

Resource Summary Report

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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-occurrence 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: data processing resource, software resource, software toolkit, source code

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

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: 20260905T132757+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 31 mentions in open access literature.

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

Lutz ND, et al. (2025) Long-Term Visual Gist Abstraction Independent of Post-Encoding Sleep. Journal of sleep research, e70106.

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.

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

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).

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.

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

- 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.
- Weber FD, et al. (2021) Coupling of gamma band activity to sleep spindle oscillations - a combined EEG/MEG study. *NeuroImage*, 224, 117452.
- 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).
- Beck J, et al. (2021) Hypnotic Suggestions Increase Slow-Wave Parameters but Decrease Slow-Wave Spindle Coupling. *Nature and science of sleep*, 13, 1383.
- 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.
- 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.
- Span?? 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.