

## 基於趨勢觀察之預測器在微電網上之應用

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### 摘要

本文提出了一個基於趨勢觀察之預測器，演算法是利用離散化的純預測器和數據累加生成運算的前處理，主要特點是具有最少的計算量、較大的預測長度以及非基於模式之預測，以致於有較廣的應用性，從驗證範例和電力負載預測的應用結果，可以證實根據少量的數據，提出的方法能簡單地提供滿意的預測。

**關鍵詞：**灰色預測，累加生成運算，z 轉換，電力負載預測

## Trend-Observation-Based Predictor: Applications to a Micro-Grid

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### ABSTRACT

A predictor based on the trend observation is proposed in this paper. The algorithm of which utilizes a pure predictor in discrete time and the data pre-processing of an accumulated generating operation with properties of the low calculation load, longer prediction horizon and non-model-based prediction possessed of great adaptation to applications. The proposed method simply gives the satisfactory prediction according to a few data and is verified from demonstration examples and a result of power load forecasting.

**Key Words:** grey forecasting, accumulated generating operation, z-transform, power load forecasting