

Lototskaya Viktoria Aleksandrovna

Orcid Author ID :

<https://orcid.org/0000-0001-8766-3154>



Working address and telephone: B.I. Verkin Institute of Low Temperature Physics and Engineering of the NAS of Ukraine, Department of Thermal Properties and Structure of Solids and Nanosystems, Nauky Ave., 47, 61103 Kharkiv, Ukraine, tel: + (38)-057 343 14 00

E-mails: lototskaya@ilt.kharkov.ua

Main areas of research: study of physical and mechanical properties of materials for space purposes (metals, alloys, composites, polymers) at low temperatures and in conditions of ground-based simulation of space factors.

Academic degrees: candidate of physical and mathematical sciences (01.04.06–solid state physics, 1991)

Professional activity:

Special Design and Technology Bureau of the B.I. Verkin Institute of Low Temperature Physics and Engineering of the NAS of Ukraine, Department of Low-Temperature Applied Materials Science

1973 - 1986 - engineer

1986 – 1989 - senior engineer

1989 – 1994 - engineer of 1st category

1994 – 2000 - lead engineer

2000-2006 - sector head

B.I. Verkin Institute of Low Temperature Physics and Engineering of the NAS of Ukraine, Scientific and Technical Department of Low-Temperature and Space Materials Science

2006 - 2010 - lead engineer

2010 - 2022 - department head

B.I. Verkin Institute of Low Temperature Physics and Engineering of the NAS of Ukraine, Department of Thermal Properties and Structure of Solids and Nanosystems

2023 - currently – research fellow

Education:

1967 – 1973, Kharkiv Polytechnic Institute, Faculty of Physics and Engineering, specialty - physics of metals.

Membership in scientific societies and other associations of scientists:

Member of the scientific council on the problem "Low-temperature physics of plasticity and strength" of B.I. Verkin Institute of Low Temperature Physics and Engineering of the NAS of Ukraine.

Languages: ukrainian, russian, english

Publications: about 50 papers and reviews in scientific journals and more than 30 scientific and technical reports under contracts and agreements with domestic and foreign institutions and enterprises.

Works published after 2010:

1. Lototskaya V.A., Abraimov V.V., Gamulya G. D.Гамуля Г.Д. Issledovanie svoystv novykh materialov v usloviyakh vozdeystviya niskikh temperatur i faktorov kosmicheskogo prostranstva // coll. "Perspektivy Kosmichnykh Doslidgen' v Ukraine" (Space Visioiv of Ukraine), 2011.- P.216-223.
2. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Abraimov V.V., Salteviskiy G.I., Zaritskiy I.P. Vliyabie laboratorno imitiruemyykh faktorov kosmicheskogo prostranstva na tsiklicheskiy prochnost ugleplastikov// "Voprosy Atomboy Nauki i Tehniki"(Questions of Atomic Science and Technic),ISSN 1562-6016.-2011.—Vol. 98.- Release 4(74).-P. 118-123.
3. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Zheltov P.N., Malyj N.A., Gavrilenko A.M., Bogatyreva G.P. Mehanicheskie svoystva stekloplastika, modifitsirovanogo nanoalmazami i uglerodnymi nanotrubkami v intervale temperatur 77-373K // Visnyk Ukrainського Materialoznavchogo Tovarystva- Release 6.-2013.-P.65-72.
4. Braude I.S., Gal'tsov N.N., Geidarov V.G., Kirichenko G.I., Abraimov V.V., Lototskaya V.A. Investigation of quasilinear molecules ordering of deformed polyimide PM-A by means of x-rays dispersion // <http://www.european-mrs.com/2015-fall-symposium-f-european-materials-research-society>
5. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Abraimov V.V., Wen Zhu Shao Low temperature deformation and strength of polyimide films due to thickness and deformation speed//East.Eur.J.Phys.-2017.-V.4, No2.-P.44-52
6. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Velichko V.A., Zaritskiy I.P., Abraimov V.V., Wen Zhu Shao, Liu Hai Investigation of mechanical properties of polyimide films under the influence of laboratory-simulated space factors // East.Eur.J.Phys.-2018.-V.5, No3.-P.53-60
7. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Velichko N.A., Doronin Y.S., Tkachenko A.A., Zaritskiy I.P., Abraimov V.V., Wen Zhu Shao Influence of electromagnetic radiation of the transatmospheric Sun, simulated laboratory, on the mechanical properties of the kapton H type polyimide film // EEJP.-2019.-№4.-P.92-98.
8. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Abraimov V.V., Wen Zhu Shao. Regularities of Low-Temperature Deformation and Fracture of Polyimide Films of Kapton H Type of Different Thickness. East. Eur. J. Phys. 4, P.144-153 (2020) [dx.doi.org/10.26565/2312-4334-2020-4-18](https://doi.org/10.26565/2312-4334-2020-4-18).
9. Lototskaya V.A., Yakovenko L.F. Relaxation of The Mechanical Properties of Polyimide Films of the Kapton H Type During Long-Term Exposure at Ambient Conditions // Fiz. Nyzk. Temp. -49.-11.-P.1346-1353, (2023) ISSN 0132-6414
10. Natsik V. D., Rusakova H. V., Lubenets S. V., Lototskaya V. A., and Yakovenko L. F., Fiz. Nyzk. Temp. 49, 569 (2023) [Low Temp. Phys. 49, 521 (2023)]. <https://dx.doi.org/10.1063/10.0017812>.

