**"Gyroscopy and Navigation" 2003**

|  |
| --- |
|  |
|   | **list of the materials published in the journal in 2003**

|  |  |  |
| --- | --- | --- |
|  |       | **№     page** |

|  |  |  |
| --- | --- | --- |
| **Babich O.A., Fedoskin O.I.** | Joint solution of aerospace navigation problems and Earth surface monitoring using the Earth frame | **4       19** |
|   | Abstract | **4       29** |

|  |  |  |
| --- | --- | --- |
| **Belyanin L.N.** | A borehole gyro system for orientation of the three-component seismic probe | **1       19** |
|   | Abstract | **1       30** |

|  |  |  |
| --- | --- | --- |
| **Binder Ya.I.** | Analytical compassing in slim hole inclinometry | **2       38** |
|   | Abstract | **2       46** |

|  |  |  |
| --- | --- | --- |
| **Binder Ya.I., Paderina T.V.** | Strapdown inertial measuring units: compassing and calibration under restriction of angular movements | **4       29** |
|   | Abstract | **4       40** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Binder Ya.I., Paderina T.V.,**

|  |
| --- |
| **Anuchin O.N.** |

 | Calibration of angular rate sensors with mechanical carrier of angular momentum vector, being parts of strapdown inertial measurement units | **3       3** |
|   | Abstract | **3       16** |

|  |  |  |
| --- | --- | --- |
| **Chikovani V.V., Yatsenko Yu.A., Kovalenko V.A.** | Test results for the first batch of Coriolis vibratory gyros and analysis of their performance | **2       32** |
|   | Abstract | **2       38** |

|  |  |  |
| --- | --- | --- |
| **Dygurov S.M., Landau B.E., Romanenko S.G.** | The random error model for the strapdown ESG data readout system | **2       18** |
|   | Abstract | **2       24** |

|  |  |  |
| --- | --- | --- |
| **Evstifeev M.I.** | Estimation of micromechanical gyro sensitivity threshold | **1       13** |
|   | Abstract | **1       19** |

|  |  |  |
| --- | --- | --- |
| **Evstifeev M.I., Untilov A.A.** | The requirements to manufacturing accuracy for elastic suspension of a micromechanical gyro | **2       24** |
|   | Abstract | **2       31** |

|  |  |  |
| --- | --- | --- |
| **Izmailov E.A.** | On the unified approach to the analysis of sources of inside electromechanical disturbances in inertial measuring converters | **4       40** |
|   | Abstract | **4       49** |

|  |  |  |
| --- | --- | --- |
| **Galaktionov A.A.** | Indirect heat setting of gyroscopes and gyrostabilized platforms (methods for accuracy increase) | **1       5** |
|   | Abstract | **1       12** |

|  |  |  |
| --- | --- | --- |
| **Novozhilov A.A.** | Conceptual approaches to selection and substantiation of the structure of the ship motion control system in inland waterways | **3       17** |
|   | Abstract | **3       25** |

|  |  |  |
| --- | --- | --- |
| **Peshekhonov V.G.** | Gyroscopes in the beginning of XXI century | **4       5** |
|   | Abstract | **4       18** |

|  |  |  |
| --- | --- | --- |
| **Peshekhonov V.G.** | Three-century development of marine navigation theory and engineering in St. Petersburg | **2       3** |
|   | Abstract | **2       17** |

|  |  |  |
| --- | --- | --- |
| **Volovodov S.K., Chernyaev M.G., Kaverinsky A.Yu., Volovodov S.S.** | Allocation of control resources in attitude stabilization of moving vehicles | **1       30** |
|   | Abstract | **1       42** |

|  |  |  |
| --- | --- | --- |
| **Zuev V.A., Lukomsky Yu.A., Shpektorov A.G.** | Automatic stabilization of a hovercraft at the prescribed route | **3       26** |
|   | Abstract | **3       36** |

**Brief notes**

|  |  |  |
| --- | --- | --- |
| **Agroskin B.N., Shipilov S.V.** | Calculation of temperature in the contact zone of rotor surfaces and electrostatic gyro supports | **3       40** |
|   | Abstract | **3       45** |

|  |  |  |
| --- | --- | --- |
| **Anfinogenov A.S., Dryapak O.G., Parfenov O.I., Sumarokov V.V.** | Potential of an electrostatic gyro rotor with different structures of suspension | **3       37** |
|   | Abstract | **3       40** |

|  |  |  |
| --- | --- | --- |
| **Gusinsky V.Z., Litmanovich Yu.A.** | Accuracy Improvement of the Spacecraft Attitude Determination by the ESG/FOG Data Fusion | **4       50** |
|   | Abstract | **4       58** |

|  |  |  |
| --- | --- | --- |
| **Plotnikov P.K., Nikishin V.B.,Melnikov A.V.** | Determination of position of a strapdown gyro inclinometer with allowance for the Earth nonsphericity | **3       45** |
|   | Abstract | **3       51** |

