

ORAL PRESENTATIONS

O P E N I N G S E S S I O N

Prof. AKSENOV, Victor	Russia Neutron Landscape
Dr. SHVETSOV, Valery	Frank Laboratory of Neutron Physics

C A R B O N N A N O S Y S T E M S

Dr. KYZYMA, Olena	On the influence of the nC60, nC70 aggregate structure on the toxicity of aqueous fullerene solutions
Dr. LEBEDEV, Vasily	Structure of aqueous gels of nanodiamonds by small-angle neutron scattering
Prof. VUL, Alexander	Detonation nanodiamond. Technology, properties and applications

C O M P U T A T I O N A L S T U D I E S

Dr. EREMIN, Roman	Microstructure of organic solutions of mono-carboxylic acids: combined study by small-angle neutron scattering and molecular dynamics simulations
Dr. TROPIN, Timur	Investigation and theoretical modeling of polystyrene glass transition in a wide range of cooling rates
Dr. TURCHENKO, Vitalii	Crystal structure and magnetic properties Sr _{1+x} Ba _{1-x} Fe _{1+x} Mo _{1-x} O ₆ (x= 0 and 0.1)

F U N C T I O N A L M A T E R I A L S

Dr. BOBORIKO, Natalia	Structural peculiarities of TiO ₂ :MoO ₃ nanocomposites that ensure their catalytic activity
Dr. MATOVIC, Branko	New mesoporous ceria synthesized by templating procedure
Prof. KREZHOV, Kiril	Synthesis and Characterization of New Lead-based Perovskites with Crystallographic Shear Planes
Dr. KURLOV, Alexey	Microstructure of nanocrystalline nonstoichiometric niobium NbC _{0.93} and vanadium VC _{0.875} carbides

I N S T R U M E N T S A N D M E T H O D S

Dr. IOFFE, Alexander	Development of advanced neutron scattering instrumentation for long pulse neutron sources
Dr. KIRILOV, Andrey	Sonix+ - основа программного обеспечения комплекса спектрометров реактора ИБР-2
Dr. KOZHEVNIKOV, Sergey	System of neutron microbeams from a planar waveguide
Dr. KOZLENKO, Denis	Neutron scattering instruments of ibr-2 high flux pulsed reactor for condensed matter research: current state and recent results
Prof. RAITMANS, Ernst	Propagation of neutron spherical waves through a thick, vibrating Ge single crystal

L A Y E R E D N A N O S T R U C T U R E S

Dr. GAKOVIĆ, Biljana	Compositional, morphological and accumulation phenomena in laser pulse ablation of nano-layered (Ni/Ti) thin films
Dr. NIKITENKO, Yuri	SPIN-ECHO spectrometry in grazing geometry
Ms. RYABUKHINA, Marina	Determination of magnetic order in superlattices Fe/Cr/Gd
Ms. YAKUNINA, Elena	Investigation of magnetism in multilayer metallic nanostructures Fe/MgO/Fe and Fe/MgO/Cr/MgO/Fe using polarized neutron reflectometry
Mr. ZHAKETOV, Vladimir	Magnetism of nanostructures with ferromagnetic and superconducting layers

M A G N E T I C A N D L A T T I C E E X C I T A T I O N S

- Prof. ALEKSEEV, Pavel Exotic magnetic ordering in systems with strongly correlated electrons
-
- Dr. BILSKI, Paweł High pressure measurements on the nera facility
-
- Dr. CLEMENTYEV, Evgeny Direct vs inverted TOF geometry in the studies of magnetic and lattice excitations
-
- Dr. GOREMYCHKIN, Evgeny Spin excitation in the iron based high Tc superconductor FeTe_{1-x}Sex

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M A G N E T I C C O L L O I D N A N O S Y S T E M S

- Dr. KOPCANSKY, Peter Ferronematics - the way to magnetovission camera
-
- Dr. NAGORNYI, Anatolii Neutron investigations of water-based ferrofluids synthesized by different methods
-
- Dr. RAJNAK, Michal Electric field driven assembly of ferrofluid magnetic nanoparticles studied by small angle neutron scattering (SANS)

