

Continuous Adaptive Robust Control for Non-Linear Uncertain Systems

Authors : Dong Sang Yoo

Abstract : We consider nonlinear uncertain systems such that a priori information of the uncertainties is not available. For such systems, we assume that the upper bound of the uncertainties is represented as a Fredholm integral equation of the first kind and we propose an adaptation law that is capable of estimating the upper bound and design a continuous robust control which renders nonlinear uncertain systems ultimately bounded.

Keywords : adaptive control, estimation, Fredholm integral, uncertain system

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