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2019**

ОРГАНИЗАТОРЫ КОНФЕРЕНЦИИ

САНКТ-ПЕТЕРБУРГСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ
АЭРОКОСМИЧЕСКОГО ПРИБОРОСТРОЕНИЯ (ГУАП)

ИНСТИТУТ ИНЖЕНЕРОВ ПО ЭЛЕКТРОТЕХНИКЕ И ЭЛЕКТРОНИКЕ (ИЕЕЕ)

ИЗДАТЕЛЬСКИЙ ДОМ «МЕДИА ПАБЛИШЕР»

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CHAPTER 1.

Acoustooptics

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ELECTRONIC RETUNING OF ACOUSTO-OPTIC LASER MODE LOCKER.

Experimental study

2. Belyi V.N., Kazak N.S., Khilo N.A., Ropot P.I.

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ACOUSTOOPTIC GENERATION OF LIGHT BEAMS WITH TUNABLE CURVILINEAR PROPAGATION TRAJECTORY

3. Boritko S.V., Karandin A.V., Boritko Y.S.

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OPTICAL SPECTRUM DERIVATIVE REGISTRATION BY ACOUSTOPTIC SPECTROSCOPY METHOD

4. Grigoryev L.V., Morozov I.S., Zhuravlev N.V., Mikhailov A.V.

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6. Lebedev V.F., Pavlov K.V., Koliadin A.V.

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Saint Petersburg State University of Aerospace Instrumentation, Saint Petersburg, Russia;

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7. Mantsevich S.N.

M.V. Lomonosov Moscow State University, Moscow, Russia

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8. Verona Enrico, Member, IEEE

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Kotel'nikov Institute of Radio Engineering and Electronic, RAS, Moscow, Russia

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9. Vlasova A.G., Polschikova O.V., Machikhin A.S., Lyashenko A.I., Dmitriev I.V.

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RGB LASER SOURCE FOR COLOR DIGITAL HOLOGRAPHY

CHAPTER 2.

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1. Baksheeva Iu.V., Khomenko A.A.

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St. Petersburg, Russia*

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2. Balysheva O.L.

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3. Bylina M.S., Semenov A.B.

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*Moscow State University of Civil Engineering (MGSU) National Research University,
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4. Fedorov I.D., Zhezherin A.R.

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5. Kandziouba E.V., Member, IEEE, Semenov A.B.

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6. Larin V.P.

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7. Malygin I.V.

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9. Sheinman I.L.

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10. Sorokin A.V., Member, IEEE, Shepeta D.A.

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1. Bakay K.A., Ovchinnikov A.A., Member, IEEE, Ilina D.V.

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Volga State University of Technology, Yoshkar-Ola, Russia

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8. **Gatchin Yu.A., Sukhostat V.V.**

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3. **Bogatyrev A.V., Bogatyrev V.A., Bogatyrev S.V.**

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7. **Dvornikov S.V., Erokhin S.D., Balenko E.G., Dvornikov S.S.**

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8. **Ermakov A.K., Podstrigaev A.S., Povarenkin N.V.**

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23. **Pavlov A.P., Kashchenko I.E., Krivaltsevich S.V.**

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**EVALUATION OF THE APPLICABILITY OF NEURAL NETWORKS
TO SUPPRESS HARMONIC DISTORTION OF HF POWER AMPLIFIERS**

24. **Poddubny S.S., Mashkov G.M., Borisov E.G., Egorov S.G.**

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MULTIPOSITIONAL RADIOLOCATION SYSTEM BASED ON BISTATIC CELLS

25. **Povarenkin N.V. Velezhev D.S., Romanenkov D.A., Mulminov M.V.**

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**PARAMETERS OF CHANNEL-FORMING MODULES OF DIGITAL
ANTENNA ARRAYS**

26. **Rabin A.V**

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**ENCODING AND DECODING SCHEMES IN COMMUNICATION SYSTEMS
USING ORTHOGONAL CODING FOR NOISE IMMUNITY'S INCREASE**

27. **Smirnov V.M., Filatov V.N.**

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**APPLICATION OF WAVELET TRANSFORM FOR SPEECH SIGNAL
SEGMENTATION**

28. **Veresova A.M., Ovchinnikov A.A., Member, IEEE**

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**ABOUT ONE ALGORITHM FOR CORRECTING BURSTS USING
BLOCK-PERMUTATION LDPC-CODES**

29. **Yablokov E.N., Vinogradov A.Yu., Yachnaya V.O.**

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NETWORK TRAFFIC ANALYSIS USING ETH-SPW PROTOCOL

30. **Zeulin N.V., Pastushok I.A., Turlikov A.M., Davydov V.A.**

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**ON PERFORMANCE OF REMAINDER CODES IN MANHATTAN METRICS
OVER AWGN CHANNEL WITH MODULATION 1024-QAM**

CHAPTER 6.