Participation in conferences:

1. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Zheltov P.N., Malyj N.A. Mechanical properties and fatigue resistance of some carbon plastics at the room temperature // Abstracts of the 3rd Int. Conf. "HighMatTech" 3-7 October 2011.- Kyev.- Ukraine.
2. Abraimov V.V., Lototskaya V.A., Salteviskiy G.I., Zaritskiy I.P., Yakovenko L.F., Aleksenko E.N., Issledovanie stoykosti materialov kosmicheskogo naznaxheniya k vozdeystviyu faktorov kosmicheskogo prostranstva v usloviyakh nazemnoy imitastii // " Trudy Mezhdunar. Konf/

- Nezavisimogo Kazahstana.: 20 let razvitiya kosmicheskikh issledovaniy, 4-6 October 2011 Almaty, Kazakhstan, CD disk".-P. 1-5.
3. Abraimov V.V., Lototskaya V.A., Salteviskiy G.I., Zaritskiy I.P. Investigation of mechanical properties of some polymeric materials under the influence of space factors // Abstracts of the 3rd Int. Conf. "HighMatTech" 3-7 october 2011.- Kyev.- Ukraine.
 4. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Zheltov P.N., Malyj N.A., Gavrilenko A.M., Bogatyreva G.P. Influence of additions of nanomodifiers on mechanical properties of fibreglass in the temperature interval of 77-373K// Abstracts of the 7rd Int. Conf. «Materials and coatings in extreme conditions: research, application, environmentally friendly production and recycling of products», 24-28 September 2012. – Katsiveli, AR of Crimea-Ukraine.- P.221.
 5. Gamulyu G.D., Lototskaya V.A., Zerkovnyy A.I., Volobuev F.I., Zheltov P.N. , Malyj N.A., Gavrilenko A.M., Bogatyreva G.P. Friction factors of the nanomodified fibreglasses // Abstracts of the 7rd Int. Conf. «Materials and coatings in extreme conditions: research, application, environmentally friendly production and recycling of products», 24-28 September 2012. – Katsiveli, AR of Crimea-Ukraine.- P.222.
 6. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Beskorsuy A.P., Zheltov P.N., Malyj N.A., Gavrilenko A.M., Bogatyreva G.P. Development and investigation of nanomodified polymeric composites for aerospace technique // Abstracts of the 4th Int. Conf. "Space Technologies; Present and Future", April 17-19, 2013 - Dnepropetrovsk. - Ukraine - P.95.
 7. Abraimov V.V., Lototskaya V.A., Salteviskiy G.I., Zaritskiy I.P. Investigation of mechanical properties of polyimide materials in the 4.2-300 K temperatures interval // Abstracts of the 4th Int. Conf. "Space Technologies; Present and Future", April 17-19, 2013 - Dnepropetrovsk. - Ukraine - P.88.
 8. Abraimov V.V., Lototskaya V.A., Zaritskiy I.P. Investigation of peculiarities of mechanical properties of some polymeric materials in the 4.2-300 K temperatures interval // Abstracts of the 4th International Conf. HighMatTech-2013, October 7-11, 2013 - Kiev. - Ukraine.- P.282.
 9. Abraimov V.V., Lototskaya V.A., Zaritskiy I.P., Salteviskiy G.I. The influence of space factors (low temperatures, extra-atmospheric sun, proton and electron flows) on the mechanical properties of some polymers // Abstracts of the LV International Conference "Current Problems of Strength", 9-13 June 2014.-Kharkiv.-Ukraine - P.158.
 10. Abraimov V.V., Lototskaya V.A., Zaritskiy I.P., Salteviskiy G.I. Effect of strain rate on low-temperature mechanical properties of kapton-H polyimide films // Abstracts of the 5th International Conference "HighMatTech", October 5-8, 2015 - Kiev. - Ukraine - C.184.
 11. Abraimov V.V., Azarenkov N.A., Bozhkov A.I., Lototskaya V.A., Kuznetsova Yu.A., Goltvyansky A.V., Velichko N.I., Zaritsky I.P., Salteviskiy G.I. Vozmozhnost zhizni biologicheskikh ob'ektov v usloviyakh kosmicheskogo prostranstva // Abstracts of the 15th Ukrainian Conf on Space Research (ISSN 2309-2130), 24-28 August 2015 - Odessa - Ukraine - P.32
 12. Abraimov V.V., Azarenkov N.A., Bozhkov A.I., Lototskaya V.A., Kuznetsova Yu.A., Goltvyansky A.V., Velichko N.I., Zaritsky I.P., Salteviskiy G.I. The influence of space factors, simulated in the laboratory, on the stability of wheat seeds and yeast culture // Abstracts of the 5th International Conference "HighMatTech", October 5-8, 2015 - Kiev. - Ukraine - P.34.
 13. Zaikin G.G., Sharov A.F., Abraimov V.V., Velichko N.I., Lototskaya V.A. Izmerenie neodnorodnosti polya oblucheniya misheni zaryazhennymi chastistami v kompleksnom imitatore faktorov kosmicheskogo prostranstva (KIFK) //Tezy dopovidey XXV shchorichna naukova konferentsiya Instytutu yadernykh doslidzhen' Ukrainy, 16-20 April 2018 -P.60
 14. Geidarov V.G., Braude I.S., Gal'tsov N.N., Pohribnaya Y.M., Lototskaya V.A., Aksenova N.A., Structural studies of polyimide films. Size effect/ 5th International Conference "Nanotechnologies", 19 – 22 November 2018, Tbilisi, Georgia.
 15. Lototskaya V.A., Yakovenko L.F., Aleksenko E.N., Velichko V.I., Zaritsky I.P., Abraimov V.V., Wen Zhu Shao Issledovanie prochnosti i deformiruemosti poliimidnykh plenok pri

