

## عنوان مقاله:

Thermodynamic analysis of solid oxide fuel cell hybrid power plant and gas turbine

## محل انتشار:

سومین کنفرانس ملی صنعت نیروگاههای حرارتی (سال: 1390)

تعداد صفحات اصل مقاله: 5

## نویسندگان:

Reza barmaki - Tabriz University

mir biyuk Ehghagh

Nader Nourdanesh

## خلاصه مقاله:

Solid oxide fuel cells, due to high efficiency in converting chemical energy to electrical energy of fossil fuels and minimal emissions of pollutants, producing one of the priorities set in the future. In addition, the ability of solid oxide fuel cells in combination with cycle gas turbine power cycles such, has led the combined system as proposed for future powerplants is considered in this paper, a solid oxide fuel cell hybrid system in combination with a cycle gas turbine with recovery has been considered. With electrochemical fuel cell modeling and cell voltage to V with electrochemical analysis and fuel cell voltage gain cell with Thermodynamic analysis, efficiency and system power mix is obtained. Results show that an electrical current density and pressure can determine work efficiency was around 60%.

## کلمات کلیدی:

Thermodynamic analysis , solid oxide, fuel cell, hybrid power plant , gas turbine

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/156252>

