

# Accepted Manuscript

An accurate sleep stages classification system using a new class of optimally time-frequency localized three-band wavelet filter bank

Manish Sharma, Deepanshu Goyal, Achuth Pv, U. Rajendra Acharya



PII: S0010-4825(18)30106-9

DOI: [10.1016/j.compbimed.2018.04.025](https://doi.org/10.1016/j.compbimed.2018.04.025)

Reference: CBM 2950

To appear in: *Computers in Biology and Medicine*

Received Date: 26 February 2018

Revised Date: 27 April 2018

Accepted Date: 28 April 2018

Please cite this article as: M. Sharma, D. Goyal, A. Pv, U.R. Acharya, An accurate sleep stages classification system using a new class of optimally time-frequency localized three-band wavelet filter bank, *Computers in Biology and Medicine* (2018), doi: 10.1016/j.compbimed.2018.04.025.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Highlights

- A novel three-band time-frequency localized (TBTFL) wavelet filter bank (FB) for analysis of sleep-stage EEG signals.
- A new Single-channel EEG based automated sleep scoring system.
- A large population dataset is used for six multiple-class classification problems.
- The model surpasses all existing models.

Download English Version:

<https://daneshyari.com/en/article/6920492>

Download Persian Version:

<https://daneshyari.com/article/6920492>

[Daneshyari.com](https://daneshyari.com)