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Title: A New Approach for Automatic Sleep Scoring:
Combining Taguchi Based Complex-Valued Neural Network
and Complex Wavelet Transform

Author: Musa Peker



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Highlights

In this study, a new complex classifier-based approach is presented for automatic sleep scoring using EEG signals.

The effect of complex-valued classifiers shown to have a positive impact on classification accuracy of EEG signal data.

One of the interesting parts of the study is the parameter optimization that significantly affects system performance.

Proposed method can be used to design a computer support system for rapid and accurate sleep stage scoring.

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