Special Issue

Exergoeconomic Analysis of Thermal Systems

Message from the Guest Editors

Exergoeconomics is a unique exergy-based method that identifies and calculates the location, magnitude, causes, and costs of thermodynamic inefficiencies in thermal system. The real inefficiencies in such system are the exergy destruction and the exergy loss. Through a comparison between investment cost and cost of exergy destruction, the researcher can decide for each component of a system whether (a) an increase in the efficiency at the expense of investment cost or (b) a decrease in the investment cost at the expense of the efficiency would increase the cost effectiveness of the overall system. In order to better understand the interactions among different components and the real potential for improving the system, an advanced exergoeconomic analysis has been developed and already successfully applied to several systems. The conclusions obtained from the analysis and optimization based on conventional or advanced exergoeconomic analysis cannot usually be obtained when exergetic and economic analyses are applied separately. Research and review papers dealing with the development, application of exergoeconomic analysis, evaluation, optimization are sought for this Special Issue.

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Message from the Editor-in-Chief

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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