

1- The influence of Aspect Ratio and angle of attack on the Aerodynamic Performance of Airfoils

تأثير نسبة الأبعاد وزاوية الهجوم في الأداء الأيروديناميكي للسطوح الانسيابية
حسب كتاب مجلة جامعة دمشق الرقم / 2040 / ص بتاريخ 2009/8/6.

Abstract:

The aerodynamic performance of a flying body depend on many parameters, as flow condition or the body design. In this research the influence of the wing aspect ratio and the angle of attack on the airfoil aerodynamic characteristic is investigated.

2- Wind Power Extraction by Fluctuating Wing.

استخلاص طاقة الرياح بجناح متقلب
حسب كتاب مجلة جامعة دمشق الرقم / 40 / ص بتاريخ 2010/1/14.

Abstract :

This research introduces the possibility of exploiting the phenomenon of wing flutter in aircraft and put them in building a new system for extracting energy from the wind .

3- Practical investigation for the reliability of aerofoil program packages relating with the aerodynamic performance

التحقق العملي من موثوقية البرامج الجاهزة المتعلقة بأداء السطوح الانسيابية
حسب كتاب مجلة جامعة حمص الرقم 3264 في 2010/7/14

Abstract :

This research examines the degree of reliability of the available software about the properties of aerofoil compares to the practical results.

4- Design of the Wind turbine for low wind speeds.

تصميم توربين رياح لسرع الرياح المنخفضة
2010 – 1st. French & Syrian Conference. In Renewable energies. As participant.

Abstract:

Arab countries occupy large areas of tracts with low speed wind, which have bad affects on the efficiency and investment of the wind energy in those areas, The design of the imported wind turbines may be not suitable for the available winds speed, Which necessitated to design the wind power generator according to the low speed wind,

5- Behaviour of the wind turbine during the starting period at fixed blades angle.

سلوك توربين الرياح خلال مرحلة الاقلاع عند ثبوت زاوية الريش

2011- 1st Scientific conference on energy application and renewable energies.
University of technology Baghdad 2011. As participant.

Abstract:

The problem of self-starting is considered as the most important problems facing the work of wind turbines at fixed blade angle, especially at low wind speed. The lack of response of the turbine to start-up at the medium wind speed lead to a decline in energy production, which makes the idea of wind energy investment useless and disappointing.

6- Study the possibility of using savonius wind turbine in the lifting system of wells water.

دراسة إمكانية استخدام توربين الرياح نوع سافينوس في منظومة رفع مياه الآبار

2013-National renewable energy conference and their application

Abstract:

Water is the important source of life, and the availability of water has become more crucial than ever before. The demand for water grows along with the world's population. The mankind need of water for irrigate land addition to industrial demand, as well as clean water for drinking purposes.

7- Design and Construction of Hybrid Solar-Wind System used for Irrigation Projects .

Indian journal of applied research. Volume 4 July 2014.

Abstract :

This work deals with the design and implementation of a solar-wind system used to irrigate the agricultural Iraqi areas in the far and desert areas.

8- Design and construction of water solar distillation work by steam circulation technique

Abstract :

The shortage of drinking and agricultural water in many areas of the world, and especially in the Middle East is now a great problem. This paper presents a suggestion of a new system design to realize the high drinkable water capacity and conservation of energy with high thermal efficiency.

9- : Design and construction of battery (Deep cycle) specially for electrical power storage with specifications of 12V/60Ah

Abstract:

The aim of this research is to study the possibility of building an efficient battery for energy storage (12V/60Ah) that can work for a long service time.