Fixed Point Theorems For 1-Set Contractions

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Abstract

Amann [2] and Nussbaum [5] have introduced the fixed point indices of k-set operators \((0 \leq k < 1)\) and condensing operators to derive some fixed point theorems. As a compliment, Li Guozhen [4] has defined the fixed point index of 1-set contractive operators and obtained some fixed point theorems of 1-set contractive operators. The main purpose of this paper is to generalize the result [4, Theorem 3] of Li Guozhen by relaxing the condition 'bounded' on the subset \(D\) of the Banach space \(E\). In addition, our method is also different from that of Guozhen.

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References


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