

Contents

Vol. 51, No. 5, 2015

A simultaneous English language translation of this journal is available from Allerton Press, Inc.,
Distributed worldwide by Springer. *Optoelectronics, Instrumentation and Data Processing* ISSN 8756-6990.

Automation Systems in Scientific Research and Industry

Structural-Parametric Synthesis of Time-Optimal Distributed Parameter Control Systems with Interval Uncertainty of the Plant Characteristics	
<i>E. Ya. Rapoport and I. S. Levin</i>	429
Alternance Method of Structural-Parametric Synthesis of Cascade Automatic Control Systems	
<i>Yu. E. Pleshivtseva and A. A. Afinogentov</i>	441
Estimation of Directly Unmeasurable External Perturbations using Functional Observers	
<i>A. Z. Asanov and D. N. Dem'yanov</i>	449
Aircraft Attitude Control	
<i>Yu. N. Zolotukhin and A. A. Nesterov</i>	456
Self-Adjusting System with a Reference Model for Control of Underwater Vehicle Motion	
<i>A. V. Lebedev and V. F. Filaretov</i>	462
Synthesis of PID Controllers for Nonlinear Nonstationary Plants	
<i>A. S. Vostrikov and G. A. Frantsuzova</i>	471
Robust Correction of Dynamic Plants in Automatic Control Systems	
<i>A. B. Filimonov and N. B. Filimonov</i>	478
Root Coordinates in the Design of SISO Control Systems	
<i>A. V. Chekhonadskikh</i>	485
Robust Leader-Follower Formation Control of Mobile Robots by the Structural Synthesis Method	
<i>Yu. N. Zolotukhin, K. Yu. Kotov, A. S. Mal'tsev, A. A. Nesterov, M. A. Sobolev, M. N. Filippov, and A. P. Yan</i>	496
Information-Control System for Mobile Robots	
<i>V. F. Filaretov, D. A. Yukhimets, and E. Sh. Mursalimov</i>	505
Modeling the Process of Measuring Radial and Axial Displacements of Complex-Shaped Blade Tips	
<i>S. Yu. Borovik, M. M. Kuteynikova, P. E. Podlipnov, Yu. N. Sekisov, O. P. Skobelev</i>	512

Adaptive Periodic Servo-System for Nonlinear Control-Affine Objects	
<i>E. L. Eremin, E. A. Shelenok</i>	523
Analysis of the Error of Measuring the Capacity of Semiconductor Structures at a High Frequency	
<i>V. N. Vyukhin</i>	530
