

<b>Education</b>	<b>Master of Science in Nuclear Physics</b> August/1984 Voronezh State University, Voronezh, Russia
	<b>Doctor of Philosophy in Nuclear Physics</b> November/1994 Joint Institute for Nuclear Research, Dubna, Moscow reg, Russia
	Ph.D. thesis: "Non-statistical effects in cascade $\gamma$ -transitions of even-even heavy nuclei"
<b>Work experience</b>	<b>Research Assistant Professor</b> 2008-present Edwards Accelerator Laboratory, Physics and Astronomy Department Ohio University, Athens OH
	<b>Research Associate</b> 2004-2008 Edwards Accelerator Laboratory, Physics and Astronomy Department Ohio University, Athens OH
	Set up and performed scientific experiments on tandem charged particle accelerator of Edwards Laboratory, registered charged particles (proton, $\alpha$ -particles), neutrons and $\gamma$ -rays with silicon, scintillator (BGO, NaI, NE213) and Ge detectors. Worked with electronics, analyzed data with computer programs including those written by myself. Analyzed reaction cross sections with nuclear reaction codes "Empire" and HF. Analyzed optical model parameters from experimental elastic cross section data with computer code "Fop". Wrote publications and reports, supervised students.
	<b>Staff Physicist</b> 1990-2007 Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia.
	Participated in experiments on IBR-30 reactor and Van de Graaff accelerator. Studied neutron capture reactions, neutron resonances, analyzed $\gamma$ -spectra from neutron capture reactions, wrote publications and reports, supervised students. Developed computer codes for calculations of $\gamma$ -decay of compound nuclei, $\gamma$ -strength functions and parameters of neutron resonances such as partial and total radiative widths.
	<b>Junior Researcher</b> 1984-1990 Voronezh State University, Voronezh, Russia
	Worked at the laboratory of environmental radioactivity. Studied $\gamma$ -radiation from different samples, identified radioactive isotopes, made a quantitative analysis of radioactive contaminations, worked with radioactive materials.
<b>Teaching experience</b>	Taught "Introductory Physics" course, Ohio University Fall/2007
<b>International connections</b>	I have close collaboration with Nuclear Physics group from Cyclotron Laboratory of Oslo University (Norway), Budapest Neutron Center (Hungary), as well as people from Livermore National Laboratory, Los Alamos National Laboratory, North Carolina State University, Eskisehir Osmangazi University (Turkey).

I was initiator of the following nuclear physics experiments in which people from different countries participated:

- $^{171}\text{Yb}(n,2\gamma)$  experiment at Los Alamos National Lab., Lujan Neutron Center, 2001
- $^{56}\text{Fe}(n,2\gamma)$  experiment at Budapest Neutron Center, Budapest, Hungary, 2003
- $^{45}\text{Sc}(^3\text{He},\alpha)$  experiment at Edwards Lab. of Ohio University, 2006.

Participated in many international nuclear physics conferences as a speaker as well as an invited speaker.

## **Publications**

Author and co-author of 52 journal articles and about similar number of works presented in preprints and conference proceedings.

## **Membership**

- a member of American Physical Society, Division of Nuclear Physics.
- a member of editorial board and a referee for "Open Nuclear Physics Journal", Bentham Publishing company (Netherlands) <http://www.bentham.org/open/tonppj/EBM.htm>
- a referee for Institute of Physics (IOP) journals (London) related to nuclear and applied physics, Physical Review C
- a member of the organizing committee of international nuclear physics meeting in 2008.

## **Honors, awards**

NATO fellowship awarded by Norwegian Research Council, 2002 (have been invited to stay at Oslo University for 3 months to do research).

