Albert V. Davydov

Office Address: National Institute of Standards and Technology (NIST)
Material Measurements Laboratory (MML)
Materials Science and Engineering Division (MSED)
100 Bureau Drive, Stop 8550, Gaithersburg, MD 20899, USA
T. (301)-975-4916 (Office); Email: davydov@nist.gov; URL: www.ctcms.nist.gov/~davydov/

Summary. Experience in fabrication, processing and characterization of a wide range of electronic materials, including bulk crystals, thin films, nanowires and 2D layers. Thermodynamic modeling and experimental study of phase diagrams for metal and semiconductor material systems.

Professional Preparation:

Institution	Major	Degree
Moscow State University, Moscow, Russia	Chemistry	M.S.
Moscow State University, Moscow, Russia	Inorganic Chemistry	Ph.D.

Appointments:

2013-present	Leader, Functional Nanostructured Materials Group, MSED, MML, NIST
2005-present	Staff Scientist, NIST, Gaithersburg, MD
1997-2005	Research Associate, Dept. of Mat. Science, Univ. Maryland, College Park, MD
1993-1997	Research Scientist, Chem. Eng. Dept., Univ. of Florida, Gainesville, FL
1992-1993	Invited Researcher, Dept. of Mat. Engineering, Univ. of Sheffield, Sheffield, UK
	Invited Researcher, Dept. of Chemistry, Univ. of Wisconsin, Madison, WI
1989-1993	Assistant Professor, Dept. of Chemistry, Moscow State Univ., Moscow, Russia

H-index: 37 https://scholar.google.com/citations?user=Cg1tY3AAAAAJ&hl=en

Publications: http://www.ctcms.nist.gov/~davydov/publications.htm

Synergistic activities:

1. Leader of Nanostructured Functional Materials Group at the Materials Science and Engineering Division at NIST from 2013 to present. The group includes ~ 20 researchers with the focus areas related to nanostructured materials for energy, magnetics, electronics and electrochemical processes: https://www.nist.gov/mml/materials-science-and-engineering-division/functional-nanostructured-materials-group
2. Project Leader on "Low-dimensional semiconductor materials for electronics, photonics, sensors and energy" at the Materials Science and Engineering Division at NIST
3. Head of the Semiconductor Task Group for the International Centre for Diffraction Data: http://www.icdd.com/index.htm
4. Co-chair of the Reference Materials Task Group at ASTM Subcommittee on Compound Semiconductors: https://www.astm.org/COMMIT/SUBCOMMIT/F0115.htm
5. Member of Science Advisory Board for nCORE/SRC center: https://www.src.org/compete/ncore/rfp/
6. Leader of the review panel for the NSF-NRI program on "Nanoelectronics for 2020 and Beyond" (program ended)
7. Associate Editor of the Journal of Mining and Metallurgy: http://www.jmmab.com/
8. Co-organizer of Conferences/Symposia/Sessions related to wide-band-gap and other semiconductor materials: ACCG (2009), IWN (2010, 2013), WOFE (2001, 2013, 2015, 2019), IEEE Nano (2012, 2014, 2016), ICON (2013), ISDRS (2013, 2017), SPIE (2010-2019)