static electricity passively attracts ticks onto hosts. *Current biology : CB*, 33(14), 3041.

Peng R, et al. (2023) In-depth understanding of boosting salinity gradient power generation by ionic diode. *iScience*, 26(7), 107184.

Glover JD, et al. (2023) The developmental basis of fingerprint pattern formation and variation. *Cell*, 186(5), 940.

Tang ZL, et al. (2023) Topology optimization for near-junction thermal spreading of electronics in ballistic-diffusive regime. *iScience*, 26(7), 107179.

Li M, et al. (2022) Tuning the surface potential to reprogram immune microenvironment for bone regeneration. *Biomaterials*, 282, 121408.

S  t  r A, et al. (2022) High-resolution laser resonances of antiprotonic helium in superfluid 4He. *Nature*, 603(7901), 411.

Naughton JR, et al. (2022) Suppression of crosstalk in multielectrode arrays with local shielding. *Frontiers in nanotechnology*, 4.

Nasrollahzadeh N, et al. (2022) Temperature evolution following joint loading promotes chondrogenesis by synergistic cues via calcium signaling. *eLife*, 11.

Yao M, et al. (2021) A multiwell plate-based system for toxicity screening under multiple static or cycling oxygen environments. *Scientific reports*, 11(1), 4020.

Sercel AJ, et al. (2021) Stable transplantation of human mitochondrial DNA by high-throughput, pressurized isolated mitochondrial delivery. *eLife*, 10.

Wang S, et al. (2021) Effects of pulse parameters on the temperature distribution of a human head exposed to the electromagnetic pulse. *Scientific reports*, 11(1), 22938.

Schrock LE, et al. (2021) 7T MRI and Computational Modeling Supports a Critical Role of Lead Location in Determining Outcomes for Deep Brain Stimulation: A Case Report. *Frontiers in human neuroscience*, 15, 631778.

Zhang J, et al. (2021) Primary human colonic mucosal barrier crosstalk with super oxygen-sensitive *Faecalibacterium prausnitzii* in continuous culture. *Med (New York, N.Y.)*, 2(1), 74.