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B.I. Verkin Institute for Low Temperature Physics & Engineering,
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Title: Senior Researcher, Scientific degree: PhD

Date and place of birth: 13.02.1963, Kharkov, Ukraine

Education, academic degrees and titles:

Graduated: Kharkov State University, Ukraine, 1985.

Ph.D. (Solid State Physics), Thesis " Elastic properties of ferroelastics in the vicinity of phase transitions ". Institute for Low Temperature Physics and Engineering, Kharkov, Ukraine, 2004.

Senior Researcher Diploma (Solid State Physics), B.I. Verkin Institute for Low Temperature Physics & Engineering NASU, Kharkov, Ukraine, 2014

• **Institutional Affiliations:** Since 1987 has worked at ILTPE as an engineer, junior researcher, researcher (1987-2010), from 2010 – senior researcher.

Area of Expertise: Magneto elasticity; piezomagnetic and piezoelectric effects in solids, physics of magnetic phenomena; phase transitions of different nature in solids; precision measurements of the elastic modules of single crystals.

I have supervised 3 PH.D. students.

Number of papers published: about 60.

List of recent relevant publications of Galina Zvyagina

AA Zvyagin, GA Zvyagina Biaxial paramagnet: Manifestation of the electro-magneto-elastic coupling Low Temperature Physics, 2022, 48 (3), 212-222

AY Glamazda, VP Gnezdilov, P Lemmens, GA Zvyagina, IA Gudim Raman scattering study of the rare-earth binary ferroborate Nd_{0.75}Dy_{0.25}Fe₃(BO₃)₄ single crystal, Low Temperature Physics, 2021, 47 (12), 1011-1021

VD Fil, DV Fil, GA Zvyagina, KR Zhekov, IV Bilych, DA Chareev, Piezomagnetism of superconducting iron chalcogenides, Physical Review B, 2021, 104 (9), 094424

