

Ambient Brain Computer Interface

Medical and habilitation field

- To grasp human conditions
- To deliver appropriate service

**Common field:
Ambient BCI**

Industrial field

- Human-centered system
- Downsizing of devices



To control exogenous stimulus using BCI

Individual Characteristic analysis Based on EEG analysis

Issues

- Intra- and inter- individual characteristic



Solutions

- To consider human personality
- To propose methods based on gray model

**Novelty
algorithm**

【Ambient Brain Computer Interface】

• Concept;

This study constructs novel electroencephalogram (EEG) interface, which is ambient BCI, based on EEG analysis techniques. Final goal of this study is to create the assist system for therapy.

• Applications

- To detect an inclination, thinking, preference, uncomfortable feeling
- To control exogenous stimulus

【Individual Characteristic Analysis in EEG】

• Concept;

This study analyzes an intra- and inter-individual characteristic in EEG. One is affected by the influence of personality. We propose a method to analyze the EEG considering personality. Also, the proposed method employ a technique based on gray model.

• Applications

- To make new EEG interface
- To detect the human habit

Keywords: EEG, stimulus, personality

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