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Cross MFF - Analysis in studying the obsessive-compulsive disorder

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Abstract

© Published under licence by IOP Publishing Ltd. There were demonstrated capabilities of the Memory Function Formalism (MFF) in analyzing cross correlations in human brain bioelectric activity at obsessive-compulsive disorder (OCD). To extract the information about collective phenomena in (electroencephalogram) EEG brain activity we use the power spectra of memory functions and the memory quantifiers. We discover the pairs of the electrodes with the greatest differences in dynamic and stochastic parameters for patients with the different condition. The high OCD condition is characterized by the influence of the memory effects. The MFF cross correlation analysis allow to describe the collective phenomena in EEG dynamics at OCD including the dynamic, spectral and stochastic behavior.

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