

## عنوان مقاله:

Uncertainties due to Fuel Heating Value and Burner Efficiency on Performance Functions of Turbofan Engines Using Monte Carlo Simulation

## محل انتشار:

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## نویسندگان:

m Gorji - Department of Mechanical Engineering, Babol Noshirvani University of Technology, Babol, Iran

a Kazemi - Department of Mechanical Engineering, Babol Noshirvani University of Technology, Babol, Iran

dd Ganji

## خلاصه مقاله:

In this paper, the impacts of the uncertainty of fuel heating value as well as the burner efficiency on performance functions of a turbofan engine are studied. The mean value and variance curves for thrust, thrust specific fuel consumption as well as propulsive, thermal and overall efficiencies are drawn and analyzed, considering the aforementioned uncertainties based on various Mach numbers at a number of flying altitudes in order to yield a more accurate prediction of values of performance functions. The results of this study can be of essential significance for an optimal and robust design of turbofan engines. This study is done employing Monte Carlo Simulation method which is a probabilistic analysis method.

## کلمات کلیدی:

Monte Carlo Uncertainty Turbofan Engine

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/308835>

