

Resource Summary Report

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AAL

RRID:SCR_003550

Type: Tool

Proper Citation

AAL (RRID:SCR_003550)

Resource Information

URL: <http://www.gin.cnrs.fr/spip.php?article216>

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Description: Software for automated anatomical labeling of activations in SPM (Statistical Parametric Mapping) using a macroscopic anatomical parcellation of the MNI MRI single-subject brain. The software was used for an automated anatomical parcellation of the spatially normalized single-subject high-resolution T1 volume provided by the Montreal Neurological Institute (MNI) (D. L. Collins et al., 1998, Trans. Med. Imag. 17, 463468, PubMed). Using this parcellation method, three procedures to perform the automated anatomical labeling of functional studies were proposed: (1) labeling of an extremum defined by a set of coordinates, (2) percentage of voxels belonging to each of the anatomical volumes of interest (AVOI) intersected by a sphere centered by a set of coordinates, and (3) percentage of voxels belonging to each of the AVOI intersected by an activated cluster. An interface with the Statistical Parametric Mapping package is provided as a freeware to researchers of the neuroimaging community.

Abbreviations: AAL

Synonyms: Automated Anatomical Labeling

Resource Type: software resource, software application, data processing software, image analysis software

Defining Citation: [PMID:11771995](#)

Keywords: neuroimaging, mri, labeling, activation foci, parcellation, statistical parametric mapping

Availability: Free

Resource Name: AAL

Resource ID: SCR_003550

Alternate IDs: nlx_157677

Record Creation Time: 20220129T080219+0000

Record Last Update: 20260801T190824+0000

Ratings and Alerts

No rating or validation information has been found for AAL.

No alerts have been found for AAL.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 45 mentions in open access literature.

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

Hu Y, et al. (2025) Dataset of natural conversations about appearance using fNIRS. Scientific data, 12(1), 1486.

Gwak DS, et al. (2025) Effects of Combining Traditional East Asian and Conventional Western Medicine on Acute Stroke Outcomes. Journal of the American Heart Association, 14(21), e043784.

Radua J, et al. (2025) Neural correlates of human fear conditioning and sources of variability in 2199 individuals. Nature communications, 16(1), 7869.

Hosseini SM, et al. (2025) Structural and diffusion imaging in olfactory-related brain regions in Parkinson's disease: predictors of clinical progression. Scientific reports, 15(1), 35636.

Aoe T, et al. (2024) Functional connectivity associated with attention networks differs among subgroups of fibromyalgia patients: an observational case-control study. Scientific reports, 14(1), 10197.

Sato S, et al. (2024) Association of olfactory and cognitive function test scores with hippocampal and amygdalar grey matter volume: a cross-sectional study. Scientific reports, 14(1), 19138.

Ufkes S, et al. (2024) Prenatal Magnesium Sulfate and Functional Connectivity in Offspring at Term-Equivalent Age. JAMA network open, 7(5), e2413508.

Ruppert-Junck MC, et al. (2024) Connectivity based on glucose dynamics reveals exaggerated sensorimotor network coupling on subject-level in Parkinson's disease. *European journal of nuclear medicine and molecular imaging*, 51(12), 3630.

Coolen T, et al. (2024) Spectrotemporal cortical dynamics and semantic control during sentence completion. *Clinical neurophysiology : official journal of the International Federation of Clinical Neurophysiology*, 163, 90.

Hakamata Y, et al. (2023) Blunted diurnal interleukin-6 rhythm is associated with amygdala emotional hyporeactivity and depression: a modulating role of gene-stressor interactions. *Frontiers in psychiatry*, 14, 1196235.

Sone D, et al. (2023) Contribution of the μ -opioid receptor system to affective disorders in temporal lobe epilepsy: A bidirectional relationship? *Epilepsia*, 64(2), 420.

Miseré RML, et al. (2023) Neuroimaging in Breast Implant Illness: An fMRI Pilot Study. *Aesthetic surgery journal*, 43(1), 51.

Oh JY, et al. (2023) Association of dysphagia with altered brain glucose metabolism in Parkinson's disease. *CNS neuroscience & therapeutics*, 29(9), 2498.

Lee D, et al. (2022) Insular activation and functional connectivity in firefighters with post-traumatic stress disorder. *BJPsych open*, 8(2), e69.

Billot A, et al. (2022) Multimodal Neural and Behavioral Data Predict Response to Rehabilitation in Chronic Poststroke Aphasia. *Stroke*, 53(5), 1606.

Hendrikse CJ, et al. (2022) Childhood trauma exposure and reward processing in healthy adults: A functional neuroimaging study. *Journal of neuroscience research*, 100(7), 1452.

Steiner F, et al. (2022) Affective speech modulates a cortico-limbic network in real time. *Progress in neurobiology*, 214, 102278.

Hassa T, et al. (2021) Increased Amygdala Activity Associated With Cognitive Reappraisal Strategy in Functional Neurologic Disorder. *Frontiers in psychiatry*, 12, 613156.

Harrison RA, et al. (2021) The association of genetic polymorphisms with neuroconnectivity in breast cancer patients. *Scientific reports*, 11(1), 6169.

Chu SA, et al. (2021) Brain volumetric deficits in MAPT mutation carriers: a multisite study. *Annals of clinical and translational neurology*, 8(1), 95.