



► Volume 37, Issue 4 ► NONLINEAR ROBUST CONTROL FOR PARALLEL AC

Cybernetics and Systems > An International Journal Volume 37, 2006 - Issue 4

68 Views CrossRef citations to date Altmetric

Original Articles

NONLINEAR ROBUST CONTROL FOR PARALLEL AC/DC TRANSMISSION SYSTEMS: A NEW ADAPTIVE BACK-STEPPING APPROACH

Jun Fu 🔀 & Jun Zhao

Pages 347-359 | Published online: 01 Sep 2006

66 Cite this article

https://doi.org/10.1080/01969720600626360

Sample our



Repri

ABSTE

By utiliz

the pg perfo

approac

"classica

equivale

systems

dynamic

time est

We Care About Your Privacy

We and our 909 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Show Purposes link on the bottom of the webpage . Your choices will have effect within our Website. For more details, refer to our Privacy Policy. Here

We and our partners process data to provide:

Use precise geolocation data. Actively scan device

I Accept

Reject All

Show Purpose

means that

on

ack-stepping

er based on

al certainty-

rallel AC/DC

timator and

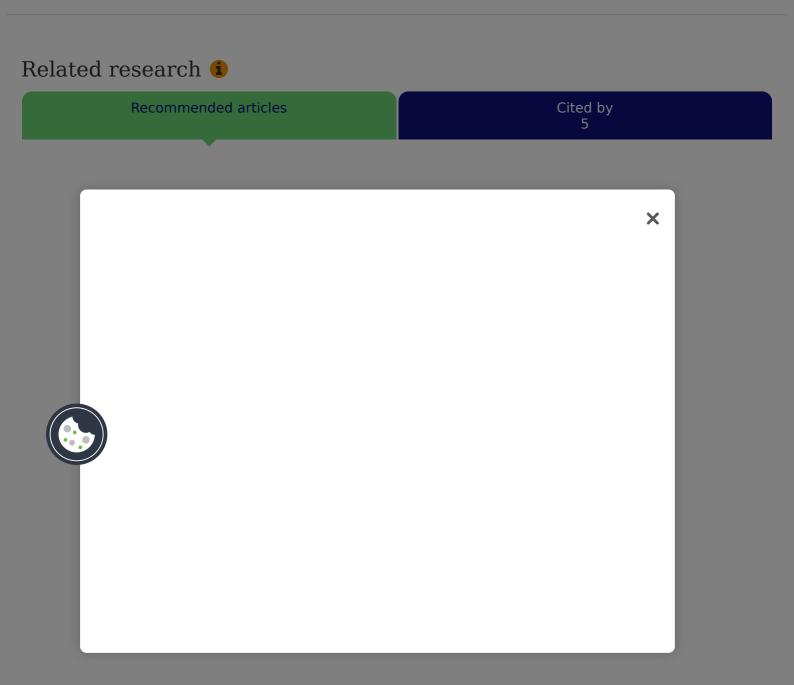
and the real-

s better

performances with respect to the response of the system and the speed of adaptation.

Simulation results demonstrate that the proposed approach is better than the design based on "classical" adaptive back-stepping in terms of properties of stability and parameter estimation and that it recovers the performance of the "full-information" controller, which is obtained by assuming that the parameters are known and apply standard back-stepping, hence it will be an alternative to practice engineering and applications.

This article was supported by the National Natural Science Foundation of China under Grants 60574013 and 60274009, the Specialized Research Fund for the Doctoral Program of Higher Education of China under Grant 20020145007, and the Natural Science Foundation of Liaoning Province under Grant 20032020.



Information for Open access Authors Overview R&D professionals Open journals Editors **Open Select** Librarians **Dove Medical Press** Societies F1000Research Opportunities Help and information Reprints and e-prints Advertising solutions Newsroom Accelerated publication Corporate access solutions Books Keep up to date Register to receive personalised research and resources by email Sign me up X or & Francis Group Copyright