عنوان مقاله:

ON COMPACTNESS AND G-COMPLETENESS IN FUZZY METRIC SPACES

محل انتشار:

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خلاصه مقاله:

In [Fuzzy Sets and Systems ۲۷ (۱۹۸۸) ۳۸۵-۳۸۹], M. Grabiec in- troduced a notion of completeness for fuzzy metric spaces (in the sense of Kramosil and Michalek) that successfully used to obtain a fuzzy version of Ba- nachs contraction principle. According to the classical case, one can expect that a compact fuzzy metric space be complete in Grabiecs sense. We show here that this is not the case, for which we present an example of a compact fuzzy metric space that is not complete in Grabiecs sense. On the other hand, Grabiec used a notion of compactness to obtain a fuzzy version of Edelstein s contraction principle. We present here a generalized version of Grabiecs version of the .Edelstein xed point theorem and dierent interesting facts on the topology of fuzzy metric spaces

کلمات کلیدی:

Fuzzy metric space, Cauchy sequence, G-completeness, Compactness, Fixed point theorem