**Materials of the 5th conference of young scientists Navigation and Motion Control**

|  |  |  |
| --- | --- | --- |
| **Paper abstracts** |     | **4       99** |

**Materials of the 9th Saint Petersburg International Conference on Integrated Navigation Systems**

|  |  |  |
| --- | --- | --- |
| **Eissfeller B., Kreye C., Sanroma D., Luck T.** | Development and performance analysis of a tightly coupled GNSS/INS system | **2       47** |
|   | Abstract | **2       64** |

|  |  |  |
| --- | --- | --- |
| **Giroux R., Landry R.Jr., Gourdeau R.** | Simulation software and handware implementation for a low cost electronic inertial navigation system test-banch | **1       53** |
|   | Abstract | **1       62** |

|  |  |  |
| --- | --- | --- |
| **Ladetto Q., Merminod B.** | Digital magnetic compass and gyroscope integration for pedestrian navigation | **2       65** |
|   | Abstract | **2       77** |

|  |  |  |
| --- | --- | --- |
| **Shiele O., Kleusberg A., Horn R.** | A comparison of two integrated airborne positioning and orientation systems | **1       43** |
|   | Abstract | **1       53** |

|  |  |  |
| --- | --- | --- |
| **Sinelnikov A.E., Kudryavtsev V.N., Pavlov P.A.** | A new Russian standard in the field of low-frequency motion quantities measurements | **1       63** |
|   | Abstract | **1       75** |

**Materials of the 10th Saint Petersburg International Conference on Integrated Navigation Systems**

|  |  |  |
| --- | --- | --- |
| **Abstracts of the papers** |     | **3       68** |

|  |  |  |
| --- | --- | --- |
| **Hertzman V.Е., Dvorkin V.V., Ivanov V.P., Petushkov A.M., Ekalo А.V.** | Development of trajectory measurement systems based on GPS/GLONASS signals | **4       59** |
|   | Abstract | **4       73** |

|  |  |  |
| --- | --- | --- |
| **Ikeda Yu., Nguyen Ba, Panagos J.** | Simulation Validation for an automatic air collision avoidance system in preparing for flight test | **4       85** |
|   | Abstract | **4       89** |

|  |  |  |
| --- | --- | --- |
| **Litmanovich Yu.A., Mark J.G.** | Progress in strapdown algorithm design at the West and East as appeared at Saint Petersburg conferences: decade overview | **3       52** |
|   | Abstract | **3       67** |

|  |  |  |
| --- | --- | --- |
| **Mezentsev O., Collin J.,Lachapelle G.** | Vehicular navigation in urban canyons using high sensitivity GPS receiver augmented with a medium-grade IMU | **4       73** |
|   | Abstract | **4       84** |

|  |  |  |
| --- | --- | --- |
| **Thin G.** | Sperwer UAV and its integrated system for navigation, guidance and stabilization | **4       89** |
|   | Abstract | **4       98** |

**Materials of the 23th Conference in memory of N.N.Ostryakov****Article**

|  |  |  |
| --- | --- | --- |
| **Anisimov V.A., Zhbanov Yu.K., Zilberman B.S., Popov G.V.** | Rapid compassing on a fixed base | **2       79** |
|   | Abstract | **2       84** |

|  |  |  |
| --- | --- | --- |
| **Dyumin A.F., Egorov S.N.** | Observability of constant gyro drifts in an orbital gyrocompass | **2       85** |
|   | Abstract | **2       92** |

|  |  |  |
| --- | --- | --- |
| **Gryazev B.V., Malyutin D.M., Saveliev V.V., Smirnov V.A.** | Dynamics research for the two-axis stabilization and guidance system considering the influence of technological errors and way of its accuracy increasing | **4       126** |
|   | Abstract | **4       135** |

|  |  |  |
| --- | --- | --- |
| **Gurevich S.S., Zavgorodniy V.I., Kuzin V.M., Landau B.E., Levin S.L., Romanenko S.G.** | Experimental estimate of ESG characteristics for space systems in conditions of ground tests | **3       102** |
|   | Abstract | **3       109** |

|  |  |  |
| --- | --- | --- |
| **Lukin N.A.** | Architectural synthesis of functionally oriented processors of mathematical functions | **3       109** |
|   | Abstract | **3       120** |

|  |  |  |
| --- | --- | --- |
| **Severov L.A., Ponomarev V.K., Panferov А.I., Nesenyuk L.P., S.G.Kucherkov, Yu.V.Shadrin** | Informative characteristics of a micromechanical vibrating gyro | **1       76** |
|   | Abstract | **1       82** |

