



MODERN DEVELOPMENT OF MAGNETIC RESONANCE

PROGRAM OF THE
INTERNATIONAL CONFERENCE

KAZAN, SEPTEMBER 25–29, 2017

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The conference is organized under the auspices of
the AMPERE Society

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Kazan Federal University

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CONFERENCE LOCATION

The Academy of Sciences of the Republic of Tatarstan, Baumana str., 20;
Hotel Nogai, Profsojuznaja str., 16B

TIME SCHEDULE

MONDAY, September 25th, 2017

09:00	Registration
10:30–11:00	Welcome Coffee
11:00–13:00	Excursion
13:00–14:00	Lunch
14:00–14:15	Opening of the Zavoisky Week
14:15–15:20	Zavoisky Award Ceremony
15:20–16:00	Zavoisky Award Lecture
16:00–16:30	Coffee Break
16:30–17:50	Plenary Lectures
18:00	Welcome Party

TUESDAY, September 26th, 2017

09:00–10:20	Plenary Lectures
10:20–10:40	Coffee Break
10:40–13:00	Session: Theory of Magnetic Resonance Session: Low-Dimensional Systems and Nano-Systems
13:00–14:30	Lunch
14:30–16:00	Session: Spin-Based Information Processing Session: Low-Dimensional Systems and Nano-Systems
16:00–16:20	Coffee Break
16:20–17:00	Session: Spin-Based Information Processing Session: Low-Dimensional Systems and Nano-Systems
17:00–18:00	Session: Molecular Magnets and Liquid Crystals Session: Modern Methods of Magnetic Resonance
18:30	Culture Program

WEDNESDAY, September 27th, 2017

09:00–10:20	Plenary Lectures
10:20–10:40	Coffee Break
10:40–13:00	Session: Strong Correlated Electron System Session: Magnetic Resonance Imaging Session: Magnetic Resonance Instrumentation
13:00–14:30	Lunch

- 14:30–16:00 Session: Electron Spin Based Methods for Electronic and Spatial Structure Determination in Physics, Chemistry and Biology
Session: Chemical and Biological Systems
- 16:00–16:30 Coffee Break
- 16:30–18:00 Session: Electron Spin Based Methods for Electronic and Spatial Structure Determination in Physics, Chemistry and Biology
Session: Chemical and Biological Systems
- 18:00–20:00 Poster Session

THURSDAY, September 28th, 2017

- 09:00–10:00 Special Session Devoted to the 110 Anniversary of E. K. Zavoisky
- 10:00–10:20 Coffee Break
- 10:20–12:00 Special Session Devoted to the 110 Anniversary of E. K. Zavoisky. Plenary Lectures
- 12:00–13:30 Lunch
- 14:00–15:30 Zavoisky Readings (Kazan Federal University)
- 19:00 Conference Dinner

FRIDAY, September 29th, 2017

- 09:00–10:20 Session: Other Applications of Magnetic Resonance/
Perspective of Magnetic Resonance in Science and Spin-Technology
- 10:20–10:40 Coffee Break
- 10:40–12:00 Session: Other Applications of Magnetic Resonance /
Perspective of Magnetic Resonance in Science and Spin-Technology
- 12:00 Closing of the Conference
- 12:15–13:00 Lunch

SCIENTIFIC PROGRAM

MONDAY, September 25th, 2017

- 14:00 Opening of the Zavoisky Week
14:15 Zavoisky Award Ceremony
15:20 Zavoisky Award 2017 Lecture
T. Takui: Topological High-Spin Organic Chemistry and
Molecular Spin-Qubit Quantum Technology Underlain by
Electron Magnetic Resonance

Plenary Session

Chair: *K. M. Salikhov*

- 16:30 H. Ohta: Multi-Extreme THz ESR: Developments and Future
Biological Applications
17:10 A. I. Smirnov: Spinon Magnetic Resonance in a Quasi 1D
 $S = 1/2$ Antiferromagnet with a Weak Exchange Interaction

TUESDAY, September 26th, 2017

Hall A

Plenary Session

Chair: *M. Bowman*

- 09:00 E. G. Bagryanskaya: A Pulse Dipole EPR-Based Distance
Measurements at Ambient Temperatures
09:40 M. Huber: EPR Methods to Determine Properties of Intrinsi-
cally Disordered Proteins

