

International Journal of Control, Automation, and Systems

Int J Contr Autom Syst

Volume 15 Number 2 April 2017

REGULAR PAPERS

Control Theory and Applications

Stability Analysis for Switched Positive Linear Systems under Statedependent Switching

X. Ding and X. Liu 481

Finite-time L₂-L_∞ Filtering for Nonlinear Stochastic Systems Based on a Novel Stochastic Finite-time Stability Theorem

M. Hou, A. Wu, and G. Duan 489

Mean Square Detectability of LTI Systems over Finite-state Digital Block-fading Channels

W. Chen, Y. Zou, N. Xiao, and Y. Niu 498

Principal Component Analysis Based Signal-to-noise Ratio Improvement for Inchoate Faulty Signals: Application to Ball Bearing Fault Detection

M. Hamadache and D. Lee 506

Stability Analysis of Linear Systems with An Interval Time-varying Delay— A Delay-range-partition Approach

X. Zhang, Y. Wang, and X. Fan 518

Decentralized Fault Tolerant Control of a Class of Nonlinear Interconnected Systems

H. Ferdowsi and S. Jagannathan 527

Active Fault-tolerant Control Against Actuator Fault and Performance Analysis of the Effect of Time Delay Due to Fault Diagnosis

Q. Shen, B. Jiang, and P. Shi 537

Fault Recoverability Analysis of Nonlinear Systems: A Piecewise Affine System Approach

W. Ren, H. Yang, and B. Jiang 547

Intermittent Failure Detection of Multiple Electrical Connectors in EWIS

S. Zhang and Z. Cai 557

Region Stability Analysis for Switched Nonlinear Systems with Multiple Equilibria

R.-W. Guo and Y.-Z. Wang 567

Output Control of MIMO System with Unmatched Disturbance based on High-order Unknown Input Observer

J. Zhang and F. Zhu 575

Robust Exponential Passive Filtering for Uncertain Neutral-type Neural Networks with Time-varying Mixed Delays via Wirtinger-based Integral Inequality

X. Zhang, X. Fan, Y. Xue, Y. Wang, and W. Cai 585

Hierarchical Control for Nonlinear Systems by Partial-state Feedback

K. Yang and H. Ji 595

Fuzzy Filter for Nonlinear Sampled-data Systems: Intelligent Digital Redesign Approach

H. J. Kim, J. B. Park, and Y. H. Joo 603

New Results on Adaptive Control for a Class of Delayed Nonholonomic Systems

J.-M. Huang, Z.-G. Liu, and Y.-Q. Wu 611

Data-driven Predictive Control for Continuous-time Linear Parameter Varying Systems with Application to Wind Turbine

X. Luo 619

Map Assisted PDR/Wi-Fi Fusion for Indoor Positioning Using Smartphone

M. S. Lee, H. Ju, and C. G. Park 627

Positive Observer Design for Positive Markovian Jump Systems with Mode-dependent Time-varying Delays and Incomplete Transition Rates

J. Wang, W. Qi, X. Gao, and Y. Kao 640

Almost Sure Convergence of ILC for Networked Linear Systems with Random Link Failures

D. Shen 647

A Robust Adaptive Controller for Hammerstein Nonlinear Systems

P. Yuan, B. Zhang, and Z.-Z. Mao 656

Discrete Derivative Method for Adaptive Notch Filter-based Frequency Estimators

J.-M. Yoon, W. Bahn, T.-I. Kim, J.-S. Han, S.-H. Lee, and D.-i. "Dan" Cho 668

Robust Adaptive Boundary Control of a Perturbed Hybrid Euler-Bernoulli Beam with Coupled Rigid and Flexible Motion

A. Tavasoli 680

Repetitive Control Design for Variable Instantaneous Frequencies Signals

W.-S. Yao 689

Maximum Likelihood Estimation Method for Dual-rate Hammerstein Systems

D.-Q. Wang, Z. Zhang, and J.-Y. Yuan 698

Quantized H_∞ Control for a Class of 2-D Systems with Missing Measurements

X. Bu, J. Liang, Z. Hou, and J. Yang 706

A Parameter Estimation Approach based on Binary Measurements using Maximum Likelihood Analysis - Application To MEMS

K. Jafari 716

(Continued on inside back cover)

INDEXED IN Science Citation Index Expanded (SciSearch), SCOPUS, INSPEC, Google Scholar, ProQuest, Current Contents/Engineering, Computing and Technology, EI-Compendex, Journal Citation Reports/Science Edition, OCLC, Summon by Serial Solutions, Korea Citation Index.

