

Special Issue

Challenges and Research Trends of Identification of Mechanical Systems in the Energy Sector

Message from the Guest Editor

It is a well-established fact that demand for mechanical systems' reliability, durability, and safety of exploitation is increasing. For economic reasons, shorter design time, cost reduction, longer exploitation period, and minimization of necessary inspections and repairs are receiving increasing attention. In the energy sector, faults of complex systems can be diagnosed by identifying parameters of mechanical subsystems. In turn, the properties of mechanical subsystems can be identified by testing other subassemblies, e.g., electrical, magnetic, acoustic, etc. In recent years, the scope of challenges related to the interactions of mechanical structures of machines with semiconductor devices and microprocessors, as well as measurement and control systems with high dynamics and precision, has increased. Therefore, recently great attention has been paid to the scope and accuracy of such systems' modelling while the issues of novel design, manufacturing and maintenance methods remain open.

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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