

Сведения о ведущей организации

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1. Spectra of collective excitations of particles in normal and superfluid liquids / Brazhkin V. V. // *Physics-Uspekhi*. 2025. Vol. 68, № 5. P. 490–511.
2. Collective excitations in liquid carbon tetrachloride: a molecular dynamics study / Fomin Yu. D., Brazhkin V. V. // *Journal of Molecular Liquids*. 2025. Vol. 418. P. 126736.
3. A rare gas mixture: from rigid to gas-like fluid by a mutual concentration change / Fomin Yu. D., Tsiok E. N., Ryzhov V. N., Brazhkin V. V. // *Physica Scripta*. 2025. Vol. 100, № 7. P. 075914.
4. The Widom line in two- and three-dimensional fluids: Similarities and differences / Fomin Yu. D., Tsiok E. N., Ryzhov V.N. // *Journal of Chemical Physics*. 2025. Vol. 163. P. 174501.
5. Dynamical properties of hydrogen fluid at high pressures / Gliaudelis G.A., Lukyanchuk V.G., Chtchelkatchev N.M., Saitov I.M., Kondratyuk N.D. // *Journal of Chemical Physics*. 2025. Vol. 162. P. 024504.
6. Phenomenological model of relaxation and thermodynamic properties of supercooled liquid: The case study of propylene carbonate / Kondrin M.V., Lebed Y.B., Pronin A.A., Brazhkin V.V. // *Physica A: Statistical Mechanics and its Applications*. 2024. Vol. 649. P. 129961.
7. Deep machine learning, molecular dynamics and experimental studies of liquid Al-Cu-Co alloys / Kamaeva L.V., Tsiok E.N., Chtchelkatchev N.M. // *Journal of Molecular Liquids*. 2024. Vol. 393. P. 123659.
8. Benzophenone glass, supercooled liquid, and crystals: elastic properties and phase transitions / Gromnitskaya E.L., Danilov I.V., Zubkov F.I., Brazhkin V.V. // *Physical Chemistry Chemical Physics*. 2023. Vol. 25, №. 23. P. 16060–16064.
9. Phonolite-Carbonatite Liquid Immiscibility at 3–6 GPa / Arefiev A.V., Shatskiy A.F., Bekhtenova A.E., Litasov K.D. // *Minerals*. 2023. Vol. 13, №. 3. P. 443.
10. The thermodynamics of pressurized methanol: A simple hydrogen-bonded liquid as a touchstone for experiment and computer simulations / Fomin Yu.D., Dzhavadov L.N., Tsiok E.N., Ryzhov V.N., Brazhkin V.V. // *Journal of Chemical Physics*. 2022. Vol. 157. P. 124503.
11. Ultrasonic study of the elastic properties of propylene glycol oligomers in the glassy state and during the glass–liquid transition / Gromnitskaya E. L., Danilov I.V., Brazhkin V.V. // *Physics and Chemistry of Liquids*. 2022. Vol. 60, № 5. P. 645–650.
12. Universal lower bounds on energy and momentum diffusion in liquids / Trachenko K., Baggioli M., Behnia K., Brazhkin V.V. // *Physical Review B*. 2021. Vol. 103, №. 1. P. 014311.

13. Similarity between kinematic viscosity of quark-gluon plasma and liquids at the viscosity minimum / Trachenko K., Brazhkin V.V., Baggioli M. // SciPost Physics. 2021. Vol. 10. P. 118.
14. The temperature dependence of the frequency of longitudinal excitations in liquid along isobars: Simple liquid and water / Fomin Yu.D., Tsiok E.N., Ryzhov V.N., Brazhkin V.V. // Journal of Molecular Liquids. 2021. Vol. 337. P. 116450.
15. Structure of the simple harmonic repulsive system in liquid and glassy states studied by the triple correlation function / Levashov V.A., Ryltsev R.E., Chtchelkatchev N.M. // Journal of Physics: Condensed Matter. 2021. Vol. 33, № 2. P. 025403.