Curriculum vitae

Personal details

Surname: Karachevtseva (maiden name – Zvonaryova);
First name: Anna;
Orcid: 0000-0001-7974-3146,
ResearcherID: Anna Karachevtseva;

Date of CV: 14 of April 2025

Degrees

15.12.2015 PhD in Low Temperature Physics, B.Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine, Ukraine. "Isochoric thermal conductivity of cyclic hydrocarbons" supervisor: Prof. V.A. Konstantinov.

03.07.2007 Master of Science: Department of Low Temperature, Faculty of Physics, V.Karazin Kharkiv National University, Ukraine. "Statistics discharges of stress at the unstable plastic flow of metals and alloys".

Current Employment

2017– Postdoctoral researcher, Department of Thermal Properties and Structure of Solids and Nanosystems, B. Verkin ILTPE of the NAS of Ukraine, Kharkiv, Ukraine

Previous work experience

2010-2015 Junior researcher, Department of Thermal Properties and Structure of Solids and Nanosystems, B. Verkin ILTPE of the NAS of Ukraine, Kharkiv, Ukraine

2007-2010 Ph.D. student, Department of Thermal Properties and Structure of Solids and Nanosystems, B. Verkin ILTPE of the NAS of Ukraine, Kharkiv, Ukraine

Research funding and grants

2020-2023 Research grant, NRFU Competition "Leading and Young Scientists Research Support" "Quantum tunnelling of vibrational excitations in thermal conductivity of crystalline and amorphous materials and composites" (PI name – Krivchikov A.I) Responsibilities: Experimental investigation of isochoric thermal conductivity of 1,1-difluoroethane, modernization of existing experimental equipment, writing articles, reports and application.

2019-2020 Research grant from NAS of Ukraine "Phonon interaction in nanomaterials, molecular crystals and quantum liquids" (PI name – Barabashko M. S.). Responsibilities: Experimental investigation of isochoric thermal conductivity of molecular crystals, writing articles, reports and applications.

Research output

Total number of peer-reviewed scientific articles: 14 (for the full list, please see the provided list of publication)

Awards and honours

2020 Winner (with co-authors) of the Annual Prize of B.Verkin Institute for Low Temperature Physics & Engineering of NAS Ukraine for best article in the field of low temperature physics. This award is given by a vote of all the research staff of the relevant departments.

2016-2018 Scholarship of the President of Ukraine for Young Scientists. Awarded for outstanding achievements in the field of natural, technical, and human sciences, which contribute to the further development of science and social progress and affirm the high authority of domestic science in the world. The duration of this scholarship is 2 years (50% of the postdoctoral researcher's salary).

Important relevant training.

2019 Travel grant from European Microkelvin Platform (EMP) to attend the International advanced school on low and ultra-low temperature physics, cryogenics, experimental measurement techniques and engineering for quantum technology, Cryocourse 2019.

2013 Travel grant from the Abdus Salam International Center of Theoretical Physics (ICTP), Trieste, Italy.

LIST OF PUBLICATIONS

**A.V. Zvonaryova – maiden name*

1. Konstantinov V.A. *, Sagan V.V., Revyakin V.P., Zvonaryova A.V., and Pursky O.I. (2013): Isochoricthermal conductivity of solid furan. Low Temp. Phys. 39 (5), 473.
2. Konstantinov V.A. *, Krivchikov A.I., Korolyuk O.A., Revyakin V.P., Sagan V.V., Vdovichenko G.A., Zvonaryova A.V. (2013): Heat transfer in different phases of solid cyclohexene. Physica B. 424, 54–59.
3. Konstantinov V.A. *, Sagan V.V., Revyakin V.P., Karachevtseva A.V. (2014): Heat transfer in plastic phases of cyclic hydrocarbons. Visnyk of the Lviv University. Series Physics. 49,29.
4. Konstantinov V.A. *, Sagan V.V. , Revyakin V.P., Karachevtseva A.V., Pursky O.I. (2014): Heat transfer in plastic phases I and II of cyclopentane. Cent. Eur. J. Phys. 2014, 12 (9), 654.
5. Konstantinov V.A. *, Sagan V.V., Revyakin V.P., Karachevtseva A.V. (2014): Specific aspects of heattransfer in solid tetrahydrofuran. Low Temp. Physics. 40 (11), 1008.
6. Konstantinov V.A. *, Sagan V.V., Revyakin V.P., Karachevtseva A.V. (2015): Isochoric thermalconductivity of the “plastic” phase of cyclic hydrocarbons. Thiophene. Low Temp. Phys. 41 (3), 213.
7. Konstantinov V.A. *, Sagan V.V., Karachevtseva A.V. (2017): Isochoric thermal conductivity of crystalline 1-propanol. Low Temp. Phys. 43 (3), 390.
8. Konstantinov V.A. *, Sagan V.V., Karachevtseva A.V. (2018): Isochoric thermal conductivity of solid 2-propanol. Low Temp. Phys. 44 (8), 840.
9. Konstantinov V.A. *, Karachevtseva A.V., Revyakin V.P., Sagan V.V. (2019): The lower limit of thermal conductivity in multicomponent solutions of rare gas solids. Low Temp. Physics. 45 (3), 282.
10. Konstantinov V.A. *, Krivchikov A.I., Karachevtseva A.V., Sagan V.V. (2021): Thermal transport in dynamically disordered phases of molecular crystals: A thermo activation mechanism. Solid State Com. 329, 114241.
11. Konstantinov V.A. *, Karachevtseva A.V., Revyakin V.P., Sagan V.V. (2022): Phase V–T diagrams offluorinated ethanes. Low Temp. Physics. 48 (7), 556.
12. Konstantinov V.A *, Karachevtseva A.V., Revyakin V.P., Sagan V.V. (2022): Phase V–T diagrams ofsolid freons. Part II: halomethanes. Low Temp. Physics. 48 (10), 840.
13. Konstantinov V.A. *, Krivchikov A.I., Sagan V.V., Karachevtseva A.V. (2023): Hopping mechanism of heat transfer in cyclic hydrocarbons. Low Temp. Physics. 49 (5), 548.
14. Konstantinov V.A. *, Karachevtseva A.V., Sagan V.V. (2023): Phase *V-T* diagrams of solid hydrocarbons. Part III: cyclic compounds. Low Temp. Physics. 2023, *Vol* 49 (8), 971.