**List of  
publications**  
(conference  
proceedings are  
not included)

1. A.V. Voinov, S.M. Grimes, A.C. Larsen, C.R. Brune, M. Guttormsen, T. Massey, A. Schiller, S. Siem, N.U.H. Syed, Phys. Rev. C77, 034613(2008).  
*Level densities of  $^{44}\text{Sc}$  and  $^{47}\text{Ti}$  from different experimental techniques*
2. E. Algin, A. Schiller, A. Voinov, U. Agvaanluvsan, T. Belgya, L.A. Bernstein, C.R. Brune, R. Chankova, P.E. Garrett, S.M. Grimes, M. Guttormsen, M. Hjorth-Jensen, M.J. Hornish, C.W. Johnson, T. Massey, G.E. Mitchell, J. Rekstad, S. Siem, W. Younes  
Phys. Atomic Nuclei 70, 1634 (2007)  
*Bulk properties of iron isotopes*
3. A.C. Larsen, M. Guttormsen, R. Chankova, F. Ingebretsen, T. Lonnroth, S. Messelt, J. Rekstad, A. Schiller, S. Siem, N.U.H. Syed, A. Voinov  
Phys. Rev. C76, 044303 (2007)  
*Nuclear level densities and  $\gamma$ -ray strength functions in  $^{44,45}\text{Sc}$*
4. A. Voinov, S.M. Grimes, C.R. Brune, M.J. Hornish, T.N. Massey, and A. Salas  
Phys. Rev. C76, 044602 (2007)  
*Test of nuclear level density inputs for Hauser-Feshbach model calculations*
5. M. Guttormsen, R. Chankova, A.C. Larsen, J. Rekstad, S. Siem, N.U.H. Syed, U. Agvaanluvsan, A. Schiller, A. Voinov  
Acta Phys. Pol. B38, 1489 (2007)  
*The Role of Broken Cooper Pairs in Warm Nuclei*
6. A.C. Larsen, M. Guttormsen, R. Chankova, F. Ingebretsen, T. Lonnroth, S. Messelt, S.W. Odegard, J. Rekstad, S. Siem, N.U.H. Syed, A. Schiller, A. Voinov  
Acta Phys. Pol. B38, 1495 (2007)  
*Radiative Strength Functions of Warm Nuclei in the  $1f_{7/2}$  Shell*
7. R. Chankova, A. Schiller, U. Agvaanluvsan, E. Algin, L.A. Bernstein, M. Guttormsen, F. Ingebretsen, T. Lonnroth, S. Messelt, G.E. Mitchell, J. Rekstad, S. Siem, A.C. Larsen, A. Voinov, S. Odegard  
Phys. Rev. C 73, 034311 (2006)  
*Level densities and thermodynamical quantities of heated  $^{93-98}\text{Mo}$  isotopes*
8. K. Kaneko, M. Hasegawa, U. Agvaanluvsan, E. Algin, R. Chankova, M. Guttormsen, A.C. Larsen, G.E. Mitchell, J. Rekstad, A. Schiller, S. Siem, A. Voinov  
Phys. Rev. C74, 024325 (2006)  
*Breaking of nucleon Cooper pairs at finite temperature in  $^{93-98}\text{Mo}$*
9. A.C. Larsen, R. Chankova, M. Guttormsen, F. Ingebretsen, S. Messelt, J. Rekstad, S. Siem, N.U.H. Syed, S.W. Odegard, T. Lonnroth, A. Schiller, A. Voinov  
Phys. Rev. C73, 064301 (2006)  
*Microcanonical entropies and radiative strength functions of  $^{50,51}\text{V}$*
10. A. Schiller, A. Voinov, E. Algin, J.A. Becker, L.A. Bernstein, P.E. Garrett, M. Guttormsen, R.O. Nelson, J. Rekstad, S. Siem  
Phys. Lett. B633, 225 (2006)  
*Low-energy M1 excitation mode in  $^{172}\text{Yb}$*
11. A. Schiller, A.V. Voinov, E. Algin, L.A. Bernstein, P.E. Garrett, M. Guttormsen, R.O. Nelson, J. Rekstad, S. Siem  
Phys. Rev. C74, 017305 (2006)  
*Primary versus secondary  $\gamma$ -intensities in  $^{171}\text{Yb}(n_{th}, \gamma)$*
12. A.V. Voinov, S.M. Grimes, U. Agvaanluvsan, E. Algin, T. Belgya, C.R. Brune, M. Guttormsen, M.J. Hornish, T. Massey, G.E. Mitchell, J. Rekstad, A. Schiller, S. Siem  
Phys. Rev. C74, 014314 (2006)  
*Level density of  $^{56}\text{Fe}$  and low-energy enhancement of  $\gamma$ -strength function*
13. U. Agvaanluvsan, E. Algin, J.A. Becker, M. Guttormsen, G.E. Mitchell, S. Siem, A. Schiller, A. Voinov  
Nucl. Instrum. Methods Phys. Res. B241, 180 (2005)  
*Investigation of the radiative strength function*