M A T E R I A L S F O R E N E R G Y A P P L I C A T I O N S

- Prof. ANTIPOV, Evgeny T_c-enhancement of Fe_{1+δ}Se by electrochemical lithium intercalation
-
- Dr. BOBRIKOV, Ivan Evolution of crystal structure of cathode material LiNi_{0.8}Al_{0.1}Co_{0.1}O₂ during electrochemical cycling
-
- Dr. DROZHZHIN, Oleg Phase transitions upon Li (de)intercalation in Li_xFe_{1-y}MnyPO₄ (0 ≤ x ≤ 1, 0 ≤ y ≤ 0.5)
-
- Dr. ISTOMIN, Sergey Спиновое состояние катионов Co³⁺ в перовскитоподобных оксидах
-
- Dr. ITKIS, Daniil In operando studies of electrochemical interfaces
-
- Dr. IVANISHCHEV, Alexander A comparative study of lithium-vanadium phosphate and fluorophosphate: application of neutron diffraction and electrochemical methods
-
- Dr. MINYUKOVA, Tatyana Distribution of cations in the Cu-containing oxides of a spinel structure and its influence on the catalytic properties the low-temperature WGSR

N E U T R O N I M A G I N G A N D A P P L I E D S T U D I E S

- Dr. DINCA, Marin Investigation of an ancient thracian spear fragment with neutrons and X-rays
-
- Dr. PAKHNEVICH, Alexey Опыт исследования палеонтологических объектов с помощью нейтронной томографии на реакторе ИБР-2
-
- Mr. ZEL, Ivan Elastic anisotropy of layered rocks: crystallographic texture and ultrasonic measurements of plagioclase-biotite gneiss versus effective media modeling
-
- Prof. ZISMAN, Alexander Texture investigation through thickness of rolled high-strength steel by neutron diffraction

S O F T M A T T E R

- Prof. BALGAVÝ, Pavol Effects of normal alkanes on bilayer thickness in dioleoylphosphatidylcholine liposomes
-
- Dr. FELDMAN, Tatiana Study of visual pigment rhodopsin supramolecular organization in photoreceptor membrane by small angle neutron scattering method with contrast variation
-
- Dr. ISAEV-IVANOV, Vladimir Фрактальная организация хроматина ядер эукариот по данным МУРН: общие принципы
-
- Mr. KONDELA, Tomas Real-time neutron diffraction from lipid membranes

U S E R P O L I C Y

- Dr. CHUDOBA, Dorota FLNP JINR user programme

POSTER PRESENTATIONS October, 13 (Tuesday)

FUNCTIONAL MATERIALS		
Dr. ALEKSEEVA, Olga	Particularities of NaNO ₂ phase state in the ferroelectric composite 0,9NaNO ₂ +0,1BaTiO ₃	T-F 1
Ms. BELOZEROVA, Nadezhda	Nanostructured manganites: neutron diffraction studies at high pressure and low temperature	T-F 2
Dr. CRAUS, Mihail Liviu	Influence of chemical compositions and thermal treatments on the structure and mechanical properties of zirconia based thermal coatings	T-F 3
Dr. CRAUS, Mihail Liviu	Nanocrystalline stabilized zirconia	T-F 4
Dr. DANG, Toan	Influence of Fe doping on structural and electric properties of multiferroics BaTi _{1-x} FexO ₃	T-F 5
Dr. DOROSHEVICH, Alexander	Chemo-voltaic effect in the ZrO ₂ - nanopowder systems	T-F 6
Dr. GOLOSOVA, Natalia	Structural, magnetic and vibrational properties of multiferroic GaFeO ₃ at high pressure	T-F 7
Ms. GORKOVENKO, Ekaterina	The pressure and temperature induced polymorphic transformations in fluconazole	T-F 8
Mrs. ISMAYILOVA, Narmin	Defect formation energy for charge states in TlInS ₂	T-F 9
Dr. JABAROV, Sakin	High pressure study on crystal structure of BaTi _{0.99} Fe _{0.01} O ₃	T-F 10
Dr. KICHANOV, Sergey	The magnetic and structural modifications in multiferroic YMn ₂ O ₅ at high pressure	T-F 11
Ms. ŁUCZYŃSKA, Katarzyna	Experimental (X-ray, ¹³ C CP/MAS NMR, IR, RS, INS, THz) and Solid-State DFT Study on (1:1) Co-Crystal of Bromanilic Acid and 2,6-Dimethylpyrazine	T-F 12
Mr. LUSHNIKOV, Stepan	Структура стабильных гидридов ИМЦ CeNi ₃	T-F 13
Mr. NGUYEN, Chi Thang	Structure of optical materials GeO ₂ , In ₂ O ₃ , and SnO ₂ doped Eu ³⁺ studied by means of small angle neutron scattering and neutron diffraction	T-F 14
Ms. POPIUK, Tatiana	Molecular orientation in amlodipine besylate	T-F 15
Mr. RUTKAUSKAS, Anton	Suppression of the antiferromagnetic state in La _{0.82} Ba _{0.18} CoO ₃ cobaltite at high pressure	T-F 16
Dr. SHABANOV, Osman	Neutron diffraction studies of molten salts in nonequilibrium state	T-F 17
Dr. SIKOLENKO, Vadim	Antiferromagnetic-ferromagnetic transition in anion deficient cobaltites. Neutron diffraction studies	T-F 18
Mr. SUMNIKOV, Sergey	Neutron diffraction study of magnetic and structural phase transitions in nio and mno	T-F 19
Dr. TRUKHANOV, Alexey	Investigation of crystal and magnetic structures of barium ferritesdoped by diamagnetic ions	T-F 20
Ms. VANINA, Polina	Critical scattering in single crystal of uniaxial relaxor Sr _{0.6} Ba _{0.4} Nb ₂ O ₆	T-F 21
Mr. VU, Minh Thanh	Crystal and magnetic structure of manganite La _{0.7} Sr _{0.3} Mn _{0.83} Nb _{0.17} O ₃ in wide range of the temperatures and pressures	T-F 22

