

Special Issue

Simulation, Prediction, Optimization and Application of the Wind Turbine in Modern Wind Power Industries

Message from the Guest Editor

The wind power industry is young compared with conventional power generation technologies such as hydro, coal, natural gas, and nuclear. This industry is involved with the design, manufacture, installation, optimisation and maintenance of wind turbines as well as other power facilities. Wind turbine companies design, analyze, assemble, and support the development and maintenance of wind turbines. Significant decisions challenge them to incorporate turbine design components such as generator type, gearbox, materials, etc. In order to handle these challenges and achieve the highest level of power output, a wide range of classical and modern methods have been applied. In this way, optimising the wind turbine distribution in a wind farm plays a significant role to derive the maximum power for the minimum installation costs. Furthermore, developing an accurate forecasting model for wind power is substantial for the stable and cost-effective operation of power systems with high wind power perception.

Guest Editor

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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