14. M. Guttormsen, R. Chankova, U. Agvaanluvsan, E. Algin, L.A. Bernstein, F. Ingebretsen, T. Lonroth, S. Messelt, G.E. Mitchell, J. Rekestad, A. Schiller, S. Siem, A.C. Sunde, A. Voinov, S. Odegard  
Phys. Rev. C71, 044307 (2005)  
*Radiative strength functions in  $^{93-98}\text{Mo}$*
15. S. Siem, M. Guttormsen, E. Algin, U. Agvaanluvsan, T. Belgya, R. Chankova, G. Mitchell, L.A. Bernstein, J. Rekestad, A. Schiller, A.C. Sunde, N. Syed, A. Voinov  
Acta Phys. Pol. B36, 1089 (2005)  
*Soft resonances in hot nuclei*
16. A.C. Sunde, M. Guttormsen, R. Chankova, F. Ingebretsen, T. Lonroth, S. Messelt, J. Rekestad, A. Schiller, S. Siem, N.U.H. Syed, A. Voinov, S.W. Odegard  
Acta Phys. Pol. B36, 1197 (2005)  
*Thermal and electromagnetic properties of the light vanadium isotopes  $^{50,51}\text{V}$*
17. U. Agvaanluvsan, A. Schiller, J.A. Becker, L.A. Bernstein, P.E. Garrett, M. Guttormsen, G.E. Mitchell, J. Rekestad, S. Siem, A. Voinov, W. Younes  
Phys. Rev. C70, 054611 (2004)  
*Level densities and  $\gamma$ -ray strength functions in  $^{170,171,172}\text{Yb}$*
18. A. Voinov, E. Algin, U. Agvaanluvsan, T. Belgya, R. Chankova, M. Guttormsen, G.E. Mitchell, J. Rekestad, A. Schiller, S. Siem  
Phys. Rev. Lett. 93, 142504 (2004)  
*Large Enhancement of Radiative Strength for Soft Transitions in the Quasicontinuum*
19. A.V. Voinov, A. Schiller, E. Algin, L.A. Bernstein, P.E. Garrett, M. Guttormsen, R.O. Nelson, J. Rekestad, S. Siem  
Yad. Fiz. 67, 1891 (2004); Phys. Atomic Nuclei 67, 1866 (2004)  
*Nature of the Pygmy Resonance in Continuous  $\gamma$ -spectra*
20. M. Guttormsen, E. Melby, J. Rekestad, S. Siem, A. Schiller, T. Lonroth, A. Voinov  
J. Phys. (London) G29, 263 (2003)  
*Level density and  $\gamma$ -ray strength in  $^{27,28}\text{Si}$*
21. M. Guttormsen, A. Bagheri, R. Chankova, J. Rekestad, S. Siem, A. Schiller, A. Voinov  
Phys. Rev. C68, 064306 (2003)  
*Thermal properties and radiative strengths in  $^{160,161,162}\text{Dy}$*
22. A. Voinov, A. Schiller, M. Guttormsen, J. Rekestad and S. Siem  
Nucl. Instrum. Methods Phys. Res. A497, 350 (2003)  
*Determination of the electromagnetic character of soft dipole modes solely based on quasi-continuous  $\gamma$ -spectroscopy*
23. A. Schiller, E. Algin, L.A. Bernstein, P.E. Garrett, M. Guttormsen, M. Hjorth-Jensen, C.W. Johnson, G.E. Mitchell, J. Rekestad, S. Siem, A. Voinov, W. Younes  
Phys. Rev. C68, 054326 (2003)  
*Level densities in  $^{56,57}\text{Fe}$  and  $^{96,97}\text{Mo}$*
24. A.V. Voinov, D.G. Serov, Yu.P. Popov, N.A. Gundorin, A.P. Kobzev, S.S. Parzhitski  
Yad. Fiz. 66, 47 (2003); Phys. Atomic Nuclei 66, 44 (2003)  
*Measurements of the Partial Cross Section for the Reaction  $^{48}\text{Ti}(n,\gamma)^{49}\text{Ti}$  and Estimation of the Radiative Strength Functions for E1 and M1 Transitions*
25. S. Siem, M. Guttormsen, K. Ingeberg, E. Melby, J. Rekestad, A. Schiller, A. Voinov  
Phys. Rev. C65, 044318 (2002)  
*Level Densities and  $\gamma$ -Strength Functions in  $^{148,149}\text{Sm}$*
26. E. Melby, M. Guttormsen, J. Rekestad, A. Schiller, S. Siem, A. Voinov  
Phys. Rev. C63, 044309 (2001)  
*Thermal and Electromagnetic Properties of  $^{166}\text{Er}$  and  $^{167}\text{Er}$*
27. Yu.P. Popov, A.V. Voinov, P.V. Sedyshev, S.S. Parzhitsky, A.P. Kobzev, N.A. Gundorin, D.G. Serov, M.V. Sedysheva  
Nucl. Instrum. Methods Phys. Res. A463, 309 (2001)  
*Neutron Spectrometry Method for Partial Radiative Capture Cross-Section Measurements*

