“MODERN DEVELOPMENT OF MAGNETIC RESONANCE 2025”| POSTER SESSIONS

|  |  |
| --- | --- |
|  |  **1. Advances in magnetic resonance theory and instrumentation. Poster session** |
| 1-Po1 | **A.A. Gol’dberg, S.A. Klimova, R.V. Davydov, D.S. Provodin, V.V. Davydov:** A new approach to finding an analytical solution to the Bloch equations for magnetization components under modulation conditions of a constant magnetic field |
|  | **2. Modern methods of magnetic resonance. Poster session** |
| 2-Po1 | **M.M. Bakirov, A.A. Sukhanov, H. Zhang, J. Zhao, Yu.E. Kandrashkin:** Time Resolved EPR Study of CNI Tempo |
| 2-Po2 | **R.R. Fatykhov:** ANTISITE DEFECTS IN CATHODE MATERIALS OF LITHIUM (SODIUM) -ION BATTERIES. EPR STUDY |
| 2-Po3 | **I.T. Khairutdinov, R.B. Zaripov:** Inversion of ensemble of frequency-distributed spins using a chirp pulse sequences |
| 2-Po4 | **Zh.Kh. Pulotov, A.Kh. Kadikova, B.F. Gabbasov, I.V. Yanilkin, A.I. Gumarov, A.G. Kiiamov, L.R. Tagirov, R.V. Yusupov:** Spin-Hall effects in epitaxial Pd1-xFex/Pt and Pd1-xFex/W thin film structures |
| 2-Po5 | **A.D. Shishkin, G.S. Shakurov, I.V. Romanova, V.V. Semashko, O.A.Morozov, S.L. Korableva:** EPR EXPERIMENTS in LiDyF4 at SUBTERAHERTZ FREQUENCIES |
| 2-Po6 | **D.E. Zhelezniakova, I.I. Gimazov, Y.I. Talanov:** INFLUENCE of MAGNETIC CORRELATIONS on SCATTERING of CURRENT CARRIERS in IRON ARSENIDES |
|  | **3. Low-dimensional systems, nano-systems and molecular magnets. Poster session** |
| 3-Po1 | **V.A. Achintseva, R.G. Batulin, M.A. Cherosov, A.L. Zinnatullin, I. V. Romanova:** Features of solid-phase synthesis of Gd2-xDyxTi2O7 and Gd1-xDyxTiO3 titanates |
| 3-Po2 | **M.L. Falin, V.A. Latypov, S.L. Korableva.** EPR of cubic center of Gd3+ in Rb2NaF6 single crystal before phase transition at T = 300 K |
| 3-Po3 | A.S. Gurin, D.D. Kramushchenko, A.M. Skomorokhov, P.G. Baranov, S.Ya.Kilin,R.A. Babunts: Cross-relaxation of nitrogen-related centers in diamond |
| 3-Po4 | **N. I. Nurgazizov, A. P. Chuklanov, Ye. O. Mityushkin, V. G. Nikiforov:** USING ATOMIC FORCE MICROSCOPY to FABRICATE TEST STRUCTURES FROM UPCONVERSION LUMINESCENT PARTICLES for CONFOCAL MICROSCOPY |
| 3-Po5 | **M.Yu. Dmitrieva, A.B. Drovosekov, A.V. Sitnikov, S.N. Nikolaev, V.V. Rylkov:** MAGNETIC RESONANCE in NANOGRANULAR COMPOSITES: OBSERVATION of “DOUBLE-QUANTUM” EXCITATIONS in FERROMAGNETIC NANOPARTICLES |
| 3-Po6 | **B.F. Farrakhov, Ya.V. Fattakhov:** MORPHOLOGY of the SURFACE of the IMPLANTED SILICON to INCREASE the EFFICIENCY of LIGHT ABSORPTION FORMED by PULSED LIGHT HEATING |
