

1 Introduction. Wind energy production is dominated by horizontal axis turbines (Global Wind Energy Council 2015), but several other turbine types have been proposed. For example, drag-driven Savonius turbines (Savonius Reference ...

Based on this finding, we propose a Mid-Chord Suction-Parameter (MCSP), that is more effective for wind turbine airfoils. The MCSP exhibits a breakdown in magnitude at the onset of the ...

such that, within Europe, 11.6% of energy demand was provided solely from wind energy in 2018 [1]. The installed capacity of onshore wind turbines has increased globally by 87%, between ...

The wind turbine rotor is connected to a variable-speed generator through a speed-increasing gearbox. The generator output is controlled by the power converter to follow the commanded ...

This paper investigates the stall-induced vibrations of a wind turbine rotor operating at idling state, and a strategy to mitigate the stall-induced vibrations is proposed. ...

The decrease in power with increasing wind speeds is due to aerodynamic effects on the turbine blades (regions of the blade are stalled, propagating from the hub and outwards with increasing wind speeds). ... Like the pitch-regulated wind ...

Web: <https://www.nowoczesna-promocja.edu.pl>

