GENERAL FRAMEWORK FOR SENSITIVITY ANALYSIS TO A CLASS OF NONLINEAR RELAXED COCOERCIVE QUASIVARIATIONAL INCLUSIONS

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Abstract. Based on the generalized resolvent operator technique, sensitivity analysis results for relaxed cocoercive quasivariational inclusions are obtained, which generalize a broad range of sensitivity analysis results, including strongly monotone quasivariational inclusions. Generalized resolvent operator technique is constructed on the emergence of the new notion of $A$-monotonicity — a significant generalization to the notion of maximal monotonicity. The notion of $A$-monotonicity is also referred to as $A$-maximal monotonicity in literature. Furthermore, the relaxed cocoercivity is illustrated by some examples.


Key words and phrases: Sensitivity analysis, relaxed cocoercive quasivariational inclusions, maximal monotone mapping, relaxed maximal monotone mapping, $A$-monotone mapping, $H$-monotone mappings, generalized resolvent operator technique.

REFERENCES