

# CONTENTS

## **Instrument Engineering, Metrology, Information-Measuring Instruments and Systems**

<b>Boykov V.A., Kolyuchkin V.Ya.</b> Algorithm for Object Image Automatic Tracking .....	4
<b>Bondarenko D.A., Karasik V.E., Magdich L.N., Pogonyshv O.O., Sadovskiy P.I., Semenov V.P.</b> Compact Erbium-Glass Diode Pumping Laser Emitter with Acousto-Optic Q-Switching .....	14
<b>Esipenko I.A., Lykov D.A.</b> Mathematical Model of Thermal Drift of a Fiber-Optic Gyroscope and its Experimental Verification .....	31
<b>Loskutnikova M.L., Yakimova M.A., Alekhovich V.I.</b> Opto-Acoustic Tweezers to Manipulate Microparticles .....	47
<b>Pavlov V.Yu., Piasetsky V.B., Khorokhorov A.M., Shirankov A.F.</b> LED Lighting Systems Color Efficiency .....	54
<b>Ryzhkov V.V., Zverev A.V., Rodionov I.A.</b> Numerical Simulation of Heat and Mass Transfer Processes in a Microfluidic Fluid Flow Thermal Sensor .....	70

## **Radio Engineering and Communication**

<b>Vodolazov A.V., Chapurskiy V.V.</b> Generalized Ambiguity Function for Trajectory Parameters for Forward-Scattering Bistatic <i>MIMO</i> Radar .....	85
<b>Profatilova G.A., Solov'ev G.N., Efremov V.S., Solov'ev A.G.</b> Spectral Processing of Information in Radar Systems of Air Traffic Control .....	99

## **Informatics, Computer Engineering and Control**

<b>Anikin V.I., Anikina O.V., Gushchina O.M.</b> Pair Regression in <i>Microsoft Excel</i> by using of P-Splines .....	114
<b>Deon A.F., Menyayev Yu.A.</b> Complete Factorial Simulation of Integer Random Number Uniform Sequences .....	132