### Scientific and technical journal "Гироскопия и навигация" (Gyroskopiya i Navigatsiya)

(ISSN 2075-0927 - Online, ISSN 0869-7035 - Print)

### LIST OF MATERIALS PUBLISHED IN GIROSKOPIYA I NAVIGATSIYA IN 2015

|  |  |  |
| --- | --- | --- |
|  | **№** | **page** |
| ***Ardyukov D.G., E.N. Kalish, D.A. Nosov, I.S. Sizikov, M.G. Smirnov, Yu.F. Stus, V.Yu.Timofeev, R.G. Kulinich, and M.G. Valitov*** Absolute gravity measurements at Shults Cape | **3** | **13** |
| ***Basarab М.А., B.S. Lunin, V.A. Matveev, Е.А. Chumankin*** Balancing of HRG resonators by chemical etching | **1** | **61** |
| ***Bolotin Yu. V. and V. S. Vyazmin*** Gravity anomaly estimation by airborne gravimetry data using LSE and minimax optimization and spherical wavelet expansion | **3** | **82** |
| ***Bordachev D.A., A.A. Volyntsev, P.A. Ilyushin, B.A. Kazakov, I.E. Shustov*** Precision gyroscopic device for measuring spacecraft angular rate: ground verification results | **4** | **106** |
| ***Bukin A. G., A. S. Lychagov, R. N. Sadekov, O. A. Slavin*** Machine vision hardware and software system for solving navigation problems of surface vehicles | **2** | **58** |
| ***Davidson P., M. Kirkko-Jaakkola, J. Collin, and J. Takala*** Navigation algorithm combining building plans with autonomous sensor data | **1** | **29** |
| ***Derevyankin A. V., A. I. Matasov*** On the terminating algorithm for the vehicle position determination by differences in measured pseudoranges | **2** | **106** |
| ***Evstifeev M.I., D.P. Eliseev, and I.B. Chelpanov*** Improving mechanical resistance of MEMS gyros | **4** | **56** |
| ***Dovgobrod G.M.*** Generation of smooth executive trajectory in real time | **1** | **109** |
| ***Dubrovin F.S. , A.F. Scherbatyuk*** Study of the algorithms for the single beacon mobile navigation of unmanned underwater vehicles: results of simulation and sea trials | **4** | **160** |
| ***Dzyuba A. N. and A. V. Loparev*** Time-varying correction algorithm of airborne gravimeter gyro vertical | **3** | **52** |
| ***Emel’yantsev G. I., B. A. Blazhnov, and A. P. Stepanov*** Vertical deflection determination in high latitudes using precision IMU and two-antenna GNSS system | **3** | **72** |
| ***Evstifeev M.I., D.P. Eliseev, I.B. Chelpanov*** MEMS RR-type gyro with a moving electrode | **4** | **67** |
| ***Emel’yantsev G.I., A.P. Stepanov, B.A. Blazhnov, and I.V. Semenov*** Improving the accuracy of GPS compass for small sized vehicles | **1** | **18** |
| ***Forsberg R., A. V. Olesen, and I. Einarsson*** Airborne gravimetry for geoid determination with Lacoste Romberg and Chekan-АМ gravimeters | **3** | **19** |
| ***Gorbachev О.А., V.T. Zalutskii, V.B. Ivanov, D.V. Khazanov, А.А. Kholmogorov*** Estimating the quality of GEMTEC total electron content model in GNSS autonomous positioning | **1** | **100** |
| ***Izmailov E. A., S. E. Kukhtevich, V. V. Tikhomirov, D. V. Stafeev, A.V.Fomichev*** Laser gyro drift component analysis | **2** | **40** |
| ***Karpik A. P, I. G. Ganagina, N. S. Kosarev, D. N. Goldobin*** Transport accurate positioning navigation and information system using GLONASS groundbased infrastructure | **2** | **47** |
| ***Klimkovich B.V., A.M. Tolochko*** Determination of time delays in sensor measurement channels during SINS calibration in inertial mode | **4** | **55** |
| ***Klimkovich B.V. and А.М. Tolochko*** SINS calibration with account for size effect | **1** | **81** |
| ***Koshaev D. A.*** Redundance and deficiency problems of GNSS measurements in special tasks of GNSS measurement processing | **2** | **67** |
| ***Krasnov A. A., A. V. Sokolov*** The up-to-date mathematical software set for mobile gravimeter «Chekan-AM» | **2** | **118** |
| ***Kurbatov А.М.*** New methods of improving FOGs with open and closed loops | **1** | **43** |
| ***Kutovoy V.M., O. I. Maslova, S. Yu. Perepelkina, A. A. Fedotov*** Application of the Allan variance method to estimation of noise components of measuring channel | **2** | **30** |
| ***Liu Y.,T. Cai, H.Yang, C. Liu, J. Song, M. Yu*** The pedestrian integrated navigation system with micro IMU/ GPS / magnetometer / barometric altimeter | **4** | **29** |
| ***Lobanov V. S., N.V. Tarasenko, V.N. Zboroshenko*** The development directions of orientation and stabilization systems for space vehicles of various purposes | **2** | **18** |
| ***Maslov А.А., D.A. Maslov, and I.V. Merkur’ev*** Nonlinear effects in dynamics of HRS resonator with electrostatic control system | **1** | **71** |
