



**EUSFLAT 2017 Special  
Issue of  
SOFT COMPUTING  
(Springer)  
on  
Extensions of Fuzzy Sets  
in Decision Making**

**Description:**

Decision making is the study of identifying and choosing alternatives based on the values and preferences of a decision maker. Making a decision implies that there are alternative choices to be considered, and in such a case we want not only to identify as many of these alternatives as possible but to choose the one that best fits with our goals, objectives, desires, values, and so on.

Fuzzy sets have a history starting from ordinary fuzzy sets and extending to other types of fuzzy sets: Ordinary fuzzy sets (Zadeh, 1965), interval-valued fuzzy sets (Zadeh, 1975; Grattan-Guinness, 1975; Jahn, 1975; Sambuc, 1975), type-2 fuzzy sets (Zadeh, 1975), intuitionistic fuzzy sets (Atanassov, 1986), fuzzy multisets (Yager, 1996), neutrosophic sets (Smandarache, 1999), nonstationary fuzzy sets (Garibaldi and Ozen, 2007), Hesitant fuzzy sets (Torra, 2010). Each of these extensions has been used in the solutions of single criterion and multiple criteria decision making problems. Ordinary fuzzy sets, intuitionistic fuzzy sets and hesitant fuzzy sets are the most used extensions in the fuzzy sets history, respectively. Neutrosophic sets are the generalization of intuitionistic fuzzy sets and they seem to be competitive with the other extensions of fuzzy sets in the future.

This special issue aims to publish the best papers trying to solve single criterion or multiple criteria decision making problems using the extensions of ordinary fuzzy sets.

**Topics include, but not limited to**

- Decision Support systems in Sustainability and Environment
- Making decision under uncertainty in health care systems
- Intuitionistic & Hesitant Fuzzy Multiple Criteria Decision Making
- Advances in Decision Making Under Uncertainty, Ignorance, Inconsistency, and Vagueness
- Logistics Engineering: Modeling, Optimization and Simulation
- Operations research and operations management
- Production planning and control
- Data mining and big data
- Intelligent decision making
- Strategic Decision Making
- Engineering economics decision making
- Statistical decision making

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