28. A. Voinov, M. Guttormsen, E. Melby, J. Rekestad, A. Schiller, S. Siem  
Phys. Rev. C63, 044313 (2001)  
 *$\gamma$ -Ray Strength Function and Pygmy Resonance in Rare Earth Nuclei*
29. Yu.P. Popov, A.V. Voinov, S.S. Parzhitsky, N.A. Gundorin, D.G. Serov, A.P. Kobzev,  
P.V. Sedyshev  
Yad. Fiz. 63, No 4, 583 (2000); Phys. Atomic Nuclei 63, 525 (2000)  
*Measurements of a Partial Cross Section for the Reaction  $^{58}\text{Ni}(n,\gamma)^{59}\text{Ni}$*
30. Yu.V. Kholnov, A.V. Voinov  
Bull. Rus. Acad. Sci. Phys. 62, 1701 (1998)  
*Increasing the Resolution in Coincidence Spectra of Different Radiations*
31. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 60, 1695 (1996)  
*Features of Cascade  $\gamma$ -Decay of the  $^{170}\text{Tm}$  Compound State Excited by Thermal Neutron Capture*
32. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 60, 1706 (1996)  
*Cascades of  $\gamma$ -Transitions in the  $^{200}\text{Hg}$  Nucleus at a Thermal Neutron Capture by  $^{199}\text{Hg}$  Nucleus*
33. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
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*Two-Quantum Cascades at a Thermal Neutron Capture in  $^{114}\text{Cd}$*
34. S.T. Boneva, V.A. Khitrov, A.M. Sukhovi, A.V. Vojnov  
Nucl. Phys. A589, 293 (1995)  
*Excitation Study of High-Lying States of Differently Shaped Heavy Nuclei by the Method of Two-Step Cascades*
35. S.T. Boneva, E.V. Vasilieva, A.V. Voinov, A.M. Sukhovoy, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 59, 728 (1995)  
*Specific Features of Cascade  $\gamma$ -Decay of a Compound State in  $^{198}\text{Au}$  Nucleus Excited by Capture of Thermal Neutrons*
36. R. Georgii, P. von Neumann-Cosel, T. von Egidy, M. Grinberg, V.A. Khitrov, J. Ott,  
P. Prokofev, A. Richter, W. Schauer, C. Schlegel, R. Schulz, L.J. Simonova, Ch. Stoyanov,  
A.M. Sukhovi, A.V. Voinov  
Phys. Lett. 351B, 82 (1995)  
*Unusual Neutron-Capture Gamma-Ray Cascade in  $^{124}\text{Te}$ : A fingerprint of octupole-coupled multiphonon states*
37. R. Georgii, T. von Egidy, J. Klora, H. Lindner, U. Mayerhofer, J. Ott, W. Schauer,  
P. von Neumann-Cosel, A. Richter, C. Schlegel, R. Schulz, V.A. Khitrov, A.M. Sukhovi,  
A.V. Vojnov, J. Berzins, V. Bondarenko, P. Prokofjevs, L.J. Simonova, M. Grinberg,  
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Nucl. Phys. A592, 307 (1995)  
*Complete Level Scheme of  $^{124}\text{Te}$  up to 3 MeV*
38. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 59, 1815 (1995)  
*Investigation of  $^{146}\text{Eu} \rightarrow ^{146}\text{Sm}$  Decay Scheme by the  $\gamma\gamma$ -Coincidence Method with Summation of Amplitudes of Coinciding Pulses*
39. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 59, 1889 (1995)  
*Two-Quantum Cascades in Decay of the Compound State of  $^{192}\text{Ir}$  Nucleus Excited by Capture of Thermal Neutrons*
40. E.V. Vasilieva, A.V. Voinov, A.M. Sukhovi, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 59, 1902 (1995)  
*Cascade  $\gamma$ -Decay of the Compound State of  $^{160}\text{Tb}$  Nucleus*

