

Rezapour, Sh.; Haghi, R. H.

Fixed point of multifunctions on cone metric spaces. (English) Zbl 1171.54033
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Summary: On a vector space, one can define an order by using a cone in the vector space. In this way, *L.-G. Huang* and *X. Zhang* [J. Math. Anal. Appl. 332, No. 2, 1468–1476 (2007; Zbl 1118.54022)] reviewed cone metric spaces as a generalization of metric spaces with a different view. Most known cones are normal with normal constant $M = 1$. In this paper, we give some results about fixed point of multifunctions on the cone metric spaces with normal constant $M = 1$. In this way, we provide a generalization of the main results of *H. E. Kunze*, *D. La Torre* and *E. R. Vrscay* [J. Math. Anal. Appl. 330, No. 1, 159–173 (2007; Zbl 1115.47043)].

MSC:

54H25 Fixed-point and coincidence theorems (topological aspects)
54F05 Linearly ordered topological spaces, generalized ordered spaces, and partially ordered spaces
47H10 Fixed-point theorems
47H04 Set-valued operators

Cited in **1** Review
Cited in **22** Documents

Keywords:

cone metric space; cone topology; fixed point; multifunction

Full Text: [DOI](#)

References:

- [1] DOI: 10.1016/j.jmaa.2005.03.087 · Zbl 1118.54022 · doi:10.1016/j.jmaa.2005.03.087
- [2] DOI: 10.1007/BF02771543 · Zbl 0192.59802 · doi:10.1007/BF02771543
- [3] DOI: 10.1007/s101140200165 · Zbl 1027.47058 · doi:10.1007/s101140200165
- [4] DOI: 10.1016/j.jmaa.2006.07.045 · Zbl 1115.47043 · doi:10.1016/j.jmaa.2006.07.045
- [5] Mohebi H., Continuous Optimization, Current Trends and Modern Applications. Part II pp 343– (2005)
- [6] DOI: 10.1016/j.jmaa.2008.04.049 · Zbl 1145.54045 · doi:10.1016/j.jmaa.2008.04.049

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