

**Atanassov, Krassimir T.**

**Intuitionistic fuzzy sets.** (English) Zbl 0631.03040  
Fuzzy Sets Syst. 20, 87-96 (1986).

By an intuitionistic fuzzy set (IFS) the author understands a pair of generalized characteristic functions and hence a generalization of a fuzzy set. These two functions for each point of the universe of discourse describe separately its degrees of membership and of nonmembership with respect to the IFS they characterize. These two degrees not necessarily add up to one. The motivation for introducing IFSs is explained with an example, set algebraic operations are introduced and some of their elementary properties given.

Reviewer: [Siegfried J. Gottwald \(Leipzig\)](#)

**MSC:**

[03E72](#) Theory of fuzzy sets, etc.

Cited in **74** Reviews  
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**Keywords:**

degrees of membership; degrees of nonmembership; intuitionistic fuzzy set

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**References:**

- [1] Atanassov, K., Intuitionistic fuzzy sets, () · [Zbl 0597.03033](#)
- [2] Atanassov, K.; Stoeva, S., Intuitionistic fuzzy sets, (), 23-26 · [Zbl 0597.03033](#)
- [3] Atanassov, K.; Stoeva, S., Intuitionistic L-fuzzy sets, (), 539-540
- [4] Atanassov, K., Intuitionistic fuzzy relations, (), 56-57

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