| 3-Po7 | **A.R. Sharipova, E.N. Frolova, O.A. Turanova, L.V. Bazan, A.N. Turanov:** EFFECT OF COUNTERIONS IN Fe(III) COMPLEXES WITH β-ENAMINONES ON THEIR MAGNETIC PROPERTIES  |
| 3-Po8 | **R.B. Zaripov, R.T. Galeev:** Observation of transient nutation on a two-quantum transition |
| 3-Po9 | **A.K. Ginkel, O.A. Morozov, S.L. Korableva, M.S. Pudovkin, R.M. Rakhmatullin, V.V. Semashko, A.A. Rodionov:** EFFECT of Bi3+ CO-DOPING on Yb3+ LOCAL STRUCTURE in CeO2 NANOPARTICLES |
| 3-Po10 | **A.Kh. Kadikova, I.V. Yanilkin, A.I. Gumarov, B.F. Gabbasov, D.G. Zverev, L.R. Tagirov, R.V. Yusupov:** INVERSE SPIN-HALL EFFECT AND STRUCTURAL PHASE TRANSITIONS IN Ni80Fe20/MnxPt1-x BILAYERS |
| 3-Po11 | **R.I. Khaibullin, E.M. Begishev, D.A. Bizyaev, V.V. Bazarov, I.R. Vakhitov, A.A. Sukhanov:** VSM, MFM and FMR STUDIES of RUTILE TiO2 IMPLANTED with DOUBLY POSITIVELY CHARGED COBALT IONS |
| 3-Po12 | **I.Mershiev, G.Kupriyanova:**35Cl NQR relaxation study of fine powders |
| 3-Po13 | **B.M. Mukhamadullin, E.I. Boltenkova, A.M. Garaeva, A.V. Bogaychuk, E.M. Alakshin:** Monitoring of Nanoparticles Nucleation in Capillary System Using 1H NMR |
| 3-Po14 | **N.S. Saenko, N.I. Steblevskaya, M.V. Belobeletskaya, A.M. Ziatdinov:** ESR of nanoparticles powder of europium metaphosphate Eu(PO3)3 doped by Eu2+ ions |
| 3-Po15 | **D.A. Saritsky, V.V. Zheleznov, A.M. Ziatdinov:** Analysis and Modeling of EPR Spectra of Na2Ti6O13:Fe3+ Considering the Distribution of Fine Structure Parameters |
| 3-Po16 | **T.S. Shaposhnikova, R.F. Mamin:** MAGNETOELECTRIC PROPERTIES of SKYRMIONS |
| 3-Po17 | **N. Kh. Useinov:** STUDY of SPIN-ORBIT TORQUES INDUCED by CURRENT in MAGNETIC TUNNEL JUNCTIONS |
|  |  **4. Spin-based information processing and optical quantum technologies. Poster session** |
| 4-Po1 | **M.R. Arifullin, V.L. Berdinskiy:** IMPLEMENETATION OF QUANTUM COMPUTING ON HIGH-SPIN IONS OF PARAMAGNETIC COMPLEXES USING PHASE-MODULATED MICROWAVE PULSES |
| 4-Po2 | **E.M. Begishev, N.M. Lyadov, V.V. Bazarov, A.A. Sukhanov, R.I. Khaibullin:** MAGNETIC MEMRISTOR BASED on COBALT-IMPLANTED RUTILE (TiO2-x): VSM, MOKE and FMR STUDIES |
|  | **5. Strongly correlated electron systems. Poster session** |
| 5-Po1 | **T.N. Enderova, V.O. Sakhin, I.I. Gimazov, E.F. Kukovitsky, Yu.I. Talanov:** NON-RESONANT MICROWAVE ABSORPTION STUDY OF ANISOTROPIC TRANSPORT PROPERTIES IN Bi1.06Sn0.04Sb0.9Te2S |
| 5-Po2 | **T.P.Gavrilova, I.V. Yatsyk, A.I. Zaitsev, A.V. Cherepakhin, E.M. Moshkina:** CeMnB5O10 – NEW MEMBER of a PENTABORATE FAMILY: ESR MEASUREMENTS |
| 5-Po3 | **Yu. Goryunov, A. Nateprov:** Nuclear magnetic moments in the 3D Dirac semimetal Cd3As2: Suhl-Nakamura interaction approach |
