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**Alferov Zh. I., Aseev A. L., Gaponov S. V., Kopjev P. S., Panov V. I., Poltoratsky E. A., Sibeljdin N. N., Suris R. A.**  
*Nanomaterials and Nanotechnologies* . . . . . 3

The materials of the reports in the condition and the development of nanotechnology and nanomaterials creation discussed in the meetings of the year's collection of the Russia academy of sciences and the Ministry of the industry, science and technologies of Russia Federation are stated. The acquaintance of the readers of the journal with point of view of the leading scientists of the Russia to the perspectives of nanotechnology will make possible to get the objective estimate of the future efforts in this area of the knowledges.

**Kotov V. N., Cherepakhin I. I.** *The Integral Silicon Microthermoanemometer for Measurement of the Flow of Fluid and Gaseous mediums* . . . . . 14

The integral silicon microthermoanemometer as a universal sensor for construction of flow transducers of fluid and gaseous mediums is presented. The design which allow to use the different schemes of including of heater and temperature sensitive resistive components for regulation of parameters of process of measurement of flow velocity is offered. The methods of measurements of the flow used at making of thermal flowmeters on the basis of a microthermoanemometer are shown.

**Reznik A. L., Efimov V. M.** *The Increase of the Space Resolution of the Digital Representations and Signals with the Help of the Regulative Subpoint Scan* . . . . . 20

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**Vasiljev V. A.** *Synergetics Principles and the Manifestation of the Synergetic Appearances in the Structures of the Ionic Semiconductors* . . . . . 26

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**Letuta S. N., Lantukh Yu. D., Pashkevitch S. N., Alidjanov E. K.** *Photosensitized Reactions in Dyed Solutions of Nucleic Acids* . . . . . 34

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**Zajchuk R., Sullivan G. R.** *The Individual Monitoring of a Soldier, Microinstrument and Telemedicine: Condition and Perspective* . . . 41

The great soldiers' death-rate of wounds in modern battle operations demands the development of life-saved foremost technologies good for use both on the field of the battle and in army medicine centers. The results of the investigations of the Medicine Department of the Army Department of the USA Defence on the elaboration of such technologies.

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