

THE STUDY OF IMPROVING THE HEDGE ALGEBRA BASED CONTROLLER

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TÓM TẮT:

In recent years, studies of hedge algebra applications in the field of control have been remarkably successful. Using soft calculating tools such as fuzzy logic and hedge algebra in control has some advantages such as (1) they can control the objects with incomplete information; (2) if the controllers are well-designed, they will be enough intelligent to control nonlinear objects.

However, the above controllers also contain some disadvantages including huge complexity of the algorithm, longer calculating time than PID controller's; so they can not control the objects requiring fast response.

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