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A note on intuitionistic fuzzy mappings. (English) Zbl 1260.03097

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Summary: In this paper, the concept of intuitionistic fuzzy mapping as a generalization of fuzzy mapping is presented, and its relationship with intuitionistic fuzzy relations is derived. Moreover, some basic operations of intuitionistic fuzzy mappings are defined, hence we can conclude that all of intuitionistic fuzzy mappings constitute a soft algebra with respect to these operations. Afterwards, the Atanassov's operator is applied to intuitionistic fuzzy mappings and the corresponding properties are examined. Finally, the decomposition and representation theorems of intuitionistic fuzzy mappings are established.

MSC:

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

Cited in **2** Documents

Keywords:

[truncation projection](#); [intuitionistic fuzzy mapping](#); [truncation mapping](#); [decomposition theorem](#); [representation theorem](#)