**Brief notes**

|  |  |  |
| --- | --- | --- |
| **Basun O.B., Granovsky V.A., Siraya T.N., Sukharev A.P.** | Metrological support for the development of navigation systems: problem statement, solution methods | **2       93** |
|   | Abstract | **2       97** |

|  |  |  |
| --- | --- | --- |
| **Bershtam Ya.N., Serpinsky D.A., Shevtsova E.D.** | Experience of test bench creation for marine oscillation modeling on the base of computer-controlled digital servo drives | **4       136** |
|   | Abstract | **4       138** |

|  |  |  |
| --- | --- | --- |
| **Dudnitsyn B.V., Mumin O.L., Ryabova L.P., Sumarokov V.V., Topchiy A.I.** | A magnetic spherical three-component accelerometer with digital output | **1       82** |
|   | Abstract | **1       88** |

|  |  |  |
| --- | --- | --- |
| **Kucherkov S.G., Lychev D.I., Skalon A.I., Chertkov L.A.** | The use of Allan variation in investigating characteristics of a micromechanical gyro | **2       98** |
|   | Abstract | **2       104** |

**International Public Association The Academy of Navigation and Motion Control Official information**

|  |  |  |
| --- | --- | --- |
| **Binder Ya.I., Gutner I.E., Mezentsev A.P., Molchanov A.A.** | Present-day information-measuring systems for subsurface navigation and orientation | **1       110** |
|   | Abstract | **1       123** |

|  |  |  |
| --- | --- | --- |
| **Information about the 15th General meeting of the Academy** |   | **1       123** |

|  |  |  |
| --- | --- | --- |
| **Koneshov V.N.** | State of the art and trends in development of gravimetry when studying the gravity field of the World Ocean | **1       90** |
|   | Abstract | **1       99** |

|  |  |  |
| --- | --- | --- |
| **Materials of the workshop "State and prospects of developing navigation gyroscopic systems for aviation"** |  | **1       123** |

|  |  |  |
| --- | --- | --- |
| **To the 70th anniversary from the birth of D. M. Klimov - the Honorary Member of the Academy of Navigation and Motion Control** |  | **1       123** |

|  |  |  |
| --- | --- | --- |
| **To the 80th anniversary from V.N.Koshlyakov's birth** |   | **1       89** |

|  |  |  |
| --- | --- | --- |
| **The 16th General meeting of the Academy of Navigation and Motion Control** |   | **4       139** |

|  |  |  |
| --- | --- | --- |
| **Volfson G.B.** | New technologies in gravity gradiometry | **1       99** |
|   | Abstract | **1       109** |

**History pages**

|  |  |  |
| --- | --- | --- |
| **Peshekhonov V.G.** | Admiral Anatoly Ivanovich Rassokho and evolution of marine inertial navigation | **4       141** |

|  |  |  |
| --- | --- | --- |
| **Rivkin S.S.** | Development of artillery gyroscopy in the Russian Navy | **2       105** |
|   | Abstract | **2       112** |

|  |  |  |
| --- | --- | --- |
| **Rivkin S.S.** | Meetings with academician A.Yu. Ishlinsky (To the 90th anniversary from his birth) | **3       125** |
|   | Abstract | **3       130** |

**New books**

|  |  |  |
| --- | --- | --- |
|  | ["Gravi-inertial technologies in geophysics".](http://www.elektropribor.spb.ru/en/books/book16.html) Digest | **1       131** |

|  |  |  |
| --- | --- | --- |
| **Chelpanov I.B.** | Review of the digest ["Gravi-inertial technologies in geophysics"](http://www.elektropribor.spb.ru/en/books/book16.html) | **1       132** |

|  |  |  |
| --- | --- | --- |
| **Solovjev Yu.A.** | "Satellite navigation and its applications" | **4       146** |

**Information**

|  |  |  |
| --- | --- | --- |
| **65 years with Elektropribor (to the anniversary of LMNS)** |   | **4       154** |

|  |  |
| --- | --- |
| **About the First All-Russia Scientific Conference Control and Information Technologies (UIT'2003)** | **3       113** |

|  |  |  |
| --- | --- | --- |
| **Materials** |  of the joint scientific session of the Navigation Systems and Their Sensors Section and the Saint Petersburg Section of Precise Gyroscopy of the RAS scientific council on the problems of motion control and navigation | **3       131** |

|  |  |  |
| --- | --- | --- |
| **Russian** and international conferences, symposiums and exhibitions |   | **1       127** |

|  |  |  |
| --- | --- | --- |
| **Russian** and international conferences, symposiums and exhibitions |   | **2       116** |

|  |  |  |
| --- | --- | --- |
| **Russian** and international conferences, symposiums and exhibitions |   | **3       132** |

|  |  |  |
| --- | --- | --- |
| **Russian** and international conferences, symposiums and exhibitions |   | **4       155** |

|  |  |  |
| --- | --- | --- |
| **Stepanov O.A.** | European control conferences | **4       147** |

 |