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Bowling Green State University Ph.D. 1998 Photo Chemistry and Physical Chemistry
Moscow International School for Business in Industry and Sciences, 1993
Russian University of Chemical Technology B.S. 1988 Engineer Radiation and Physical Chemistry

Professional Experience:

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2002–2006 Research Associate, Dept. of Material Sciences and Technologies, University of Tennessee-Knoxville
1998–2001 Postdoctoral Research Associate, Chemical Sciences Division, ORNL
1990–1993 Assistant Director, Industrial Technologies and Materials, Moscow
1988–1993 Research Assistant, Department of Physical Chemistry (Radiation and Photochemistry), Russian University of Chemical Technology, Moscow

Selected Peer-Reviewed Publications:

Tselev, A., Ivanov I. N., Lavrik N. V., Belianinov A., Jesse S., Mathews J. P., Mitchell G. D., Kalinin S. V., (2014). "Mapping internal structure of coal by confocal micro-Raman spectroscopy and scanning microwave microscopy." *Fuel* 126(0): 32-37. [dx.doi.org/10.1016/j.fuel.2014.02.029](https://doi.org/10.1016/j.fuel.2014.02.029)

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Mohsin A., Liu L., Liu P., Deng W., Ivanov I.N., Li G., Dyck O.E., Duscher G., Dunlap J. R., Xiao K., Gu G., Synthesis of Millimeter-Size Hexagon-Shaped Graphene Single Crystals on Resolidified Copper ACS Nano (2013) 7 (10), 8924-8931 DOI: [10.1021/nm4034019](https://doi.org/10.1021/nm4034019)

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Li K., Zheng H., Ivanov I.N, Guthrie M., Xiao Y., Yang W, Tulk C.A., Zhao Y., Mao H. K₃Fe(CN)₆: Pressure-Induced Polymerization and Enhanced Conductivity *The J. Phys. Chem. C* 2013 117 (46), 24174-24180 DOI: [10.1021/jp407429z](https://doi.org/10.1021/jp407429z)

L. Collins, J.I. Kilpatrick, S.A.L. Weber, A. Tselev, I.V. Vlassiuk, I.N. Ivanov, S. Jesse, S.V. Kalinin, B.J. Rodriguez Open loop Kelvin probe force microscopy with single and multi-frequency excitation *Nanotechnology* 24 (47), 475702 doi:[10.1088/0957-4484/24/47/475702](https://doi.org/10.1088/0957-4484/24/47/475702)

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Ilaf R.M., Rivero I.V., Abidi, N.; Ivanov I. N. 2013. Porous poly(ϵ -caprolactone) scaffolds for loadbearing tissue regeneration: solventless fabrication and characterization. J. Biomed. Mater. Res. Part B 2013:00B:000-000. [doi: 10.1002/jbm.b.32915](https://doi.org/10.1002/jbm.b.32915)

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Characterization, and Device Applications," *Angew. Chem. Int. Ed.*, **46**(15), 2650 (2007).*

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Bundles of Single-Walled Carbon Nanotubes for Adsorption Applications: Estimating the Fraction of Open-Ended Nanotubes in Samples," *J. Phys. Chem. C*, **111**(37), 13747 (2007).*

11 issued and 8 pending US Patents

7,608,824 Doped carbon nanostructure field emitter arrays for infrared imaging

7,763,353 Fabrication of high thermal conductivity arrays of carbon nanotubes and their composites

7,923,922 Transparent conductive nano-composites

8,101,913 Method of making large area conformable shape structures for detector/sensor applications using glass drawing technique and postprocessing

8,142,516 Self-cleaning skin-like prosthetic polymer surfaces

8,202,749 Array of aligned and dispersed carbon nanotubes and method of producing the array

8,208,136 Large area substrate for surface enhanced Raman spectroscopy (SERS) using glass-drawing technique

8,415,704 Close-packed array of light emitting devices

8,460,782 Array of aligned and dispersed carbon nanotubes and method of producing the array

8,461,600 Method for morphological control and encapsulation of materials for electronics and energy applications

8,568,027 Carbon nanotube temperature and pressure sensors

Reviewer (Journals, proposals)

Carbon, Phys. Chem., Nanotechnology, Adv. Mat., J. Appl. Phys. J. Chem. Phys, Mat. Science and Eng.

Rusnano (certificate 263), NSF/SBIR/STTR, DOE BES Early Career Awards, LDRD, SEED

Organizer

International workshops on "Nanomaterials enabled Photovoltaics" and Photovoltaic school since 2006

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B. Hu, University of Tennessee-Knoxville

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Total Graduate Students Advised: 7 (most recent listed)

Total Postdoctoral Scholars Advised: 7 (current R. Greshback, Zhiahua Zhu)

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