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Mikhail Bagatskii (Багацкий М. И.) - Google Scholar

Working address:

B.Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine, Department of Thermal Properties and Structure of Solids and Nanosystems

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Research interests: Low-temperature studies using calorimetric methods of the dynamics of quantum and classical cryocrystals and their solutions, disordered systems, pure and doped with simple atoms/molecules (Ar, Kr, Xe, N₂, O₂, CH₄, and others) of carbon nanomaterials (fullerites, single-walled and multi-walled nanotubes, graphene oxides).

Academic degree:

Candidate of Physical and Mathematical Sciences (**01.04.09**– Low Temperature Physics, **1972**),
Doctor of Physical and Mathematical Sciences (**01.04.09**– Low Temperature Physics, **2001**)

Academic title: Senior Researcher

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

- 1962 - 1966 — engineer
- 1966 – 1972 — senior engineer
- 1972 – 1978 — junior researcher
- 1978 – 2003 — senior researcher
- 2003 - to the present — leading researcher

Education:

1957 – 1962 Kharkov State University (renamed in V.N.Karazin Kharkiv National University)

Membership in scientific societies and other associations of scientists:

Member of the Scientific Council on the problem of “Molecular Physics, Physics of Cryogenic Liquids and Crystals” of the B.Verkin ILTPE of NASU, 2020 – 2025.

Awards:

Honorary Certificate of the National Academy of Sciences of Ukraine in 2009 for professional achievements.

Languages: Ukrainian, English

Publications: more than 100

Selected publications, since 2019 – till now.

1. Experimental Evidence of Flexural Phonons in Low-Temperature Heat Capacity of Carbon Nanotubes/ Barabashko M. S., Krivchikov A. I., Jeżowski A., Bezkrovnyi O., Bagatskii M. I., Sumarokov V. V., Boiko V., Szewczyk D. // Carbon Trends – 2025 – 100479.
2. Measurements on the heat capacity of thermal reduced graphene oxide down to 0.3 K / Sumarokov V. V., Dolbin A. V., Jeżowski A., Szewczyk D., Gnida D., Vinnikov N. A., Bagatskii M. I. // Low Temp. Phys. – 2024 – V. 50, № 2 – P. 185.
3. Experimental heat capacity of 1D chains of Xe atoms adsorbed in the grooves of c-SWCNTs bundles: Contributions of vibrations and spatial redistribution of atoms / Barabashko M. S., Bagatskii M. I., Dolbin A. V., Sumarokov, V. V. // Low Temp. Phys. – 2023 – V.49, №8 – P. 979.
4. Size effects in the heat capacity of modified MWCNTs / Bagatskii M. I., Jeżowski A., Szewczyk D., Sumarokov V. V., Barabashko M. S., et al. // Thermal Science and Engineering Progress - 2021 - V. 26, 101097.
5. Calorimetric, NEXAFS and XPS studies of MWCNTs with low defectiveness / Barabashko M. S., Drozd M., Szewczyk D., Jeżowski A., Bagatskii M. I., Sumarokov V. V., et al. // Fullerenes, Nanotubes and Carbon Nanostructures – 2021 – V. 29, № 5 – P. 331.
6. The low-temperature specific heat of thermal reduced graphene oxide / Sumarokov V. V., Jeżowski A., Szewczyk D., Dolbin A. V., Vinnikov N. A., Bagatskii M. I. // Low Temp. Phys. – 2020 – V. 46, № 3 – P. 301.
7. The low-temperature specific heat of MWCNTs / Sumarokov V. V., Jeżowski A., Szewczyk D., Bagatski M. I., Barabashko M. S., et al. // Low Temp. Phys. – 2019 – V. 45, № 3 – P. 347.