

Resource Summary Report

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HERMES

RRID:SCR_009584

Type: Tool

Proper Citation

HERMES (RRID:SCR_009584)

Resource Information

URL: <http://hermes.ctb.upm.es/>

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Description: A toolbox for the Matlab environment designed to study functional and effective brain connectivity from neurophysiological data such as multivariate EEG and/or MEG records. It includes also visualization tools and statistical methods to address the problem of multiple comparisons. This toolbox may be very helpful to all the researchers working in the emerging field of brain connectivity analysis.

Abbreviations: HERMES

Synonyms: HERramientas de MErida de la Sincronizacion

Resource Type: software toolkit, software resource, software application, data processing software

Keywords: clinical neuroinformatics, computational neuroscience, connectivity analysis, directed transfer analysis, eeg, meg, electrocorticography, granger causality, information theory, matlab, partial directed coherence, transfer entropy analysis, connectivity, brain

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Spanish Ministry of Economy and Competitiveness TEC2012-38453-CO4-01;

Spanish Ministry of Economy and Competitiveness TEC2012-38453-CO4-03

Availability: GNU General Public License

Resource Name: HERMES

Resource ID: SCR_009584

Alternate IDs: nlx_155770

Alternate URLs: <http://www.nitrc.org/projects/hermes>

Record Creation Time: 20220129T080253+0000

Record Last Update: 20260804T043413+0000

Ratings and Alerts

No rating or validation information has been found for HERMES.

No alerts have been found for HERMES.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 136 mentions in open access literature.

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

Fide E, et al. (2025) Network Segregation and Integration Changes in Healthy Aging: Evidence From EEG Subbands During the Visual Short-Term Memory Binding Task. The European journal of neuroscience, 61(3), e70001.

Li Q, et al. (2025) Neuroimaging epicenters and the related neurobiological signatures in patients with postherpetic neuralgia. The journal of headache and pain, 26(1), 247.

Huang L, et al. (2025) Gut microbiota and risk of heart failure in European population-A comprehensive Mendelian randomization study. ESC heart failure, 12(4), 2518.

Qi W, et al. (2025) Exploring cortical excitability in children with cerebral palsy through lower limb robot training based on MI-BCI. Scientific reports, 15(1), 12285.

Ding H, et al. (2025) Comparison of 68Ga-DOTATATE and 18F-FDG PET/CT for tumor staging and primary tumor volume delineation in patients with nasopharyngeal carcinoma. Scientific reports, 15(1), 16167.

Visani GM, et al. (2024) HERMES: Holographic Equivariant neuRAI network model for Mutational Effect and Stability prediction. ArXiv.

Stockbauer A, et al. (2024) Metabolic network alterations as a supportive biomarker in dementia with Lewy bodies with preserved dopamine transmission. European journal of nuclear medicine and molecular imaging, 51(4), 1023.

Dubin RF, et al. (2024) Incident heart failure in chronic kidney disease: proteomics informs biology and risk stratification. European heart journal, 45(30), 2752.

Visani GM, et al. (2024) HERMES: Holographic Equivariant neuRal network model for Mutational Effect and Stability prediction. *bioRxiv : the preprint server for biology*.

Choi K, et al. (2024) Patient-Centered Economic Burden of Diabetic Macular Edema: Retrospective Cohort Study. *JMIR public health and surveillance*, 10, e56741.

Achebak H, et al. (2024) Geographic sources of ozone air pollution and mortality burden in Europe. *Nature medicine*, 30(6), 1732.

Liao K, et al. (2024) Alzheimer's disease increases the risk of erectile dysfunction independent of cardiovascular diseases: A mendelian randomization study. *PloS one*, 19(6), e0303338.

Brodbeck J, et al. (2024) Fostering resilience and well-being in emerging adults with adverse childhood experiences: study protocol for a randomized controlled trial to evaluate the FACE self-help app. *BMC psychology*, 12(1), 84.

Li H, et al. (2024) Biodistribution and dosimetry of ¹⁷⁷Lu-DOTA-IBA for therapy of bone metastases. *EJNMMI research*, 14(1), 30.

Wu J, et al. (2024) Heterogeneous entity representation for medicinal synergy prediction. *Bioinformatics (Oxford, England)*, 41(1).

Mitsuhashi T, et al. (2024) Prognostic Determinants of Anterior Large Vessel Occlusion in Acute Stroke in Elderly Patients. *Geriatrics (Basel, Switzerland)*, 9(1).

Zengin IN, et al. (2024) Benchmarking ANI potentials as a rescoring function and screening FDA drugs for SARS-CoV-2 Mpro. *Journal of computer-aided molecular design*, 38(1), 15.

Chen L, et al. (2023) The increased inter-brain neural synchronization in prefrontal cortex between simulated patient and acupuncturist during acupuncture stimulation: Evidence from functional near-infrared spectroscopy hyperscanning. *Human brain mapping*, 44(3), 980.

Zhang W, et al. (2023) Gender differences in cognitive and affective interpersonal emotion regulation in couples: an fNIRS hyperscanning. *Social cognitive and affective neuroscience*, 18(1).

Choi K, et al. (2023) Patient-Centered Economic Burden of Exudative Age-Related Macular Degeneration: Retrospective Cohort Study. *JMIR public health and surveillance*, 9, e49852.