| 5-Po4 | **Nasyrova M.I., Gabbasov B.F., Cherosov M.A., Batulin R.G., Yusupov R.V.:** INFLUENCE OF COOLING CONDITIONS ON MAGNETIC RESONANCE SPECTRA OF FeCr2O4 MULTIFERROIC SPINEL |
| 5-Po5 | **A.Е. Os’kin, A.V. Popov, I.V. Yatsyk, R.M. Eremina, S.V. Demishev:** QUANTITATIVE EPR LINE SHAPE ANALYSIS IN a METAL BASED on the SEMICLASSICAL MAGNETIZATION DYNAMICS |
| 5-Po6 | **S.V. Demishev, R.R. Tagirov, A.V. Semeno, A.V. Shestakov, I.I. Fazlizhanov, R.M. Eremina, A.V. Bokov, D.A. Salamatin, A.V. Semeno, A.V. Tsvyashchenko:** Magnetic Properties of GdCoC₂: ESR, Static Magnetization and Magnetocaloric Study |
| 5-Po7 | **D.A. Arbuzov, A.A. Validov, N.N. Garyf’yanov, A.A. Kamashev, I.A. Garifullin:** INVESTIGATION OF THE OXIDATION PROCESSES OF COBALT THIN FILMS BY THE FMR METHOD |
| 5-Po8 | **I.V. Yatsyk, R.F. Likerov, R. M. Eremina, R.G. Batulin:** Magnetic properties Ca0.3Sr0.3La0.3Mn0.5Ti0.5O3 |
|  | **6. Chemical and biological systems. Poster session** |
| 6-Po1 | **M.M. Akhmetov, G.G. Gumarov, R.B. Zaripov, G.N. Konygin, D.S. Rybin:** Pulse EPR of radicals in mechanoactivated calcium gluconate |
| 6-Po2 | **V.V. Andrianov, I.B. Deryabina, A.I. Arslanov, L.V. Bazan, Kh.L. Gainutdinov:** Effect of different anesthesia methods on NO detection in rat brain tissue by the spin trap method |
| 6-Po3 | **E.E. Batueva, A.R. Sharipova, E.N. Frolova, A.A. Sukhanov, L.I. Savostina, O.A. Turanova, A.N. Turanov:** Multifunctional heptanuclear iron complexes |
| 6-Po4 | **M.I.Ibragimova, A.I. Chushnikov, I.V.Yatsyk, D.Kh.Khaibullina, G.G.Gumarov:** EPR method: methemoglobinemia in patients with connective tissue dysplasia |
| 6-Po5 | **I.S Ivanova., D.R. Bajtimirov, S.V. Konev, D.V. Ivanov, A.P. Podshivalov:** INVESTIGATION OF THE ORIGIN OF THE RADIATION-INDUCED PARAMAGNETIC CENTERS IN MELANIN BY EPR SPECTROSCOPY |
| 6-Po6 | **A.P. Podshivalov, D.R. Bajtimirov, D.V. Ivanov, S.F. Konev, G.P. Slesarev:** STUDY OF THE INFLUENCE OF HYDROXYAPATITE SYNTHESIS CONDITIONS ON ITS DOSIMETRIC PROPERTIES USING THE EPR METHOD |
| 6-Po7 | **A.F. Shaidullina, L.I. Savostina, A.R. Sharipova, M.Yu. Volkov, O.A. Turanova, A.N. Turanov:** INFLUENCE of SOLVENTS on β-ENAMINON SPECTRAL CHARACTERISTICS and DYNAMICS by NMR, UV-VISIBLE SPECTROSCOPY and DFT DATA |
| 6-Po8 | **E.K. Shamsutdinova, A.N. Turanov:** Proton Exchange in Water-Ethanol Mixture. NMR |
| 6-Po9 | **A.R. Sharipova, E.N. Frolova, O.A. Turanova, L.V. Bazan, A.N. Turanov:** Potential control of magnetic properties of a new Fe(III) complex by means of synthesis methods |
| 6-Po10 | **M.Yu. Volkov, A.R. Sharipova, O. A. Turanova:** STUDY of 1-[4-(4-PENTYLCYCLOHEXYL)-PHENYL]-3-(QUINOLIN-8-YLAMINO)PROP-2-EN-1-ONE by NMR and UV SPECTROSCOPY |
