

# IEEE TRANSACTIONS ON AUTOMATIC CONTROL

A PUBLICATION OF THE IEEE CONTROL SYSTEMS SOCIETY



NOVEMBER 2010

VOLUME 55

NUMBER 11

IETAA9

(ISSN 0018-9286)



Scanning the Issue ..... 2445

## PAPERS

Minimization of Dynamic Sensor Activation in Discrete Event Systems for the Purpose of Control .....	W. Wang, S. Lafourche, F. Lin, and A. R. Girard	2447
Distributed Moving Horizon Estimation for Linear Constrained Systems .....	M. Farina, G. Ferrari-Trecate, and R. Scattolini	2462
Design of Affine Controllers via Convex Optimization .....	J. Skaf and S. P. Boyd	2476
Smooth Regularization of Bang-Bang Optimal Control Problems .....	C. Silva and E. Trélat	2488
LMI Techniques for Optimization Over Polynomials in Control: A Survey .....	G. Chesi	2500
Control of Continuum Models of Production Systems .....	M. La Marca, D. Armbruster, M. Herty, and C. Ringhofer	2511
Model Abstraction of Nondeterministic Finite-State Automata in Supervisor Synthesis .....	R. Su, J. H. van Schuppen, and J. E. Rooda	2527
Polytopic Approximation of Explicit Model Predictive Controllers .....	C. N. Jones and M. Morari	2542
Dynamic Vehicle Routing for Translating Demands: Stability Analysis and Receding-Horizon Policies .....	S. D. Bopardikar, S. L. Smith, F. Bullo, and J. P. Hespanha	2554

## TECHNICAL NOTES AND CORRESPONDENCE

Global Output Feedback Stabilization of a Chemostat With an Arbitrary Number of Species .....	F. Mazenc and Z.-P. Jiang	2570
Stability and Incremental Improvement of Suboptimal MPC Without Terminal Constraints ....	K. Graichen and A. Kugi	2576
Sensor Deployment for Network-Like Environments .....	L. Greco, M. Gaeta, and B. Piccoli	2580
Sufficient Conditions on Observability Grammian for Synchronization in Arrays of Coupled Linear Time-Varying Systems .....	S. E. Tuna	2586
A Necessary and Sufficient Feedback Dropout Condition to Stabilize Quantized Linear Control Systems With Bounded Noise .....	Q. Ling and M. D. Lemmon	2590

(Contents Continued on Back Cover)

请阅后放回:

排架号 *E228* 处



---

Robust Constraint Satisfaction for Continuous-Time Nonlinear Systems in Strict Feedback Form .....	M. Bürger and M. Guay	2597
Transfer Equivalence and Realization of Nonlinear Input-Output Delta-Differential Equations on Homogeneous Time Scales .....	D. Casagrande, Ü. Kotta, M. Tõnso, and M. Wyrwas	2601
Balanced Truncation for Discrete Time Markov Jump Linear Systems .....	G. Kotsalis and A. Rantzer	2606
Optimal Steady-State Control for Isolated Traffic Intersections .....	J. Haddad, B. De Schutter, D. Mahalec, I. Ioslovich, and P.-O. Gutman	2612
Cucker-Smale Flocking With Inter-Particle Bonding Forces .....	J. Park, H. J. Kim, and S.-Y. Ha	2617
Design of Sliding Mode Control Subject to Packet Losses .....	Y. Niu and D. W. C. Ho	2623
Matrix Sign Function Methods for Solving Projected Generalized Continuous-Time Sylvester Equations .....	Y. Lin, L. Bao, and Y. Wei	2629
CLF-Based Control Design for Unknown Multiinput Nonlinear Systems With Good Transient Performance .....	E. B. Kosmatopoulos	2635
Randomized Receding Horizon Navigation .....	H. G. Tanner and J. L. Piovesan	2640
Integral HOSM Semiglobal Controller for Finite-Time Exact Compensation of Unmatched Perturbations .....	A. Estrada and L. M. Fridman	2645
A Bode Plot Characterization of All Stabilizing Controllers .....	L. H. Keel and S. P. Bhattacharyya	2650
Maximally Stabilizing Task Release Control Policy for a Dynamical Queue .....	K. Savla and E. Frazzoli	2655
A General Stability Test for Switched Positive Systems Based on a Multidimensional System Analysis .....	H. Alonso and P. Rocha	2660
A High-Order Internal Model Based Iterative Learning Control Scheme for Nonlinear Systems With Time-Iteration-Varying Parameters .....	C. Yin, J.-X. Xu, and Z. Hou	2665
A Computationally Efficient Adaptive IIR Solution to Active Noise and Vibration Control Systems .....	A. Montazeri and J. Poshtan	2671
Correction to "Output Feedback Stabilization of a One-Dimensional Schrödinger Equation by Boundary Observation with Time Delay" .....	B.-Z. Guo and K.-Y. Yang	2676

---