| ***Mkrtchyan A.R., N.I. Bashkeev, D.O. Yakimovskii, D.I. Akashev, and O.B. Yakovets*** Powered gyrosystems: State of the art and development prospects | **1** | **93** |
| ***Popp M., S. Prophet, G. Scholz, G.F. Trommer*** A novel guidance and navigation system for MAVs capable of autonomous collision-free entering of buildings | **2** | **3** |
| ***Refan M. H., A. Dameshghi, M. Kamarzarrin*** Utilizing Hybrid Recurrent Neural Network and Genetic Algorithm for Predicting the Pseudo- Range Correction Factors to Improve the Accuracy of RTDGPS | **2** | **92** |
| ***Rivkin B.S.*** Tenth Anniversary of E-Navigation | **4** | **173** |
| ***Rahmati S., K. Kianfar, A. A. Kalat*** Gravity gradiometry positioning system based on neuro-fuzzy modeling | **4** | **85** |
| ***Romanenko S.G., G.I. Emelyantsev, B.E. Landau, S.L. Levin, A.A. Medvedkov*** Efficiency of the case modulation rotation of the gimballess electrostatic gyro in polar orientation | **4** | **91** |
| ***Sarkar S., A. Bose*** Studies on Solution Accuracy of GLONASS from India | **4** | **117** |
| ***Scholz G., G.F. Trommer*** Model Based Control of a Quadrotor with Tiltable Rotors | **4** | **131** |
| ***Sizov V.P., V.A. Pogorelov, Yu.V. Vakhtin*** Effect of rotation on parameters of elastic waves propagating in substrate of SAW-based solidstate gyros | **4** | **77** |
| ***Smoller Yu. L., S. Sh. Yurist, A. A. Golovan, and L. Yu. Yakushik*** Using a multiantenna GPS receiver in the airborne gravimeter Gt-2A for surveys in polar areas | **3** | **61** |
| ***Sokolov A. V., A. A. Krasnov, V. A. Vasil’ev, L. S. Elinson, and L. K. Zheleznyak*** Calibration of the Chekan-AM gravimeter by a tilting method | **3** | **41** |
| ***Stepanov A.P., G.I Emelyantsev, B.A. Blazhnov*** Efficiency of IMU modulation rotations in a marine FOG-based SINS | **4** | **42** |
| ***Stepanov O. A. and A. B. Toropov*** Nonlinear filtering for map-aided navigation. Part 1. An overview of algorithms | **3** | **102** |
| ***Stepanov O. A., D. A. Koshaev, and A. V. Motorin*** Identification of gravity anomaly model parameters in airborne gravimetry problems using nonlinear filtering methods | **3** | **95** |
| ***Stepanov O.A., A.B.Toropov*** Nonlinear filtering for map-aided navigation. Part 2. Development trends | **4** | **147** |
| ***Vitushkin L.F.*** Absolute ballistic gravimeters | **3** | **3** |
| ***Wan W. g, Ch. Luo, Zh. Xue, D. Li, X. Xing, J. Ma, and H. Zhang*** Progress in the development of laser strapdown airborne gravimeter in China | **3** | **30** |
| ***Zhao Y., M. Becker, D. Becker, and S. Leinen*** Improving the Performance of Tightly-Coupled GPS/INS Navigation by Using Time- Differenced GPS-Carrier-Phase Measurements and Low-Cost MEMS IMU | **1** | **3** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Short communications** | | |
| ***Koval A. V.*** Simulation of Gravimetric Measurements by Gyroscopic Integrator of Linear Accelera | **3** | **135** |
| ***Sokolov A. V., A. A. Krasnov, L. P. Starosel’tsev, and A. N. Dzyuba*** Development of a gyro stabilization system with fiber-optic gyroscopes for an air-sea gravimeter | **3** | **126** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **International Public Association The Academy of Navigation and Motion Control O f f i c i a l   i n f o r m a t i o n** | | |
| 20th anniversary of the Academy of Navigation and Motion Control | **2** | **132** |
| XL General Meeting of the Academy of Navigation and Motion Control | **4** | **192** |
| Information on the 17th Conference of Young Scientists Navigation and Motion Control | **1** | **120** |
| Information on the 39th General Meeting of the International Public Association – Academy of Navigation and Motion Control | **1** | **120** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Information** | | |
| ***Piche R.*** International conference on Indoor Positioning and Indoor Navigation | **1** | **122** |
| Russian and international conferences, symposia and exhibitions | **1** | **125** |
| Russian and international conferences, symposia and exhibitions | **2** | **141** |
| Russian and international conferences, symposia and exhibitions | **3** | **141** |
| Russian and international conferences, symposia and exhibitions | **4** | **194** |
| The 22nd Saint Petersburg International Conference on Integrated Navigation Systems | **2** | **136** |