- vozdeystvii nekotoryh faktorov kosmosa // Abstracts of the 6th Int. Conf. "Space Technologies; Present and Future", May 23-26, 2017 - Dnepr. - Ukraine - P.77.
16. Lototskaya V.A., Yakovenko L.F., Aleksenko E. N., Abraimov V.V., Lyu Hay The role of the size factor in the mechanical behavior of polyimide films of type kapton H// "7th Intern. Conf. "Space Thecnologies: Present and Future" 21-24 May 2019, Dnepr, Ukraine.-P.84.
 17. Lototskaya V.A., Yakovenko L.F., Aleksenko E. N., Velichko N.I., Doronin Yu.S., Zaritskiy I.P., Tkachenko A.A., Abraimov V.V., Wen Zhu Shao Effect of electromagnetic radiation on the mechanical properties of polyimide film type kapton H //"7th Intern. Conf. "Space Thecnologies: Present and Future" 21-24 May 2019, Dnepr, Ukraine.-P.77
 18. Natsik V., Rusakova G., Lubenets S., Lototska V., Yakovenko L. Eksperimental'ne doslidzhennya I teoretychny analiz vysokoelastychnoi deformastii poliimidnyh amorfnyh plivok u stani pomirnogo I glybokogo oholodzhennya // Tezy dopovidey XV Ukrain's'koi konf. z vusokomolekulyarnykh spoluk z mizhnarod. Uchactyu, Української конф. з високомолекулярних сполук з міжнародною участю, 25-27 october 2022 , Kyev, v-vo Lira, 2022, P.69, ISBN 978-617-520-374-3.
 19. Lototskaya V.A., Yakovenko L.F. Influence of long-term exposure on mechanical properties of polyimide kapton H films // Abstracts of International Advanced Study Conference Condensed Matter & Low Temperature Physics-2024.
 20. Lototskaya V.A., Yakovenko L.F., Saltevskiy G.I., Zaritskiy I.P., Doronin Yu.S., Tkachenko A.A. Radiation-induced effects in polyimide kapton H films of different thicknesses. Influence on mechanical properties// Abstracts of International Advanced Study Conference Condensed Matter & Low Temperature Physics-2024.