International Journal of Control, Automation, and Systems

Int J Contr Autom Syst

Volume 15 Number 2 April 2017

(Continued from outside back cover)

Integrated Fault Detection and Control for Two-dimensional Roesser Systems

Y. Ren and D.-W. Ding 722

Robot and Applications

Cooperative Localization Based on Robust GPS and Radar Fusion for Multiple Aerial Vehicles

X. Zhao, G. Wang, and S. S. Ge 732

Efficient Autonomous Global Localization for Service Robots Using Dual Laser Scanners and Rotational Motion

M. Jung and J.-B. Song 743

Energy-saving Trajectory Planning for an Inverse Ball Drive Robot with Mecanum Wheels

K.-w. Jeong, J. Lee, and M. C. Lee 752

A Novel Leader Following Consensus Approach for Multi-agent Systems with Data Loss

X. Gong, Y.-J. Pan, and A. Pawar 763

Fault Detection and Isolation of Spacecraft Thrusters using an Extended Principal Component Analysis to Interval Data

I. Gueddi, O. Nasri, K. Benothman, and P. Dague 776

Selection and Design of Drive Modules for Robot Joint Based on Dynamic Load Characteristics

J.-M. Seo, S.-H. Rhyu, J.-H. Seo, and H.-K. Jung 790

Estimation of Desired Motion Intention and Compliance Control for Upper Limb Assist Exoskeleton

A. M. Khan, D.-w. Yun, K. M. Zuhair, J. Iqbal, R.-J. Yan, F. Khan, and C. Han 802

Avoidance of Multiple Moving Obstacles during Active Debris Removal Using a Redundant Space Manipulator

Z. Mu, W. Xu, and B. Liang 815

Master-slave Teleoperation of Underactuated Mechanical Systems with Communication Delays

O. Peñaloza-Mejía, L. A. Márquez-Martínez, J. Alvarez-Gallegos, and J. Alvarez 827

Lateral Acceleration Potential Field Function Control for Rollover Safety of Multi-wheel Military Vehicle with In-Wheel-Motors

M. A. Ali, C. Kim, S. Kim, A. M. Khan, J. Iqbal, M. Z. Khalil, D. Lim, and C. Han 837

A Precision Stopping Measurement Device to Automatically Detect Position Errors of an Urban Train at Railway Stations

M.-T. Ha, H.-Y. Kim, and C.-G. Kang 848

Practical Designs of Mobile Robot Traveling Simulator Using Optical Mice and Their Optimal Parameter Setting

S. Kim and S. Kim 857

Backward Orientation Tracking Control of Mobile Robot with N Trailers

J. Cheng, B. Wang, Y. Zhang, and Z. Wang 867

Nonlinear Adaptive Control for Dynamic and Dead-zone Uncertainties in Robotic Systems

X. Liu, W. Jiang, and X.-C. Dong 875

Uncertain Polytopic LPV Modelling of Robot Manipulators and Trajectory Tracking

M. B. A. Jabali and M. H. Kazemi 883

Intelligent Control and Applications

Multi-Agent Quality of Experience Control

F. D. Priscoli, A. D. Giorgio, F. Lisi, S. Monaco, A. Pietrabissa, L. R. Celsi, and V. Suraci 892

Nonlinear Backstepping Control Design of LSM Drive System Using Adaptive Modified Recurrent Laguerre Orthogonal Polynomial Neural Network

C.-H. Lin 905

From Single to Many-objective PID Controller Design using Particle Swarm Optimization

H. Freire, P. B. M. Oliveira, and E. J. S. Pires 918

TECHNICAL NOTES AND CORRESPONDENCE

Finite-time Cluster Average Consensus for Networks via Distributed Iterations

Y. Shang 933

Improved Delay-derivative-dependent Stability Criteria for Linear Systems Using New Bounding Techniques

J.-y. An 939

Extended Least Square Unbiased FIR Filter for Target Tracking Using the Constant Velocity Motion Model

J. M. Pak, P. S. Kim, S. H. You, S. S. Lee, and M. K. Song 947

Stability Analysis of Reference Compensation Technique for Controlling Robot Manipulators by Neural Network

S. Jung 952

A Novel Approach of Admissibility for Singular Linear Continuous-time Fractional-order Systems

S. Marir, M. Chadli, and D. Bouagada 959

NOTICE OF RETRACTION

Retraction note: "Immersion and Invariance based Fault Tolerant Adaptive Spacecraft Attitude Control" [IJCAS (2014) 12(2):333-339]

965

INDEXED IN Science Citation Index Expanded (SciSearch), SCOPUS, INSPEC, Google Scholar, ProQuest, Current Contents/Engineering, Computing and Technology, EI-Compendex, Journal Citation Reports/Science Edition, OCLC, Summon by Serial Solutions, Korea Citation Index.