POSTER PRESENTATIONS October, 13 (Tuesday)

I N S T R U M E N T S A N D M E T H O D S

Dr. GAVRILOVS, Viktors	Spatial distribution of diffracted neutron beam in perfect and strained Si crystal	T-I 1
Dr. IVANKOV, Oleksandr	SAS program for the preliminary data treatment for the small angle neutron scattering multidetector system on the pulsed source	T-I 2
Mr. KRUGLOV, Alexander	Adaptation of the FSS diffractometer at the IBR-2 fast pulsed reactor: current state and prospects of development	T-I 3
Dr. KUKLIN, Alexander	Cold and thermal Moderator at IBR-2 for SANS spectrometer: advantages and disadvantages	T-I 4
Mr. LUKIN, Evgeny	Neutron Imaging Facility: current state	T-I 5
Ms. SALAMAKHA, Tatsiana	Особенности формирования тонкодисперсных порошков BaI2:Eu для сцинтилляционных детекторов	T-I 6
Mr. ZAW LIN , Kyaw	Multilayer neutron monochromator-polarizer on the basis of iron	T-I 7

A P P L I E D S T U D I E S

Dr. BOKUCHAVA, Gizo	High resolution correlation fourier diffractometry for advanced materials characterization	T-N 1
Dr. BOKUCHAVA, Gizo	Neutron diffraction characterization of residual stress and microstructure in reconstituted charpy specimens	T-N 2
Mr. PAPUSHKIN, Igor	Investigation of residual stress in Formula 1 racing car gearwheel welded by electron beam	T-N 3
Dr. VASIN, Roman	Crystallographic preferred orientations and elastic anisotropy of sheet silicate bearing rocks	T-N 4
Dr. VASIN, Roman	Precise determination of microstructural characteristics from reverse time-of-flight neutron diffraction data	T-N 5

POSTER PRESENTATIONS October, 14 (Wednesday)

C A R B O N N A N O S Y S T E M S

Mr. NARMANDAKH, Jargalan	Experimental aspects of investigations of fullerene solutions	W-C 1
Mr. TOMCHUK, Oleksandr	Detonation nanodiamonds in aqueous suspensions by SANS	W-C 2

C O M P U T A T I O N A L S T U D I E S

Dr. ANITAS, Eugen	Structural properties of elastomeric membranes based on silicone rubber using small-angle neutron scattering	W-C 3
Dr. CHERNY, Alexander	Scattering from surface fractals	W-C 4
Prof. FILAROWSKI, Aleksander	To the question of conformational equilibrium and polymorph's states in the solid state and under the matrix conditions	W-C 5

L A Y E R E D N A N O S T R U C T U R E S

Dr. BAYEV, Vadim	Structural and phase characterization of porous Co/Pd multilayered thin films	W-L 1
Dr. BALASOIU, Maria	Titanium based composites deposited by thermionic vacuum arc method investigated by means of SANS	W-L 2
Mr. ZHAKETOV, Vladimir	Neutron depolarization investigations of spring exchange interaction nanocomposites	W-L 3

