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Some fixed point theorems via partial order relations without the monotone property

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ABSTRACT.

The main aim of this paper is to consider some fixed point theorems via a partial order relation in complete metric spaces, when the considered mapping may not satisfy the monotonic properties. Furthermore, we also obtain some couple fixed point theorems, which can be viewed as an extension of a result that was presented in [V. Berinde, *Generalized coupled fixed point theorems for mixed monotone mappings in partially ordered metric spaces*, Nonlinear Anal., **74** (2011), 7347–7355].

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