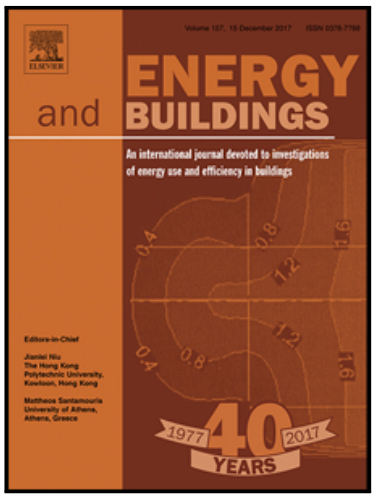

An identification method for room temperature dynamic model based on analytical solution in VAV system

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Highlights:

- **Dynamic model of room temperature is built by analytical method and characteristic parameters can be calculated directly through analytical solutions.**
- **Other factors affecting the room temperature response, including the heat storage of envelope structures and time delay, are also considered in the model.**
- **Models are simulated and compared with measured data in experiments.**
- **Proposed model has a higher fitting goodness than classical model.**