

## **Dr. Maksym Barabashko**

<https://scholar.google.com/citations?user=ZxDDD2UAAAAJ&hl=en>

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### **RESEARCH INTERESTS:**

Heat capacity of carbon nanomaterials and composites based on them, fullerites, carbon nanotubes and one-dimensional chains of adsorbates.

### **SCIENTIFIC DEGREE:**

PhD (01.04.09—low temperature physics, 2016)

### **POSITIONS HELD:**

B. Verkin Institute for Low Temperature Physics and Engineering of the NAS of Ukraine, Department of thermal properties and structure of solids and nanosystems

2010 — engineer

2010 – 2013 — PhD student

2013 p. – 2018 — Junior Researcher

2018 – 2023 — Researcher

2023 – till now —Senior Researcher

### **EDUCATION:**

2005 – 2009 BSs. in Physics (with Honours), V. Karazin Kharkiv National University, Ukraine

2009 – 2010 M. S. in Physics (with Honours), V. Karazin Kharkiv National University, Ukraine

## **MEMBERSHIP IN SCIENTIFIC SOCIETIES:**

- 1) Council of Young Scientists and Specialists of B.Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine, 2010 – till now
- 2) International Advanced Study Conference CONDENSED MATTER & LOW TEMPERATURE PHYSICS (B.Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine), 2010 – till now

## **AWARDS:**

1. Scholarship for Young Scientists from NAS of Ukraine (2016–2017).
2. Scholarship of the President of Ukraine for Young Scientists (2020-2021).
3. Award of the President of Ukraine for young scientists (certificate of laureate No. 1378, in 2021)

**LANGUAGES:** English, Ukrainian

## **SELECTED ARTICLES:**

1. M.I. Bagatskii, **M.S. Barabashko**, A.V. Dolbin, V.V. Sumarokov, B. Sundqvist, “*The specific heat and the radial thermal expansion of bundles of single-walled carbon nanotubes*”, Low Temp. Phys. **38**, 523, (2012), <http://dx.doi.org/10.1063/1.4723677>.
2. M.I. Bagatskii, **M.S. Barabashko**, V.V. Sumarokov “The heat capacity of nitrogen chain in grooves of single-walled carbon nanotube bundles”, Low Temp. Phys. **39**, 441, (2013), <http://dx.doi.org/10.1063/1.4807048>
3. M.I. Bagatskii, **M.S. Barabashko**, V. V. Sumarokov, A. Jeżowski, P. Stachowiak, “Heat Capacity of 1D Molecular Chains”, J. Low Temp. Phys. **187**, 113, (2017), <https://doi.org/10.1007/s10909-016-1737-z>
4. . M. I. Bagatskii, V. V. Sumarokov, **M. S. Barabashko**, A. V. Dolbin and B. Sundqvist, “*The low temperature heat capacity of fullerite C<sub>60</sub>*”, Low Temp. Phys. **41**, 630, (2015), <http://dx.doi.org/10.1063/1.4928920>
5. **M.S. Barabashko**, M.V. Tkachenko, et al, “*Variation of Vickers microhardness and compression strength of the bioceramics based on hydroxyapatite by adding the multiwalled carbon nanotubes*”, Applied Nanoscience, 10, 2601-2608 (2020), <https://doi.org/10.1007/s13204-019-01019-z>