

17.15-18.30

POSTER SESSION – I
MONDAY, 14 May

Section

Low Temperature Magnetism, Spintronics

- P1 MAGNETOELECTRIC EFFECT AND MAGNETIC PROPERTIES OF MULTIFERROIC (X)PZT-(1-X)MZF COMPOSITES**
Amirov A.A.¹, Kamilov I. K.¹, Razakova Z.R.¹, Gridnev S.A.² and Kalgin A.V.²
¹*Institute of Physics of Dagestan Scientific Centre of RAS, Makhachkala, Russia*
²*Voronezh State Technical University, Voronezh, Russia*
- P2 CRITICAL BEHAVIOR OF HEISENBERG FRUSTRATED MODEL ON STACKED TRIANGULAR LATTICE WITH ACCOUNTING OF NEXT-NEAREST-NEIGHBOR INTERACTIONS**
Murtazaev A.K.^{1,2}, Ramazanov M.K.¹, Badiev M.K.¹
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²*Daghestan state universities, Makhachkala, Daghestan, Russia*
- P3 DETECTION OF MAGNETIC IMPURITY IN InVSe₂O₈**
Bludov O.M., Savina Yu.O., Pashchenko V.A., Gnatchenko S.L.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine
- P4 DETECTION OF ADDITIONAL ABSORPTION IN THE RESONANCE SPECTRUM OF THE SINGLE CRYSTAL NdFe₃(BO₃)₄ AT LOW TEMPERATURES.**
Dergachev K.G., Kobets M.I.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P5 INFLUENCE OF GRAIN SIZE ON MAGNETOCALORIC EFFECT IN La_{0.5}Ca_{0.5}MnO₃ MANGANITE**
Gamzatov A.G.¹, Aliev A.M.¹, Amirzadeh P.², Kameli P.², Ahmadvand H.², Salamatyi H.²
¹*Amirkhanov Institute of Physics, Dagestan Scientific Center of RAS, Makhachkala, Russia*
²*Isfahan University of Technology, Isfahan 84156-83111, Islamic Republic of Iran*
- P6 SU(2s +1) SYMMETRY AND THE DYNAMICS OF HIGH SPIN SYSTEMS**
Glushenko A.V.¹, Kovalevsky M.Y.^{2,3}
¹*V.N. Karazin Kharkiv National University, Kharkiv, Ukraine*
²*Kharkiv Institute of Physics and Technology, Kharkiv, Ukraine*
³*Belgorod State University, Belgorod, Russia*
- P7 MAGNETIC PROPERTIES OF Ce³⁺ IONS IN IRON-CONTAINING OXYPNICTIDE CeFeAsO**
Gornostaeva O.V., Lamonova K.V., Orel S.M., Pashkevich Yu.G.
A.A. Galkin Donetsk Institute for Physics and Engineering, NASU, Donetsk, Ukraine
- P8 PHASE STATES OF NON-HEISENBERG S=1 MAGNETS**
Kosmachev O.A., Klevets Ph.N., Fridman Yu.A.
V.I. Vernadskiy Taurida national university, Simferopol, Ukraine
- P9 LOW TEMPERATURE DYNAMICS OF SPIN-CROSSOVER COMPOUNDS IN TERMS OF TRANSITION RATES**
Gudyma Iu.V., Maksymov A.Iu.
Department of General Physics, Chernivtsi National University, Chernivtsi, Ukraine
- P10 PHASE STATES AND SPECTRA OF ELEMENTARY EXCITATIONS IN A 2-D FERROMAGNET WITH LARGE INCLINED ANISOTROPY**
Gorelikov G.A., Klevets F.N., Meleshko A.G., Fridman Yu.A.
Taurida National V.I. Vernadski University, Simferopol, Ukraine
- P11 MAGNON DAMPING IN ANISOTROPIC SPIN NEMATICS**

- P30 FEATURES OF PENETRATION OF MAGNETIC FIELD INTO SUPERCONDUCTING RING WITH THE INTERFEROMETER.**
Kovryva V.P., Bondarenko S.I., Krevsun A.V., Gnezdilova L.V.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P31 ANOMALIES IN HEAT OF CYLINDRICAL MESOSCOPIC STRUCTURES NORMAL METAL – SUPERCONDUCTOR**
Gogadze G.A., Dolya S.N., Lyogenkaya A.A.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine
- P32 SUPERCONDUCTIVITY AND MAGNETISM IN $Dy_{0.6}Y_{0.4}Rh_4B_4$ COMPOUND**
Terekhov A.V.^{1,2,3}, Zaleski A.J.^{2,3}, Khlybov E.P.^{3,4}, Zolochevskii I.V.¹,
Rybaltchenko L.F.¹, Los A.S.⁵
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- P33 CURRENT-INDUCED SUPERCONDUCTOR-INSULATOR TRANSITION IN INTERFACIAL NANOSTRUCTURES BASED ON PbTe/PbS HETEROSTRUCTURES.**
Tsimbal E.V.^{1,2}, Bengus S.V.^{2,3}, Sipatov A.Yu.⁴, Yuzephovich O.I.^{2,3}
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- P34 EFFECTS OF PRESSURE ON ELECTRONIC STRUCTURE AND MAGNETIC PROPERTIES OF GADOLINIUM**
Zhuravleva I.P., Logosha A.V.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine

16.20-17.20

**POSTER SESSION – II
TUESDAY, 15 May**

Section	Quantum Liquids and Quantum Crystals, Cryocrystals
P1	PRESSURE RELAXATION IN HCP 1% 3He-4He CRYSTALS OF THE VARIOUS QUALITY <u>Birchenko A.P.</u> , Mikhin N.P. <i>B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine</i>
P2	SIMULATION OF THE AFFECT OF DISK RESONATOR ENVIRONMENT ON THE SPLITTING OF He II RESONANCE ABSORPTION LINE <u>Girich A.A.</u> ¹ , Tikhii V.A. ² ¹ <i>O.Uiskov Institute of Radiophysics and Electronics, NASU, Kharkiv, Ukraine</i> ² <i>B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine</i>
P3	OBSERVATION OF NONLINEAR KELVIN WAVES IN THE TURBULENT FLOW OF He-II <u>Gritsenko I.</u> , Zadorozhko A., Chagovets V., Sheshin G. <i>B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine</i>
P4	ACOUSTIC EMISSION AND VISCOUS DISSIPATION OF AN

- OSCILLATING QUARTZ TUNING FORK IMMERSED IN He-II**
Gritsenko I.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine
- P5 ACTIVATION SPECTROSCOPY OF PRE-IRRADIATED RARE GAS MATRICES: THE ROLE OF DOPANTS IN RELAXATION CASCADES**
Khyzhniy I.V.¹, Uyutnov S.A.¹, Savchenko E.V.¹, Ponomaryov A.N.³,
Gumenchuk G.B.², Bondybey V.E.²
¹*B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine*
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³*Department of Physics, Chung-Ang University, 221 Heukseok-dong, Dongjak-gu, Seoul 156, South Korea*
- P6 STATE DIAGRAM OF Ar-Kr CLUSTERS FROM ELECTRON DIFFRACTION DATA**
Konotop O.P., Danylchenko O.G., Kovalenko S.I., Samovarov V.N.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P7 STUDY OF THERMODYNAMIC PROPERTIES OF SOLID HELIUM IN DIFFERENT CELLS AT ULTRALOW TEMPERATURES**
Lisunov A.A., Rubanskyi V.Yu., Rubets S.P.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P8 INELASTIC PROCESSES OF PHONON INTERACTION WITH He II – SOLID INTERFACE**
Nemchenko E.K., Adamenko I.N.
V.N. Karazin Kharkiv National University, Kharkiv, Ukraine
- P9 ELASTIC PROPERTIES OF COMPRESSED NEON CRYSTAL IN A DEFORMED ATOM MODEL**
Pilipenko E.A.¹, Troitskaya E.P.¹, Chabanenko Val.V.¹, Zhikharev I.V.¹
and Gorbenko Ie.Ie.²
¹*Donetsk A.A. Galkin Physics and Technology Institute, NASU, Donetsk, Ukraine*
²*Lugansk Taras Shevchenko National University, Lugansk, Ukraine*
- P10 THE RESEARCH OF ISOCHORIC HEAT CONDUCTIVITY OF SOLID CYCLOHEXENE**
Sagan V.V., Zvonaryova A.V., Revyakin V.P., Konstantinov V.A.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine
- P11 LOW TEMPERATURE TERMAL CONDUCTIVITY OF POLYMORPHAL STATES IN SOLID CYCLOHEXENE**
Vdovychenko G.A., Sharapova I.V., Krivchikov A.I.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine
- P12 ISOCHORIC THERMAL CONDUCTIVITY OF SOLID FURAN**
Zvonaryova A.V., Sagan V.V., Revyakin V.P.
B.Verkin Institute for Low Temperature Physics and Engineering, NASU, Kharkiv, Ukraine

Section	Optics and Spectroscopy, Photonics. Optical Investigations at Low Temperatures.
P13	SELF-AGGREGATION OF CYANINE DYES IN REVERSE MICELLES <u>Fylymonova I.I.</u> , Sorokin A.V., Yefimova S.L., Bespalova I.I., Malyukin Yu.V. <i>Institute for Scintillation Materials, STC "Institute for Single Crystals", NASU, Kharkiv, Ukraine</i>
P14	FOCUSING PROPERTIES OF TAPERED WIRE MEDIUM FORMED BY COPPER CONDUCTORS <u>Kozhara L.I.</u> ^{1,2} , Ostrizhnoy E.M. ¹ ¹ <i>Kharkov National University of Radio Electronics, Kharkiv, Ukraine</i> ² <i>Institute for Radiophysics and Electronics, NASU, Kharkiv, Ukraine</i>

