

Special Issue

Sensitivity Analysis and Decision Making

Message from the Guest Editors

This Special Issue is devoted to advances in research on sensitivity analysis methods and their interdisciplinary applications. Via sensitivity analyses, various sources of uncertainty in a mathematical model are studied in terms of how they contribute to the model's overall uncertainty. The model is analyzed using specific values for inputs, and the space of uncertain inputs may be explored using many mathematical approaches. The complexity of mathematical approaches and the interpretation of results provide great possibilities for the use of sensitivity analysis methods, including regression, variance-based techniques, distribution-based methods, entropy, fuzzy sets, and many other methods. There are numerous application areas in all disciplines of science where mathematical models are used, including computer science, biology, medicine, physics, engineering, economics... One of the key applications of sensitivity analysis is in the utilization of models by managers and decision-makers. This Special Issue welcomes articles that address the challenges and opportunities of sensitivity analysis in all its facets.

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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