

CURRICULUM VITAE

Ivan I. Bobrinetskiy

Education

2005 - 2009	Moscow state institute of electronic technology, Doctor of Technical Science	Moscow, Russia
2002 - 2004	Moscow state institute of electronic technology, Candidate of Technical Science	Moscow, Russia
2000 - 2002	Moscow state institute of electronic technology, M.S. in Electronics and Microelectronics	Moscow, Russia
1996 - 2000	Moscow state institute of electronic technology, B.S. in Electronics and Microelectronics	Moscow, Russia

Research Interests

Nano-bio-electronics, Scanning Probe Microscopy, Nanowires, Nanotubes/Graphene devices, Nanosensing, Nanomedicine, Nanomaterials, Conducting Polymers, Nanolithography (probe, ion beam).

Professional Experience:

- 11/2010 – Lead Researcher, MIET, Moscow, Russia.
- 10/2005 – Senior Researcher, MIET, Moscow, Russia.
- 09/2002 – Research assistant, MIET, Moscow, Russia.
- 01/1999 – Technician, MIET, Moscow, Russia.

Teaching Experience:

- 01/2011 – Professor, MIET, Moscow, Russia.
- 09/2007 – Associate professor, MIET, Moscow, Russia.
- 01/2005 – Assistant professor, MIET, Moscow, Russia.
- 01/2003 – Teacher, MIET, Moscow, Russia.

Other Employments/Consultancies

- 10/2011–11/2012 - Consultant, Nanoengineering of Organic and Biological Integrated Systems LLC (*cells growth stimulating systems*)
- 06/2006–08/2008 – Chief Scientist, RPSL LLC (*CVD systems production*)
- 06/2000-12/2000 – Production engineer, State Research Institute for Problems in Physics (*silicon probes production scanning probe microscopy*)

Awards & Honors

- 01/2012 Grant of Russian Federation President for Young Russian Scientists Support
- 03/2010 The Award of Russian Federation Government in the Field of a Science and Techniques for Young Scientists
- 03/2008 “Golden medal “Archimedes” of Moscow International Salon of Inventions and Innovation Technologies «Archimedes»
- 01/2005 Grant of Russian Federation President for Young Russian Scientists Support
- 09/2002 Diploma of Moscow Grant for Science and Technology

Membership in Professional Associations

- Federal Register of Experts in Science and Technology
- Editorial Board member of American Journal of Tissue Engineering
- Program Committee Member of International Symposium of IEEE Circuits and Systems in Latin America.
- Organization Committee Member of National Interuniversity Scientific Conference of students and post-graduate students “Microelectronics and Informatics”.
- Chairman of Young Scientists Council of MIET.
- Member of Young Scientists and Specialists Council of Zelenograd town.

Selected Publications:

1. *Effect of an Organic Molecular Coating on Control Over the Conductance of Carbon Nanotube Channel* // I.I. Bobrinetskiy, A.V. Emelianov, V.K. Nevolin, A.V. Romashkin. **Semiconductors**, 2014, Vol. 48, No. 13, pp. 1735–1741.
2. *Photoelectric response of thiamonomethinecyanine J-aggregate nanoribbons deposited via dielectrophoresis technique* // I.V. Fedorov, I.I. Bobrinetskiy, B.I. Shapiro, A.V. Romashkin, V.K. Nevolin. **Physics Letters A**, 2014, V. 378, Iss. 3, P. 226-228.
3. *The development of flexible transparence and conductive coatings based on single-walled carbon nanotubes* // KF Akhmadishina, II Bobrinetsky, RA Ibragimov, IA Komarov, AM Malovichko, VK Nevolin, VA Petuhov. **Inorganic materials**, 2014, Vol. 50. N. 1. P. 23-28.
4. *Photothermoelectric Response in Asymmetric Carbon Nanotube Devices Exposed to Sub-THz Radiation* // G. Fedorov, A. Kardakova, I. Gayduchenko, I. Charayev, B.M. Voronov, M. Finkel, T.M. Klapwijk, S. Morozov, M. Presniakov, I. Bobrinetskiy, R. Ibragimov, G. Goltsman. **Applied Physics Letters**, 2013. Vol. 103. N. 18. P. 181121(5).
5. *Flexible biological sensors based on carbon nanotubes films* // Ahmadishina K.F., Bobrinetskiy I.I., Komarov I.A., Malovichko A.M., Nevolin V.K., Petuhov V.A., Golovin A.V., Zalevskiy A.C. **Nanotechnologies in Russia**, 2013, Volume 8, Numbers 11-12. P. 721-726.
6. *The Interaction Between Nerve Cells and Carbon Nanotube Networks Made by CVD Process Investigation* // Bobrinetskiy I.I., Seleznev A.S., Gayduchenko I.F., Fedorov G.E., Domantovskiy A.G., Presnyakov M.Yu., Podchernyaeva R.Y., Mikchailova G.R., Suetina I.A. **Biophysics**, 2013, Vol. 58, No. 3, pp. 409–414.
7. *Transparent and Biocompatible Electrodes Based on Carbon Nanotubes/Albumin Composite* // Kireev D., Bobrinetskiy I., Seleznev A., Fedorov I., Romashkin A., Morozov R. **Open Journal of Composite Materials**, Vol. 3 No. 2A, 2013, pp. 33-39.
8. *Quasi One Dimensional Molecular Transistors Based on Polyaniline and Carbon Nanotubes as Electrodes* // Bobrinetskiy I.I., Nevolin V.K., Romashkin A.V. **Semiconductors**, 2012, Vol. 46, No. 13, pp. 1593-1597.
9. *Investigation of the Effect of Local Electrical Stimulation on Cells Cultured on Conductive Single-Walled Carbon Nanotube/Albumin Films* // Bobrinetskiy I.I., Seleznev A.S., Morozov R.A., Lopatina O.A., Podchernyaeva R.Y. Suetina I.A. **Journal of Biomaterials and Nanobiotechnology**, Vol. 3 No. 3, 2012, pp. 377-384.
10. *Proliferative Activity and Viability of Fibroblast and Glioblastoma Cell on Various Types of Carbon Nanotubes* // Bobrinetskiy I.I., Morozov R.A., Seleznev A.S., Podchernyaeva R.Ya., Lopatina O.A. **Bulletin of Experimental Biology and Medicine**. - 2012. - Vol. 153, Iss. 2, P. 259-262.
11. *Radiation Effects in Nanoelectronic Elements* // Gromov D.V., Elesin V.V., Petrov G.V., Bobrinetskiy I.I., Nevolin V.K. **Semiconductors**, 2010, Vol. 44, No. 13, pp. 1699–1702.

