

#### عنوان مقاله:

Application, design and surface modification of fuel cells with electrospinning of Fe2O3 and SiO2 nanoparticles and polyether sulfone nanofiber in power generation and reduction of air pollution

### محل انتشار:

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#### نویسنده:

Mehrdad ghaderi - Department of Electrical and Computer Engineering, Mechatronics engineering, University of Mohaghegh Ardabili, Ardabil, Iran

#### خلاصه مقاله:

Air is one of the main and important sources for the life of all living beings. One of the main reasons for the increase in pollution of this important source in recent centuries is the increase in industries that produce pollutants such as carbon monoxide and hydrocarbons. An important challenge in today's economy and technology is to produce energy efficiently without the need for pollution. Political and economic crises and issues such as limited fossil fuel sustainability, environmental concerns, overcrowding, economic growth and consumption rates are all topics that are widely considered by thinkers to find better and more appropriate solutions to the world's energy problems., Especially environmental crises, has been busy. Methods that produce high-efficiency electrical energy from a direct combination of fuel and oxidant without creating environmental and noise pollution are fuel cells that are used to generate energy with new technology. In this work, we used electrospinning technique to superimpose the surface of the cathode and .anode, iron and silica nanofibers and polyester sulfone nanofiber (PES) to increase the surface to volume ratio

## کلمات کلیدی:

air pollution, Fuel cells, nanofibre Polyether sulfone (PES), nanofibers Fe2O3, environmental, nanoparticles SiO2

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