Sumy State University, Sumy, Ukraine

- P25 MODELING OF THE ELECTRON WAVE FUNCTION IN QUASI-ONE-DIMENSIONAL CONDUCTING CHANNEL OVER LIQUID HELIUM IN MAGNETIC FIELD**
Degtyarov I.A. and Sokolov S.S.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P26 THE DEVELOPMENT OF THE INTERNAL PRESSURES BY THE CHANGE OF $Mn_xZn_yFe_zO_4$ -FERRITE CHEMICAL COMPOSITION**
Khodov A.A.¹, Ivakhnenko N.N.^{1,2}
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²*Donetsk Physicotechnical Institute, NASU, Donetsk, Ukraine*
- P27 INFLUENCE OF SCREW EXTRUSION ON ANJVIC ORDER OF CONSTRUCTION STEEL**
Kulishov B.A.¹, Ivakhnenko N.N.^{1,2}
¹*Donetsk National University of Economics and Trade after M. Tugan-Baranovsky, Donetsk, Ukraine*
²*Donetsk Physicotechnical Institute, National Academy of Sciences of Ukraine, Donetsk, Ukraine*
- P28 “GRINDED” SUPERPARAMAGNETIC CLUSTERS IN MULTILAYERED Co/Cu NANOFILMS**
Lukienko I.M., Kharchenko M.F., Savytskiy V.M., Khrustalyov V.M.,
Fedorchenko A.V., Desnenko V.A.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P29 ELASTIC STRAIN PROPERTIES OF MULTILAYER FILM SYSTEMS BASED ON Co AND Ag**
Makuh Z.M., Protsenko I.Yu.
Sumy State University, Sumy, Ukraine
- P30 FMR INVESTIGATION OF PATTERNED THIN MAGNETIC FILMS**
Moskaltsova A.N.¹, Kharchenko A.A.², Nedukh S.V.²
¹*National Technical University KhPI, Kharkiv, Ukraine*
²*Usikov Institute of Radiophysics and Electronic, NASU, Kharkiv, Ukraine*
- P31 COMPARISON OF DIFFERENT ALGORITHMS PRODUCTIVITY FOR CALCULATION OF VAN-DER-VAALS INTERACTIONS ON GRAPHICS UNITS**
Moskovin D.O., Sotsky V.V.
Nanomaterials Research Institute of Ivanovo State University, Ivanovo, Russia
- P32 PECULIARITIES OF POLARIZATION BREMSSTRAHLUNG SPECTRA FROM SURFACE- AND VOLUME-EXCITED XENON CLUSTERS**
Nechay A.N., Gnatchenko E.V., Samovarov V.N., Tkachenko A.A.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P33 ANGULAR DIE GEOMETRY IMPROVEMENT BASED ON A SIMULATION OF EQUAL CHANNEL PLASTIC FLOW OF MATERIALS**
Perig A.V.¹, Palamarchuk G.V.², Matveev I.A.¹, Palamarchuk V.A.¹
¹*Donbass State Engineering Academy, Kramatorsk, Ukraine*
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- P35 PSEUDOMORPHIC DEFORMATIONS EuS-BASED IN SUPERLATTICE**
Samburskaya T.A., Sipatov O.Y., Volobuev V.V.
National Technical University KhPI, Kharkiv, Ukraine
- P36 MAGNETIC PROPERTIES OF GRANULATED FILM SYSTEMS BASED ON Ag AND Co**
Pazukha I.M., Shabelnyk Y.M.
Sumy State University, Sumy, Ukraine

- P37 PENETRATION OF STRONTIUM INTO CRYSTAL STRUCTURE In_2O_3**
Shymilo J.N.^{1,2}, Nicolaenko Y.M.¹, Zhikharev I.V.^{1,2}
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- P38 SPECTRUM OF SPIN WAVES IN HELICAL NANOWIRES**
Tkachenko V.S.¹, Kuchko A.N.¹, Dvornik M.², and Kruglyak V.V.²
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- P39 KINETICS OF H_2 GAS SORPTION BY FULLERITE C_{60}**
Dolbin A.V., Esel'son V.B., Gavrilko V.G., Manzhelii V.G., Vinnikov N.A.,
Popov S.N.
B.Verkin Institute for Low Temperature Physics and Engineering NASU, Kharkiv, Ukraine
- P40 THE OBSERVATION OF HCP AND FCC PHASES IN NI-PD LASER THIN FILMS**
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