Tehran High Temperature Solar System

In the heart of Tehran, a city where the sun blazes with intensity, a groundbreaking study is shedding light on the future of energy optimization in high-rise buildings.

In order to investigate the scope of uncertainty in projections of GCMs for Tehran province, a multi-model projection composed of 15 models is employed.

In this study, we aim to compare the climatic conditions of Surface Urban Heat Island (SUHI) in Tehran and its suburbs using day/night time data from three satellites. A high-resolution Land Surface ...

Due to its geographical location and favorable climatic conditions, Iran is considered one of the countries with high potential in the field of solar energy. This article explores the solar irradiance ...

The results show that MENA region have a high potential for large scale PV plant due to its high amount of solar irradiation, and that the annual electricity production ranges between 70.1- 94.9 GWh, 98.123 ...

This paper evaluates the performance of a PV system in five different cities of Iran with diverse climatic conditions in order to investigate the effect of weather and climatic conditions on...

Comparison of the land-use data with the data from temperature maps of the four study periods shows that the highest temperatures belong to wastelands of western Tehran and ...

In central Tehran, where building heights exceed street widths, the UHI effect is particularly strong due to a reduced solar energy balance in narrow streets, resulting in higher urban...

Considering the very high solar radiation potential in Iran, this study used roof solar collectors to partially supply the heat required for domestic hot water (DHW) and heat the indoor ...