**Da “A survey on EEG‑based neurophysiological research for emotion**

**Recognition” di Badajena et al**

1. Li 2018

* Artifact Filtering
  + Hanning window Bandpass filter; raw data down sampled; removing electromyogram (EMG) and electrooculogram (EOG); finite impulse response (FIR)
* EEG Features – feature extraction
  + Theta rhythm (4–7 Hz), alpha rhythm (8–15 Hz), beta rhythm (16–31 Hz), and gamma rhythm (> 32 Hz) ERD/ERS (43.5–94.5 Hz), DASM, PSD, The filter-based methods. The RFE-based method
* Classification task
  + SVM and random forest (RF) 83.33% (AUC = 0.904) on the SEED dataset

1. Jin ET.AL 2020

* Artifact Filtering
  + 0-75 Hz bandpass filter; Down sampling to 200 Hz; Categorical labels minimize noisy channels
* EEG Features – feature extraction
  + Delta (0–4 Hz), theta (4–7.5 Hz), alpha (7.5–12.5 Hz), beta (12.5–30 Hz), and gamma (30–40 Hz)
  + 62 × 62 channel wise feature for SEED
* Classification task
  + SVM SEED-99.63% over three-class emotion classification (positive, neutral, negative)

1. Sakalle et al. 2021

* Artifact filtering
  + Down sampling of data using 256 Hz frequency and sampling frequency 45–64 Hz, Notch filter used
* Feature extraction – NULL
* Classification task
  + LSTM for four class of emotion classification accuracy as 83.12%, 86.94%, 91.67%,
  + For three class of emotions LSTM based deep learning model provides classification
  + Accuracy as 81.33%, 85.41%, 89.44%, and 92.66% for 50–50, 60–40, 70–30, and tenfold cross-validation

1. Topic et al 2021

* Artifact filtering - NULL
* Feature extraction
  + Delta (0–4 Hz), theta (4–8 Hz), alpha (8–16 Hz), beta (16–32 Hz), and gamma (32–64 Hz)
  + DWT, DE, FD, PSD, HP
* Classification task
  + Modello CNN e SVM su SEED 88.5

Perché su tutte le bande?

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8955420/

Immagine che contiene tavolo

Descrizione generata automaticamente

Perché utilizzare ica invece di PCA?

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6650744/