- AA Zvyagin, GA Zvyagina Piezoelectric and magneto-elastic effects in a quantum paramagnet Low Temperature Physics, 2021, 47 (2), 123-129
- IV Bilych, MP Kolodyazhnaya, KR Zhekov, GA Zvyagina, VD Fil, IA Gudim, Elastic, magnetoelastic, magnetopiezoelectric, and magnetodielectric characteristics of HoAl₃(BO₃)₄, Low Temperature Physics, 2020, 46 (9), 923-931
- AV Andreev, DI Gorbunov, T Nomura, AA Zvyagin, GA Zvyagina, High-field magnetoacoustics of a Dy₂Fe₁₄Si₃ single crystal, Journal of Alloys and Compounds, 2020 835, 155335
- AA Zvyagin, GA Zvyagina Spontaneous spin-nematic ordering in a spin-chain system Physical Review B, 2019, 100 (1), 014416
- DI Gorbunov, T Nomura, AA Zvyagin, MS Henriques, AV Andreev, Magnetoelastic coupling across the field-induced transition of uranium mononitride, Physical Review B, 2019, 100 (2), 024417
- LS Kolodyazhnaya, GA Zvyagina, IV Bilych, KP Zhekov, NG Burma, Magnetocapacitance, magnetoelasticity, and magnetopiezoelectric effect in HoFe₃(BO₃)₄, Low Temperature Physics, 2018, 44 (12), 1341-1347
- VD Fil, MP Kolodyazhnaya, GA Zvyagina, IV Bilych, KR Zhekov, Piezomagnetoelectric effect in LiCoPO₄, Physical Review B, 2017, 96 (18), 180407
- MP Kolodyazhnaya, KR Zhekov, IV Bilych, GA Zvyagina, AA Zvyagin, Reentrant low-temperature phase transition in an “orbital nematic”, Low Temperature Physics 43 (11), 1276-1282
- MP Kolodyazhnaya, GA Zvyagina, IV Bilych, KR Zhekov, NF Kharchenko, Is LiCoPO₄ a pyroelectric? Low Temperature Physics 43 (10), 1240-1242
- MP Kolodyazhnaya, GA Zvyagina, IA Gudim, IV Bilych, NG Burma, Piezoelectric response in SmFe₃(BO₃)₄, a non-piezoactive configuration. The surface piezoelectric effect, Low Temperature Physics 43 (8), 924-929
- Fil. V.D., Kolodyazhnaya, M.P., Zvyagina, G.A., Bilych, I.V., Zhekov, K.R. Phys. Rev. B, 2017, 96, pp. 180407(R)-1-4
- Kolodyazhnaya, M.P., Zhekov, K.R., Bilych, I.V., Zvyagina, G.A., Zvyagin, A.A. Low Temperature Physics, 2017, 43, N11, pp. 1276-1282
- Kolodyazhnaya, M.P., Zvyagina, G.A., Bilych, I.V., Zhekov, K.R., Kharchenko, N.F., Fil, Bilych, I.V., Zhekov, K.R., Gaydamak, T.N., Gudim, I.A., Zvyagina, G.A., Fil, V.D, Low Temperature Physics, 2016, 42, N12, pp. 1112-1119
- Gaydamak, T. N., Gudim, I. A., Zvyagina, G. A., Bilych, I. V., Burma, N. G., Zhekov, K. R., & Fil, V. D. Low Temperature Physics, 2016, 41, N8, pp. 614-618
- Gaydamak, T.N., Gudim, I.A., Zvyagina, G.A., Bilych, I.V., Burma N.G., Zhekov, K.R., Fil, V.D. Physical Review B 92, B. 21-1 P. 214428-1-7, 2015
- G. A. Zvyagina, Fiz. Nizk. Temp. 40, 585 (2014) [Low Temp. Phys. 40, 454, (2014)]
- V. D. Fil, D. V. Fil, K. R. Zhekov, T. N. Gaydamak, G. A. Zvyagina, I. V. Bilich, D. A. Chareev and A. N. Vasiliev, EPL, 103, 47009 (2013)
- G. A. Zvyagina, Zhekov K.R, Bilych I.V., Zvyagin A.A., Gudim I.A., Temerov V.L. , Eremin E.V Fiz. Nizk. Temp. 39, 1202 (2013) [Low Temp. Phys. 39, 936454 (2013)].
- G. A. Zvyagina, Gaydamak T. N, Zhekov K.R., Bilich I.V., Fil V.D., Chareev D.A. and Vasiliev A N., EPL, 101, 56005 (2013)
- G. A. Zvyagina, K. R. Zhekov, A. A. Zvyagin, I. A. Gudim, and I. V. Bilych, Fiz. Nizk. Temp. 38, 571 (2012) [Low Temp. Phys. 38, 446 (2012)].
- G.A. Zvyagina, K.R. Zhekov, I.V. Bilych, A.A. Zvyagin, I.A. Gudim, and V.L. Temerov,

- Fiz. Nizk. Temp. 37, 1269 (2011) [Low Temp. Phys. 37, 1010 (2011)]
- G. A. Zvyagina, K. R. Zhekov, A. A. Zvyagin, I. V. Bilych, L. N. Bezmaternykh, and I. A. Gudim, Fiz. Nizk. Temp. 36, 352 (2010) [Low Temp. Phys. 36, 279 (2010)]
- G. A. Zvyagina, K. R. Zhekov, A. A. Zvyagin, I. V. Bilych, L. N. Bezmaternykh, and I. A. Gudim, Fiz. Nizk. Temp. 36, 376 (2010) [Low Temp. Phys. 36, 296 (2010)]
- G. A. Zvyagina, K. R. Zhekov, L. N. Bezmaternykh, and I. A. Gudim, I. V. Bilych A. A. Zvyagin, Fiz. Nizk. Temp. 34, 1142 (2008) [Low Temp. Phys. 34, 901 (2008)]
- B. I. Belevtsev, G. A. Zvyagina, Zhekov K. R., I. G Kolobov., E. Yu.Beliayev, A. S Panfilov N.N.Galtsov, A. I Prokhvatilov, J. Fink-Finowicki, Phys. Rev. B 74, 054427 (2006)