# Resource Summary Report

Generated by NIF on May 23, 2025

## BESA

RRID:SCR_009530
Type: Tool

### Proper Citation

BESA (RRID:SCR_009530)

### Resource Information

**URL:** http://besa.de

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**Description:** Software for source analysis and dipole localization in EEG and MEG research. BESA Research has been developed on the basis of 20 years experience in human brain research by Michael Scherg, University of Heidelberg, and Patrick Berg, University of Konstanz. BESA Research is a highly versatile and user-friendly Windows program with optimized tools and scripts to preprocess raw or averaged data for source analysis. All important aspects of source analysis are displayed in one window for immediate selection of a wide range of tools. BESA Research provides a variety of source analysis algorithms, a standardized realistic head model (FEM), and allows for fast and easy hypothesis testing and integration with MRI and fMRI.

**Abbreviations:** BESA

**Synonyms:** Brain Electrical Source Analysis

**Resource Type:** software application, software resource

**Keywords:** application, connectivity analysis, eeg, meg, electrocorticography, eeg modeling, event related potential, finite element analysis, forward - inverse, fourier time-domain analysis, independent component analysis, meg modeling, modeling, principal component analysis, source separation analysis, spectral analysis, statistical operation, surrogate data analysis, temporal transformation, time domain analysis, evoked potential, evoked field, event-related field, neuroimaging, mri, fmri

**Funding:**

**Availability:** Commercial license

**Resource Name:** BESA

**Resource ID:** SCR_009530

**Alternate IDs:** nlx_155695

**Alternate URLs:** http://www.nitrc.org/projects/besa

**Record Creation Time:** 20220129T080253+0000

**Record Last Update:** 20250522T060605+0000

## Ratings and Alerts

No rating or validation information has been found for BESA.

No alerts have been found for BESA.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 225 mentions in open access literature.

**Listed below are recent publications.** The full list is available at NIF.

Wu H, et al. (2025) The Neural Development of Chinese Lexical Tone Perception: A Mismatch Negativity Study Across Childhood, Adolescence, and Adulthood. Brain sciences, 15(1).

Luria G, et al. (2024) The SESAMEEG package: a probabilistic tool for source localization and uncertainty quantification in M/EEG. Frontiers in human neuroscience, 18, 1359753.

Dwyer P, et al. (2024) "Neural Noise" in Auditory Responses in Young Autistic and Neurotypical Children. Journal of autism and developmental disorders, 54(2), 642.

Loizou P, et al. (2024) Exploring the neurofunctional impairments and cognitive biases concerning food and body related stimuli in anorexia nervosa: An integrated EEG and eye-tracking study protocol. PloS one, 19(3), e0299529.

Rollins L, et al. (2024) Event-related potentials during encoding coincide with subsequent forced-choice mnemonic discrimination. Scientific reports, 14(1), 15859.

Wöhrle SD, et al. (2024) Neuromagnetic representation of musical roundness in chord progressions. Frontiers in neuroscience, 18, 1383554.

Pluta D, et al. (2024) Improved data quality and statistical power of trial-level event-related potentials with Bayesian random-shift Gaussian processes. Scientific reports, 14(1), 8856.

Chu LH, et al. (2024) Functional excitation-inhibition ratio for social anxiety analysis and severity assessment. Frontiers in psychiatry, 15, 1461290.

Castilla-Earls A, et al. (2023) Spanish Bilingual Morphosyntactic Development in Bilingual Children With and Without Developmental Language Disorder: Articles, Clitics, Verbs, and the Subjunctive Mood. Journal of speech, language, and hearing research : JSLHR, 66(12), 4678.

Henderson J, et al. (2023) Tactile estimation of hedonic and sensory properties during active touch: An electroencephalography study. The European journal of neuroscience, 58(6), 3412.

Iffland B, et al. (2023) Differentiated processing of emotional cues in adolescents and young adults with ICD-11 PTSD and complex PTSD after child abuse. Brain and behavior, 13(3), e2904.

Gibney KD, et al. (2023) Individual differences in late positive potential amplitude and theta power predict cue-induced eating. Addiction neuroscience, 7.

Brockhoff L, et al. (2023) The effects of visual working memory load on detection and neural processing of task-unrelated auditory stimuli. Scientific reports, 13(1), 4342.

Salvari V, et al. (2023) Tinnitus-frequency specific activity and connectivity: A MEG study. NeuroImage. Clinical, 38, 103379.

Eiserbeck A, et al. (2023) Deepfake smiles matter less-the psychological and neural impact of presumed AI-generated faces. Scientific reports, 13(1), 16111.

Wang H, et al. (2023) Neural processes responsible for the translation of sustained nociceptive inputs into subjective pain experience. Cerebral cortex (New York, N.Y. : 1991), 33(3), 634.

Spichiger F, et al. (2023) Inter-rating reliability of the Swiss easy-read integrated palliative care outcome scale for people with dementia. PloS one, 18(8), e0286557.

Möde L, et al. (2023) Cognitive control in adults with high-functioning autism spectrum disorder: a study with event-related potentials. Frontiers in psychiatry, 14, 1180827.

Byczynski G, et al. (2023) Brief Myofascial Intervention Modulates Visual Event-Related

Potential Response to Emotional Photographic Contents: A Pilot Study. Vision (Basel, Switzerland), 7(4).

Ortiz-Mantilla S, et al. (2023) Experience-dependent effects of passive auditory exposure in infants impact theta phase synchrony and predict later language. Cerebral cortex (New York, N.Y. : 1991), 33(12), 7595.