

# Curriculum vitae of Sergey Lisenkov

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## Personal Information

Date and Place of birth: July 19, 1979, Volgograd, Russia  
Nationality: Russian

## Education

Ph.D. in Physics, Emanuel Institute of Biochemical Physics  
of Russian Academy of Sciences, Moscow, Russia 2005

M.A. in Physics, Volgograd State University, Volgograd, Russia 2001

High school graduate, High-school #57, Volgograd, Russia 1996

## Career/Employment

Research Assistant Professor 2007 – present  
Department of Physics,  
University of Arkansas, USA

Research Associate 2005 – 2007  
Supervisor – Prof. Laurent Bellaiche  
Department of Physics,  
University of Arkansas, USA

## Research Interests

Finite-temperature properties of multiferroic materials  
Perovskite superlattices and nanostructures  
Electronic and stability properties of nanotubes and fullerenes

## Area of expertise

First-principles calculations, density functional theory, molecular dynamics, tight-binding ;

## Publications

1. Igor A. Kornev, S. Lisenkov, R. Haumont, B. Dkhil and L. Bellaiche, "Finite-temperature properties of multiferroic BiFeO<sub>3</sub>", *Physical Review Letters* **99**, 227602 (2007).
2. Sergey Lisenkov and L. Bellaiche " Phase diagrams of epitaxial BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles ", *Phys. Rev. B (Rapid Communication)* **76**, 020102(R) (2007).
3. Laura Walizer, Sergey Lisenkov, and L. Bellaiche " Finite-temperature properties of (Ba,Sr)TiO<sub>3</sub> systems from atomistic simulations", *Phys. Rev. B* **73**, 144105 (2006).
4. Sergey Lisenkov, Antonis N. Andriotis, Inna Ponomareva, and Madhu Menon, "Transport properties of carbon nanotubes with odd-numbered carbon rings", *Phys. Rev. B* **72**, 113401 (2005).
5. S.V. Lisenkov, G.A. Vinogradov, T.Yu. Astakhova, and N.G. Lebedev "Nonchiral BN Haeckelite Nanotubes", *JETP Letters*, **81**, 346 (2005).
6. S.V. Lisenkov, G.A. Vinogradov, and N.G. Lebedev "New Class of Non-Carbon ALP Nanotubes: Structure and Electronic Properties", *JETP Letters*, **81**, 185 (2005).
7. S.V. Lisenkov, L.A. Chernozatonskii, and I.V. Stankevich "*Ab initio* study of novel crystals based on fullerene C<sub>60</sub> and carbynes", *Physics of the Solid State*, **46**, 2317 (2004).
8. S.V. Lisenkov, I.V. Ponomareva, and L.A. Chernozatonskii, "Basic Configuration of a Single-Wall Carbon Nanotube Y Junction of *D*<sub>3h</sub> Symmetry: Structure and Classification", *Physics of the Solid State*, **46**, 1577 (2004).
9. L.A. Chernozatonskii and S.V. Lisenkov "Classification of Three - Terminal Nanotube Junctions", *Fullerenes, nanotubes and carbon nanostructures*, **12**, 105 (2004).

## Talks and Posters

1. Sergey Lisenkov, I. Ponomareva and L. Bellaiche, "Dynamics of domains switching in epitaxial BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles", **Oral presentation** at the 2008 APS March Meeting, New Orleans, Louisiana, March 10-14, 2008.
2. Sergey Lisenkov, I. Ponomareva and L. Bellaiche, "Domains switching in epitaxial BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles". Poster at 2008 Workshop on Fundamental Physics of Ferroelectrics, Williamsburg, Virginia, February, 10-13, 2008.
3. Sergey Lisenkov , Laurent Bellaiche "Phase diagrams of epitaxial BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles", **Oral presentation** at the 2007 APS March Meeting; Denver, Colorado, March 5-9, 2007.
4. Sergey Lisenkov and L. Bellaiche, "Finite-temperature properties of epitaxial BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles", Poster at the 2007 Workshop on Fundamental Physics of Ferroelectrics; Williamsburg, Virginia, February, 11-14, 2007.

5. Sergey Lisenkov, Laura Walizer and L. Bellaiche, "Finite temperature properties of (Ba,Sr)TiO<sub>3</sub> disordered alloys and BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first-principles", **Oral presentation** at the 2006 APS March Meeting; Baltimore, Maryland, March 13-17, 2006.
6. Sergey Lisenkov, Laura Walizer and L. Bellaiche, "Modeling finite temperature properties of (Ba,Sr)TiO<sub>3</sub> disordered alloys and BaTiO<sub>3</sub>/SrTiO<sub>3</sub> superlattices from first principles", Poster at the 2006 Workshop on Fundamental Physics of Ferroelectrics; Williamsburg, Virginia, February, 12-15, 2006.
7. S. Lisenkov and L.A. Chernozatonskii, "*Ab initio* study of novel crystals based on fullerene C<sub>60</sub> and carbynes", Poster at the XII International Workshop on Computational Physics and Material Science: Total Energy and Force Methods, Trieste, Italy, 13-15 January 2005.
8. S. Lisenkov and L.A. Chernozatonskii, "*Ab initio* study of novel crystals based on fullerene C<sub>60</sub> and carbynes", Poster at the "NANOEXC2004: Theory and modeling of electronic excitations in Nanoscience", Aquafredda di Maratea, Italy, 19 - 23 September 2004.
9. S. Lisenkov and L.A. Chernozatonskii, "Classification of three terminal carbon nanotubes", Poster at the International Workshop "Fullerenes and atomic clusters", St. Petersburg, Russia, 30 June - 4 July, 2003.