41. M.A. Ali, V.A. Khitrov, Yu.V. Kholnov, A.M. Sukhovoij, A.V. Voinov  
J. Phys.(London) G20, 1943 (1994)  
*Properties of the  $^{158}\text{Gd}$  Compound State Gamma-Decay Cascades*
42. M.A. Ali, E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 58, 1889 (1994)  
*Cascade  $\gamma$ -Decay of the  $^{196}\text{Pt}$  Compound State Excited by Capture of Thermal Neutrons in  $^{195}\text{Pt}$*
43. E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov  
Bull. Rus. Acad. Sci. Phys. 58, 1896 (1994)  
*Cascade  $\gamma$ -Decay of the  $^{124}\text{Te}$  Compound State Excited by Thermal Neutron Capture*
44. E.V. Vasileva, A.V. Voinov, V.D. Kulik, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov, V.N. Shilin  
Yad. Fiz. 56, No 2, 13 (1993); Phys. Atomic Nuclei 56, 154 (1993)  
*Method for Analyzing the Nonstatistical Behavior of the Radiative Strength Function in the Capture of Thermal and Resonance Neutrons*
45. E.V. Vasilieva, A.V. Voinov, V.D. Kulik, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov, V.N. Shilin  
Bull. Rus. Acad. Sci. Phys. 57, 1549 (1993)  
*New Procedure for Subtraction of Compton Background in  $\gamma\gamma$ -Coincidences by Summation of Amplitudes of Coinciding Pulses*
46. E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, V.D. Kulik, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov, V.N. Shilin  
Bull. Rus. Acad. Sci. Phys. 57, 1582 (1993)  
*Possible Equidistance of Nuclear Excitation Energies*
47. E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, V.D. Kulik, A.M. Sukhovoij, Yu.V. Kholnov, V.N. Shilin  
Bull. Rus. Acad. Sci. Phys. 57, 1591 (1993)  
*Two-Quantum Cascades in the Capture of Thermal Neutrons by  $^{149}\text{Sm}$  Nuclei*
48. E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, V.D. Kulik, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov, V.N. Shilin  
Bull. Rus. Acad. Sci. Phys. 57, 1749 (1993)  
*Cascade  $\gamma$ -Decay of a Compound State of  $^{156}\text{Gd}$*
49. E.V. Vasilieva, A.V. Voinov, O.D. Kestarova, V.D. Kulik, A.M. Sukhovoij, V.A. Khitrov, Yu.V. Kholnov, V.N. Shilin  
Bull. Rus. Acad. Sci. Phys. 57, 1758 (1993)  
*Intense Two-Quantum Cascades and the Decay Scheme of the  $^{164}\text{Dy}$  Compound State*
50. S.T. Boneva, V.A. Khitrov, A.M. Sukhovoij, A.V. Voinov  
Z. Phys. A338, 319 (1991)  
*Intensities of Two-Quanta Cascades at Different Excitation Energies of Compound Nuclei  $^{146}\text{Nd}$ ,  $^{174}\text{Yb}$  and  $^{183}\text{W}$*
51. S.T. Boneva, E.V. Vasileva, A.V. Voinov, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov  
Izv. Akad. Nauk SSSR, Ser. Fiz. 53, 2092 (1989); Bull. Acad. Sci. USSR, Phys. Ser. 53, No.11, 29 (1989)  
*Intense Two-Quantum Cascades and Decay Scheme of Compound State of  $^{174}\text{Yb}$*
52. S.T. Boneva, E.V. Vasileva, A.V. Voinov, Yu.P. Popov, A.M. Sukhovoij, V.A. Khitrov  
Izv. Akad. Nauk SSSR, Ser. Fiz. 53, 2401 (1989); Bull. Acad. Sci. USSR, Phys. Ser. 53, No.12, 124 (1989)  
 *$\gamma$ -Decay of the Compound State of  $^{146}\text{Nd}$  from the  $^{145}\text{Nd}(n,2\gamma)$  Reaction Initiated by Thermal Neutrons*