Electromechanics and control systems

1. Andreev P.G., Yurkov N.K., *Member, IEEE*, **Grishko A.K.,** *Member, IEEE*, **Kochegarov I.I.,** *Member, IEEE*, **Zhumabaeva A.S.**

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**STUDY OF DIELECTRIC EFFECT ON SIGNAL PROPAGATION
IN THE GIGAHERTZ RANGE AT ELEVATED TEMPERATURE**

2. Bestugin A.R., Yakimov A.N., Kirshina I.A.

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Saint-Petersburg, Russia*

**RESEARCH POSSIBILITIES OF THE MICROWAVE ANTENNA
OPTIMIZATION WITH TAKING INTO ACCOUNT EXTERNAL
ELECTROMAGNETIC ACTIONS**

3. Filonov O.M., Bestugin A.R., Kirshina I.A., Okin P.A.

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**PARAMETRIC CORRECTION OF MICRORESONATORS BY INTERNAL
ELASTIC FIELDS GENERATION**

4. Kalinkina M.E., Bibikov S.V., Korobeynikov A.G., Pirozhnikova O.I., Tkalich V.L.

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and Optics, University ITMO (National Research University) University ITMO,
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**ANALYSIS OF THE RIGIDITY OF ELASTIC SUSPENSIONS AND
MEMBRANES OF ELECTROMECHANICAL TRANSDUCERS**

5. Martyanov P.S.

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of Sciences (STC UI RAS), Moscow, Russia*

**DESCRIPTION OF THE PROCESS OF DEVELOPMENT OF FILTERS
ON ELEMENTARY UNITS OF ANALOG ELECTRONICS**

6. Mikhailov V.F.

St. Petersburg State University of Aerospace Instrumentation, St. Petersburg, Russia

**RADIATION OF A FLAT WAVEGUIDE CLOSED BY MOLDED HEAT
PROTECTION**

7. **Murasov K.V., Zavyalov S.A., Kosykh A.V., Fakhrutdinov R.R., Wolf R.A.**

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**THE ULTRA-WIDEBAND MICROWAVE MICROELECTRONICS SYSTEMS
IN THE SI-GE BICMOS 130 NM TECHNOLOGY**

8. **Suvorova E.A., Rozanov V.V.**

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**DYNAMIC RECONFIGURABLE PACKET DISTRIBUTION UNIT
FOR EMBEDDED SYSTEMS**

9. **Vasilieva D.V., Mikhailov V.F.**

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**RADIATION OF A FLAT WAVEGUIDE CLOSED BY INHOMOGENEOUS
THERMAL PROTECTION**

10. **Yakimov A.N., Nerobeev A.V.**

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**OPTIMIZATION OF MICROWAVE ANTENNA DESIGNS USING FINITE
ELEMENT MODELS**

CHAPTER 7.

Microelectronic Embedded Systems

1. Bezvitniy S.A.

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CONTROL SYSTEMS FOR UNMANNED AERIAL VEHICLES

2. Burakov M.V.

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FUZZY MULTIPLE MODEL ADAPTIVE CONTROL

3. Vataeva E.Yu., Shishlakov V.F., Shishlakov D.V., Reshetnikova N.V.

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PARAMETRIC SYNTHESIS OF NONLINEAR AUTOMATIC CONTROL SYSTEMS WITH POLYNOMIAL APPROXIMATION

4. Erokhina O.V., Mukhametov D.R., Sheremetiev A.V.

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NEW SOCIAL REALITY: DIGITAL SOCIETY AND SMART CITY

5. Kaflanov R.I., Levko I.V., Legkov K.E.

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SELECTION AND JUSTIFICATION OF PARAMETERS AND CHARACTERISTIC OF THE FUNCTIONING OF THE AGGREGATIVE AUTOMATED CONTROL SYSTEM OF COMPLEX ORGANIZATIONAL AND TECHNICAL SYSTEM IN THE CONDITIONS OF INTENSIVE IMPACTS

6. Kozlov S.V., Kubankov A.N., Shabanov A.P.

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INNOVATIONS IN CONTROL SYSTEMS OF ACTIONS OF ROBOTIC OBJECTS IN THE FIELD OF EMERGENCY RESPONSE

7. Legkov K.E., Burenin A.N.

Military Space Academy named after A.F. Mozhaisky St. Petersburg, Russia

EVALUATION OF THE STATE OF MODERN INFORMATION SYSTEMS IN THE ORGANIZATION OF STOCHASTIC CONTROL BASED ON THE KALMAN-BUCY THEORY

8. **Nazarenko P.A., Zadirienko A.I., Ovchinnikova N.A.**

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QUADCOPTER AS A CONTROL OBJECT

9. **Paraskun A.S., Moskaletz O.D., Kazakov V.I., Vaganov M.A.**

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**THE APPLICATION OF CONTACTLESS OPTICAL SPECTROSCOPY IN
AUTOMATIC CONTROL SYSTEMS OF TECHNOLOGICAL PROCESSES**

10. **Romanov N.V., Kochetkov Y.D., Ivanov A.A.**

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**INTERNAL TIME DIVISION COMMAND/RESPONSE MULTIPLEX DATA BUS
FOR VEHICLE ELECTRICS CONTROL SYSTEM**

11. **Ushakov V.A., Member, IEEE**

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**DEVELOPMENT SIMULINK-MODEL FOR SOLVING THE PROBLEM
OF ANALYSIS AND SYNTHESIS OF NONLINEAR AUTOMATIC CONTROL
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12. **Yakushenko S.A., Dvornikov S.V.**

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**MODEL OF ACCESS TO THE RESOURCES OF THE SATELLITE RADIO
NAVIGATION SYSTEM IN THE CONDITIONS OF DESTRUCTIVE
RADIO-ELECTRONIC EXPOSURE**

13. **Zadirienko A.I., Nazarenko P.A., Ovchinnikova N.A.**

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**ANGLE OF ATTACK SENSOR BASED ON ARDUINO UNO
MICROCONTROLLER**