Wind power generation Wind organic

To address complex nonlinearities in the system, the KAN is utilized to model and approximate these dynamics, refining the LSTM predictions. The integration of these advanced ...

Inspired by the interlocking mechanism of bird flight feathers in nature, we have developed feather-inspired triboelectric nanogenerators (FI-TENGs) in the form of vertical wind ...

This Review analyses developments, costs and challenges of wind-driven triboelectric nanogenerators and evaluates research directions towards industrial applications.

Wind power is the nation"s largest source of renewable energy, with more than 150 gigawatts of wind energy installed across 42 U.S. States and Puerto Rico. These projects generate ...

The results revealed that the organic Rankine cycle can be a suitable choice for cooling wind turbines while simultaneously produce the power. Both exergy and energy analysis are conducted.

The aim of this work is the investigation of the performance of an innovative biomass/wind energy integrated system for Combined Heat and Power (CHP) generation in small-scale ...

While the concept of capturing wind energy from natural sources is well-established, this paper pioneers the exploration of artificial wind generated by human activities.

In this work, we design and fabricate a miniature direct current (DC) windmill generator based on dynamic semiconductor/metal Schottky triboelectric nanogenerators (TENGs), ...

Unlike conventional ground-based wind turbines, which are often limited by variable wind conditions and geographic constraints, high-altitude wind energy systems have the potential to ...