Krichen, Bilel; Mefteh, Bilel; O’regan, Donal
Fixed point theorems involving 1-set-weakly contractive operators in WC-Banach algebras.
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Summary: In this paper, we establish some fixed point theorems for the sum and the product of nonlinear weakly sequentially continuous operators acting on a WC-Banach algebra and involving 1-set-weakly contractive maps. The obtained results are applied to a nonlinear functional integral equation in a suitable Banach algebra. Our results are extensions of several earlier results.

MSC:
47A10 Spectrum, resolvent
47A55 Perturbation theory of linear operators
47A53 (Semi-) Fredholm operators; index theories
47H10 Fixed-point theorems

Keywords:
WC-Banach algebra; fixed point theorems; weak topology; measure of weak noncompactness; 1-set weakly contractive

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