

CONTENTS

THEORY AND METHODS OF SIGNAL PROCESSING

Blokhin L. N., Prokofieva I. Yu., Novitska N. D.

Optimal filtration of deterministic information in multivariate measuring route.....11

Prokopenko K. I.

Information flow recognition in radio communication channel between air traffic dispatcher and aircraft crew.....16

Prokopenko I. G., Martynchuk I. A.

Nonparametric detection algorithm of the signals that using the kernel estimation of distribution function of a noise and beta-distribution of the modified ranks.....21

Yurchuk A. A., Kolganova E. O., Konin V. V., Shutko V. N.

Satellite signal detection method based on modification compression operator.....27

Mykhatsky O. Yu., Kuzmenko N. S., Savchenko O. V.

Measurement, post-processing, analysis and visualization of the experimental flight data.....33

Chumachenko O. I.

Integrated intellectual diagnostic system.....39

AUTOMATIC CONTROL SYSTEMS

Chikovani V. V., Tsiruk G. V.

Viratory gyro accuracy parameters improving by means of excitation control.....43

Komnatska M. M.

Flight control system design VIA LMI-approach.....49

COMPUTER-AIDED DESIGN SYSTEMS

Sineglazov V. M., Kaleniuk K. I.

Computer-aided design system for internal led lightning.....53

Sushchenko O. A.

Design of robust controllers in problems of UAV information-measuring devices stabilization.....58

Ryzhkov L. M., Stepurenko D. I.

Determining some elements of attitude matrix.....65

Melnyk O. S., Kozarevych V. O., Ivakhniuk V. V.

Computer aided design of single-electron nanocircuits.....71

Sineglazov V. M., Svynarenko D. A.

Computer-aided design systems of radiators.....75

Sineglazov V. M., Heleveria M. O.

Computer-aided design control system of the heat pump.....79

Sineglazov V. M., Kulbaka A. V., Boyko V. M.

Computer-aided design system of combined wind power plants.....84

Sineglazov V. M., Fedosenko V. N., Voropaev N. S.

Computer-aided design system of cleanroom elements.....89

TRANSPORT SYSTEMS

Martyniuk V. S., Grishin V. O.

Magnetoelectric generator.....95

Askerov Sh. I.

Synthesis of truncated filters in task of orientation.....99

Shevchuk D. O.

Optimization of decision-making process in extra situation on landing.....103

Osipchuk A. A.

Principles of creation unified base complex of navigation and landing equipment.....107

Goncharenko A. V.

Control of flight safety with the use of preferences functions.....113

Sineglazov V. M., Shmelev Ju. M.

Improving the efficiency of helicopter pilots training in the simulator.....120

MATHEMATICAL MODELING OF PROCESSES AND SYSTEMS**Azarskov V. N., Zhiteckii L. S., Nikolaienko S. A.**

Sequential learning processes in neural networks applied as models of nonlinear systems.....124

Galaguz T. A.Structural-parametric synthesis of the flight control system with the previous design
of unmanned aerial vehicle model.....133

Requirements for Articles.....139