M A G N E T I C A N D L A T T I C E E X C I T A T I O N S

Dr. CRAUS, Mihail Liviu	Transition from spin glass to ferromagnetic state: influence on transport phenomena in some Cr doped manganites	W-M 1
Dr. HETMANCZYK, Joanna	Phase transition, structural changes and H ₂ O reorientational motion in [Ca(H ₂ O) ₂](ReO ₄) ₂ studied by neutron scattering methods	W-M 2
Mrs. ORDON, Magdalena	Spectroscopic and thermal analysis of lithocholic acid	W-M 3
Dr. SAVENKO, Boris	Pressure effects on crystal structure and vibration spectra of an antiferroelectric NaNbO ₃	W-M 4
Dr. SMIRNOV, Lev	Dynamics of (NH ₄) ₂ MeO ₂ F ₄ (Me=W, Mo) compounds by the inelastic incoherent neutron scattering	W-M 5

M A G N E T I C C O L L O I D N A N O S Y S T E M S

Dr. BALASOIU, Maria	Structural comparison of several water based ferrofluids by means of TEM and SANS methods	W-N 6
Dr. BALASOIU, Maria	On the silicone rubber elastomer microstructure by means of SANS	W-N 7
Dr. BALASOIU, Maria	Hydrophilic versus hydrophobic oleate coated magnetic particles	W-N 8
Dr. MELNÍKOVÁ, Lucia	Structure of magnetoferritin in aqueous solution	W-N 9
Mr. HAPON, Ihor	Structure of magnetic fluids at interface with silicon by neutron and X-ray reflectometry	W-N 10

POSTER PRESENTATIONS October, 14 (Wednesday)

M A T E R I A L S F O R E N E R G Y A P P L I C A T I O N S

Dr. BOBRIKOV, Ivan	Structural and electrochemical properties of doped 5 V spinel cathode materials $\text{LiNi}_{0.5-x}\text{Mn}_{1.5-y}\text{Mx+yO}_4$ (M = Co, Cr, Ti; $x+y=0.05$) prepared by mechanochemical way	W-E 1
Dr. IVANISHCHEV, Alexander	Investigation of electrochemically stimulated structural transformations in $\text{Li}_3\text{V}_2(\text{PO}_4)_3$ electrode using neutron diffraction method	W-E 2
Mr. SUMANOV, Vasily	Hydro- and solvothermal synthesis of complex lithium and d-metals phosphates as cathode materials for Li-ion batteries	W-E 3
Mr. TERESHCHENKO, Ivan	Hydrothermal synthesis of sodium and transition metals fluorophosphates as cathode materials for lithium- and sodium-ion batteries	W-E 4
Mr. USHAKOV, Arseni	Neutron diffraction and electrochemical study of lithium intercalation in the system $\text{Li}_4\text{Ti}_5\text{O}_{12}$ - $\text{Li}_7\text{Ti}_5\text{O}_{12}$	W-E 5

S O F T M A T T E R

Ms. ANGHEL, Lilia	Influence of tetrasodium ethylenediaminetetraacetate on binding capacity of human lactoferrin	W-S 1
Mr. ARTYKULNYI, Oleksandr	Combined surface tension and small-angle neutron scattering investigations of aqueous micelle solutions of dodecylbenzene sulfonic acid	W-S 2
Ms. GORSHKOVA, Yulia	Small angle neutron investigation of the lithocholic acid derivative in the dimethyl sulfoxide presence: morphology and phase transitions	W-S 3
Ms. GORSHKOVA, Yulia	Effect of ions and polar solvents on the structure and phase transitions of phospholipid membranes	W-S 4
Dr. RAJEWSKA, Aldona	Structure of mixed micellar solutions study by small angle neutron scattering method	W-S 5
Mr. RYZHYKAU, Yury	Investigation of phase transition in nanodiscs by small-angle scattering method	W-S 6
Dr. SIPOSOVA, Katarina	Bicelles: New Nanosystem for Studying Mitochondrial Membrane Proteins	W-S 7
Mr. VLASOV, Alexey	Multi-methodical investigation and SAXS/SANS data analysis of apoferritin behavior in water solutions	W-S 8