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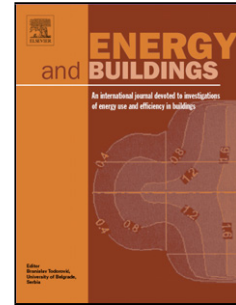
Title: Short-Term Residential Electric Load Forecasting: A Compressive Spatio-Temporal Approach

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Highlights

- Several spatio-temporal load forecasting approaches are proposed for residential units.
- The proposed approaches exploit sparse relational patterns among the time series of houses and behavioral similarities between end-users.
- A “decompose-forecast-aggregate” framework is proposed to further improve the forecasts.
- Using Pecan Street datasets, we testify our methods on real data recorded from 173 houses in Austin, Texas.
- The proposed methods significantly improve forecasts compared to the considered benchmark methods.

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