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Abstract

In this paper, a novel systematic design procedure is presented for a class of uncertain nonlinear systems. Such design procedure can remove the control input terms which contain the unknown nonlinearities as the control coefficients, and provides the following advantages: it not only avoids a possible singularity problem completely, but also simplifies the control design process. Moreover, the proposed design procedure can provide simple control structure under the relaxed conditions, which is easy to implement and can be applied to a wider class of systems.

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