12. *Formation of Integrated Nanosized Graphene Structures by Focused Ion-Beam Etching* // Bobrinetskii I.I., Gorshkov K.V., Nevolin V.K., Tsarik K.A. **Nanotechnologies in Russia**, 2010, Volume 5, Numbers 5-6. P. 313-319.
13. *Methods of parallel integration of carbon nanotubes during the formation of functional devices for microelectronics and sensor technologies* // Bobrinetskii I.I. **Russian Microelectronics**, 2009, Vol. 38, No. 5. PP. 320-326.
14. *Electrophoresis in the tasks of purifying, separating, and integrating carbon nanotubes* // Bobrinetskii I.I. **Nanotechnologies in Russia**, 2009, Vol. 4, No. 1-2, pp. 55-59.
15. *Intracavity laser spectroscopy for the identification of nanomedia* // Bobrinetskii I.I., Kolerov A.N., Nevolin V.K. **Technical Physics Letters**, 2009, Vol. 35, No. 9. PP. 800-803.
16. *Nanotube-based three-dimensional albumin composite obtained using continuous laser radiation* // Ageeva S.A., Bobrinetskii I.I., Nevolin V.K., Podgaetskii V.M., Selishchev S.V., Simunin M.M., Konov V.I., Savranskii V.V. **Semiconductors**, 2009, Vol. 43, No. 13. PP. 1714-1718.
17. *Carbon nanomaterial studied by atomic-force and electron microscopies* // Bobrinetskii I.I., Kukin V.N., Nevolin V.K., Simunin M.M. **Semiconductors**, 2008, Vol. 42, No. 13. PP. 1496-1498.
18. *Volumetric nanodesign by new laser method. Application for medical purposes* // Podgaetsky V.M., Selishchev S.V., Bobrinetskii I.I., Nevolin V.K. **Optical Memory & Neural Networks**, 2008, Vol. 17, No. 2, pp 147-151.
19. *Production of carbon nanotubes by catalytic gas-phase pyrolysis of ethanol* // Bobrinetskii I.I., Nevolin V.K., Simunin M.M. **Theoretical Foundations of Chemical Engineering**, 2007, Vol. 41, No. 5, pp. 639-643.
20. *Field-modulated conductivity in quasi-one-dimensional molecular conductors* // Bobrinetskii I.I., Nevolin V.K., S. V. Khartov, Chaplygin Yu.A. **Technical Physics Letters**, 2005, Vol. 31, No.10. P. 885-887.
21. *Controlling Electrical Transport through Bundles of Single-Wall Carbon Nanotubes* // Bobrinetskii I.I., Nevolin V.K., Stroganov A.A., Chaplygin Yu.A. **Russian Microelectronics**, 2004, Vol. 33, No. 5. pp. 292-297.
22. *The atomic structure of nanotubes synthesized from a carbon mix of high reaction ability* // Bobrinetskii I.I., Nevolin V.K., Petrik V.I., Stroganov A.A., Chaplygin Yu.A. **Technical Physics Letters**, 2003, Vol. 29, No. 4. P. 347-349.
23. *Current–Voltage Characteristics of Two-Electrode Elements with Carbon Nanotubes* // Bobrinetskii I.I., Nevolin V.K., Petrik V.I., Chaplygin Yu.A. **Russian Microelectronics**, 2003, Vol. 32, No. 2. P. 79-81.

Book

Equipments and methods for probe microscopy: tutorials // EG Dedkova, AA Chuprikov, II Bobrinetsky, VK Nevolin; MPHTI, 2011 . – 159 p. (in Russian)

Patents:

1. *RU 2488629*. Device for Cell Electrical Stimulation. 2013.
2. *RU 2465312*. Nanotube Carrier for Electric Stimulation of Cell Growth and Method for Production Thereof. 2012.
3. *RU 2402021*. Test Structure for Graduating Scanning Probe Microscopes. 2010.
4. *RU 2379671*. Sensor Structure Based on Quasi-One-Dimensional Conductors. 2010.
5. *RU 2347740*. Method of Nanosucturisation of Bulk Bio-Compatible Materials. 2009.
6. *RU 2317940*. Selective Gas Pickup 2008.
7. *RU 2308414*. Device for Measuring Sizes of Needle Tip for Scanning Microscope. 2007.
8. *RU 2307786*. Method of Formation of Planar Molecular Conductors in the Polymeric Matrix. 2007.