

Thesis Title	Robust H_∞ Controller Design
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Level of Study	Master of Engineering in Electrical Engineering
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Year	1997

ABSTRACT

This thesis presents the design method and implementation of robust H_∞ controller for linear systems with all parameter uncertainties. The controller is an output feedback controller designed to obtain robust closed-loop stability, disturbance elimination and sensor noise attenuation, and also zero offset when type 0 system has step input. This robust H_∞ controller is applied to control level process in laboratory. The experimental results have shown satisfactory performance for the process under norm-bounded parameter uncertainties.