# Resource Summary Report

Generated by NIF on May 14, 2025

## SpiSOP

RRID:SCR_015673
Type: Tool

### Proper Citation

SpiSOP (RRID:SCR_015673)

### Resource Information

**URL:** http://www.spisop.org

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**Description:** Software for detection and reporting of spindle or slow oscillation events, simple automatic EMG artifacts, and their co-occurance or respective matching non-events. SpiSOP was designed to process large data quanta at once and multiple datasets in parallel.

**Synonyms:** Spindles Slow Oscillation and Power-spectral-density

**Resource Type:** software resource, software toolkit, source code, data processing resource

**Keywords:** spindle, slow oscillation, frequency band, sleep, eeg, meg, emg artifact detection, matlab, sleep scoring, file conversion

**Funding:**

**Availability:** Open Source, Available for download, Runs on Windows, Runs on Mac OS, Runs on Linux

**Resource Name:** SpiSOP

**Resource ID:** SCR_015673

**Alternate URLs:** https://github.com/Frederik-D-Weber/spisop

**License:** GPLv2+

**Record Creation Time:** 20220129T080327+0000

**Record Last Update:** 20250514T061725+0000

## Ratings and Alerts

No rating or validation information has been found for SpiSOP.

No alerts have been found for SpiSOP.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 30 mentions in open access literature.

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

Lutz ND, et al. (2024) Sleep shapes the associative structure underlying pattern completion in multielement event memory. Proceedings of the National Academy of Sciences of the United States of America, 121(9), e2314423121.

Boon ME, et al. (2024) The daily reciprocal associations between electroencephalography measured sleep and affect. Journal of sleep research, e14258.

Rehel S, et al. (2024) Sleep oscillations related to memory consolidation during aromatases inhibitors for breast cancer. Sleep medicine, 121, 210.

Elia C, et al. (2023) Effects of sleep disturbances and circadian rhythms modifications on cognition in breast cancer women before and after adjuvant chemotherapy: the ICANSLEEP-1 protocol. BMC cancer, 23(1), 1178.

Bastian L, et al. (2022) Spindle-slow oscillation coupling correlates with memory performance and connectivity changes in a hippocampal network after sleep. Human brain mapping, 43(13), 3923.

Beck J, et al. (2022) Stress dynamically reduces sleep depth: temporal proximity to the stressor is crucial. Cerebral cortex (New York, N.Y. : 1991), 33(1), 96.

Roebber JK, et al. (2022) Effects of Anti-Seizure Medication on Sleep Spindles and Slow Waves in Drug-Resistant Epilepsy. Brain sciences, 12(10).

Bovy L, et al. (2022) Non-REM sleep in major depressive disorder. NeuroImage. Clinical, 36, 103275.

Samanta A, et al. (2021) Sleep Leads to Brain-Wide Neural Changes Independent of

Allocentric and Egocentric Spatial Training in Humans and Rats. Cerebral cortex (New York, N.Y. : 1991), 31(11), 4970.

Weber FD, et al. (2021) Coupling of gamma band activity to sleep spindle oscillations - a combined EEG/MEG study. NeuroImage, 224, 117452.

Lutz ND, et al. (2021) Occipital sleep spindles predict sequence learning in a visuo-motor task. Sleep, 44(8).

Kurz EM, et al. (2021) How do children with autism spectrum disorder form gist memory during sleep? A study of slow oscillation-spindle coupling. Sleep, 44(6).

Carbone J, et al. (2021) The effect of zolpidem on targeted memory reactivation during sleep. Learning & memory (Cold Spring Harbor, N.Y.), 28(9), 307.

Gott J, et al. (2021) Virtual reality training of lucid dreaming. Philosophical transactions of the Royal Society of London. Series B, Biological sciences, 376(1817), 20190697.

Beck J, et al. (2021) Hypnotic Suggestions Increase Slow-Wave Parameters but Decrease Slow-Wave Spindle Coupling. Nature and science of sleep, 13, 1383.

Forcato C, et al. (2020) Reactivation during sleep with incomplete reminder cues rather than complete ones stabilizes long-term memory in humans. Communications biology, 3(1), 733.

Spanò G, et al. (2020) Sleeping with Hippocampal Damage. Current biology : CB, 30(3), 523.

Cha KS, et al. (2020) Impaired slow oscillation, sleep spindle, and slow oscillation-spindle coordination in patients with idiopathic restless legs syndrome. Sleep medicine, 66, 139.

Cross ZR, et al. (2020) Individual alpha frequency modulates sleep-related emotional memory consolidation. Neuropsychologia, 148, 107660.

Bolinger E, et al. (2019) Sleep's benefits to emotional processing emerge in the long term. Cortex; a journal devoted to the study of the nervous system and behavior, 120, 457.