

Title: Optimal control of wind power generation system

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This study proposes a combined approach utilizing an ultra-capacitor energy storage system and fuzzy-control-based pitch angle adjustment to ...

Two major systems for controlling a wind turbine. Change orientation of the blades to change the aerodynamic forces. With a power electronics converter, have control over generator torque. To ...

This research paper discusses a wind turbine system and its integration in remote locations using a hybrid power optimization approach and a hybrid storage system.

This study proposes a combined approach utilizing an ultra-capacitor energy storage system and fuzzy-control-based pitch angle adjustment to address these challenges.

This document explores the fundamental concepts and control methods/techniques for wind turbine control systems. Wind turbine control is necessary to ensure low maintenance costs and ...

The traditional variable pitch controller cannot realize global precision control of the wind power system. To solve the problem, this paper combines Takagi-Sugeno (T-S) fuzzy model with ...

So, this note presents an adaptive optimal secure control strategy entailing reinforcement learning (RL) neural network (NN) using the filter error to compensate the detrimental effects of FDI ...

Discussion is focused on a global dynamic optimization approach to wind power systems using a set of optimization criteria which comply with a comprehensive group of requirements...

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