

**Krstić, M.; Kanellakopoulos, I.; Kokotović, P. V.**

**Adaptive nonlinear control without overparametrization.** (English) Zbl 0763.93043  
Syst. Control Lett. 19, No. 3, 177-185 (1992).

Summary: A new design procedure for adaptive nonlinear control is proposed in which the number of parameter estimates is minimal, that is, equal to the number of unknown parameters. The adaptive systems designed by this procedure possess stronger stability properties than those using overparametrization.

**MSC:**

**93C40** Adaptive control/observation systems

Cited in **2** Reviews  
Cited in **928** Documents

**Keywords:**

design procedure; adaptive systems; overparametrization

**Full Text:** [DOI](#)

**References:**

- [1] Jiang, Z. P.; Praly, L., Iterative designs of adaptive controllers for systems with nonlinear integrators, (Proc. 30th IEEE Conf. Decision Control (1991), Brighton: Brighton UK), 2482-2487
- [2] Kanellakopoulos, I.; Kokotović, P. V.; Morse, A. S., Systematic design of adaptive controllers for feedback linearizable systems, IEEE Trans. Automat. Control, 36, 1241-1253 (1991) · [Zbl 0768.93044](#)
- [3] Kanellakopoulos, I.; Kokotović, P. V.; Morse, A. S., Adaptive output-feedback control of a class of nonlinear systems, (Proc. 30th IEEE Conf. Decision Control (1991), Brighton: Brighton UK), 1082-1087 · [Zbl 0787.93056](#)
- [4] Kokotović, P. V.; Kanellakopoulos, I.; Morse, A. S., Adaptive feedback linearization of nonlinear systems, (Kokotović, P. V., Foundations of Adaptive Control (1991), Springer-Verlag: Springer-Verlag Berlin), 311-346 · [Zbl 0787.93047](#)
- [5] Marino, R.; Tomei, P., Global adaptive observers and output-feedback stabilization for a class of nonlinear systems, (Kokotović, P. V., Foundations of Adaptive Control (1991), Springer-Verlag: Springer-Verlag Berlin), 455-493 · [Zbl 0787.93013](#)
- [6] Sastry, S. S.; Isidori, A., Adaptive control of linearizable systems, IEEE Trans. Automat. Control, 34, 1123-1131 (1989) · [Zbl 0693.93046](#)

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.