|  | **7. Defects and spin qubits. Poster session** |
| 7-Po1 | **E.V. Dmitrieva, G.V. Mamin, F.F. Murzakhanov, I.N. Gracheva, M.R. Gafurov, V.A. Soltamov:** Hyperfine and quadrupole coupling in hexagonal boron nitride |
| 7-Po2 | **Y.E. Ermakova, I.N. Gracheva, F.F. Murzakhanov, A.N. Smirnov, I.A. Eliseyev, O.P. Kazarova, G.V. Mamin, M.R. Gafurov:** Temperature stability of spin defects in 6*H*-SiC studied by EPR and Luminescence spectroscopy |
| 7-Po3 | **L.V. Nikiforov, D.V. Dmitrieva, D.S. Dmitrieva, V.V. Davydov:** Research a relaxation processes of E’ centers in pure quartz fibers by electron paramagnetic resonance method |
| 7-Po4 | **A.Yu. Oshchepkov:**MODELING the DYNAMICS of SPIN QUBITS in the PRESENCE of STOCHASTIC IMPACT of LATTICE in the SEMICLASSICAL APPROXIMATION |
| 7-Po5 | **A.A. Sukhanov, V.F. Tarasov, Ya.S. Didenko, K.A. Subbotin, E.V. Zharikov:** HYPERFINE STRUCTURE OF EPR SPECTRA OF Cr-53 IMPURITY IONS IN SYNTHETIC FORSTERITE |
| 7-Po6 | **R.B. Zaripov, V.A. Ulanov, R.R. Zainullin:** EPR study of [Mn2+- Ag2+] exchange coupled pairs synthesized in BaF2 single crystal  |
|  | **8. Magnetic resonance imaging and applications in medical physics. Poster session** |
| 8-Po1 | **A.S. Makarchenko, V.V. Kuzmin:** Study of the efficiency of helium-3 nuclear polarization in magnetized plasma under various RF pumping conditions |
| 8-Po2 | **N.A. Nefediev, N.E. Staroverov, R.V. Davydov:** Application of convolutional neural network to improve the efficiency of tumor segmentation in prostate MRI |
| 8-Po3 | **S.V. Yurtaeva, I. V. Yatsyk, V.N. Efimov, A.A.Rodionov:** Analysis of temperature behavior of orientation dependent EMR signals in biological tissues |
|  | **9. Related phenomena. Poster session** |
| 9-Po1 | **G.Iu. Andreev, E.I. Baibekov, I.V. Romanova:** MAGNETOCALORIC EFFECT AND THE HYSTERESIS PROPERTIES OF LiDyF4 |
| 9-Po2 | **A.A. Kamashev, N.N. Garifyanov, A.A. Validov, D.A. Arbuzov, I.A. Garifullin:** INVESTIGATION of FEATURES Of MAGNETIC PROPERTIES of OXIDIZED LAYERS in SUPERCONDUCTING SPIN VALVE STRUCTURES CO/PB/CO |
| 9-Po3 | **R.F.Likerov, I.V.Yatsyk, R.M.Eremina:** HIGH-ENTROPY PEROVSKITE-LIKE OXIDE (BaCaSrLaNa)0.2FeO3: SYNTHESIS AND EPR MEASUREMENTS |
| 9-Po4 | **M.E. Menshikov, A.V. Dooglav, R.G. Batulin, S.L. Korableva, O.A. Morozov, I.V. Romanova:** MEASURING MAGNETOSTRICTION USING CAPACITIVE DILATOMETER |
| 9-Po5 | **V.O. Sakhin, B.F. Gabbasov, D.G. Zverev, E.F. Kukovitsky, N.N. Garifyanov, A.A. Kamashev:**INVESTIGATION of SPIN-CURRENT CONVERSION in Py/Bi1.08Sn0.02Sb0.9Te2S HETEROSTRUCTURE |

A