Hall A

Session: Low-Dimensional Systems and Nano-Systems

Chair: *V. A. Atsarkin*

Invited Talks

- 10:40 V. V. Ryazanov, I. A. Golovchanskiy, V. V. Bolginov, N. N. Ab-
ramov, V. I. Chichkov: Magnetoresistive and Microwave Re-
sponses of Hybrid Josephson Structures with Ferromagnetic
Layers

- 11:10 *A. S. Mel'nikov*: Dynamics of Majorana States in Nanowires and Josephson Junctions
- 11:40 *E. A. Karashtin, N. S. Gusev, K. D. Sladkov, I. A. Kolmychek, T. V. Murzina, A. A. Fraerman*: Spin Current and Second Harmonic Generation in Noncollinear Magnets
- 12:10 *L. E. Svistov, S. K. Gotovko, T. A. Soldatov, H. D. Zhou*: Electric Field Controlled ESR in Multiferroic CuCrO_2

Oral Talks

- 12:40 *E. A. Zvereva, G. V. Raganyan, V. B. Nalbandyan, M. A. Evstigneeva, S. V. Streltsov, A. I. Kurbakov, M. A. Kuchugura, A. N. Vasiliev*: Magnetic Properties of New Chiral 2D Magnet MnSnTeO_6

Hall B

Session: Theory of Magnetic Resonance

Chair: *E. B. Fel'dman*

Invited Talks

- 10:40 *F. S. Dzheparov, D. V. Lvov*: Magnetic Resonance of Impurity Spin in Slow Normal Stochastic Local Field
- 11:10 *A. G. Maryasov, S. L. Veber, M. V. Fedin*: Manipulations of High Spin Kramers System States by Circularly Polarized MW Fields
- 11:40 *B. Fine*: Reversing Chaotic Dynamics of Nuclear Spins

Oral Talks

- 12:10 *E. Yu. Tupikina, A. A. Efimova, G. S. Denisov, P. M. Tolstoy*: Probing of Fluorine Atom Electronic Shell by means of Topological Analysis of Helium Chemical Shift Surfaces

Hall A

Session: Spin-Based Information Processing

Chair: *A. A. Kalachev*

Invited Talks

- 14:30 *T. Yamane, K. Sugisaki, T. Nakagawa, H. Matsuoka, T. Nishio, S. Kinjyo, N. Mori, S. Yokoyama, C. Kawashima, N. Yokokura, K. Sato, Y. Kanzaki, D. Shiomi, K. Toyota, D. H. Dolphin, W. C. Lin, C. A. McDowell, M. Tadokoro, T. Takui*: Exact Analytical and Genuine Zeeman Perturbation Approaches

to the Eigen-Energies and -Functions of the ZFS and Electronic Zeeman Interaction Hamiltonian for the Spin Quantum Numbers up to $S = 7/2$: Applications to High Spin Metalloporphyrins and a Re(III, IV) Complex with Sizable ZFS Values and Quantum Chemical Calculations

- 15:00 K. Sato, S. Yamamoto, R. Hirao, K. Tanimoto, E. Hosseini, S. Nakazawa, K. Toyota, D. Shiomi, K. Ivanov, T. Takui: Molecular Spin Technology Based on Microwave Pulse with Arbitrary Waveform towards Spin Quantum Computing
- 15:30 G. A. Bochkin, E. B. Fel'dman, S. G. Vasil'ev, V. I. Volkov: Decoherence in Many-Qubit Clusters in Multiple Quantum NMR in One-Dimensional Systems

Oral Talks

- 16:20 R. A. Akhmedzhanov, L. A. Gushchin, N. A. Nizov, V. A. Nizov, D. A. Sobgayda, I. V. Zelensky: Cross Relaxation Magnetometry with Diamond NV Centers
- 16:40 E. I. Baibekov: Electron-Electron and Electron-Nuclear Interactions in the Context of Spin-Based Quantum Computing

Hall B

Session: Low-Dimensional Systems and Nano-Systems

Chair: A. A. Fraerman

Invited Talk

- 14:30 A. M. Ziatdinov: The Influence of Adsorbate and Edge Covalent Bonds on Topological Zero Modes in Few-Layer Nanographenes

Oral Talks

- 15:00 E. V. Skorohodov, A. P. Volodin, R. V. Gorev, V. L. Mironov: Localized Ferromagnetic Resonance of Domain Wall in Curved Nanostripe
- 15:20 T. A. Soldatov, A. I. Smirnov, K. Yu. Povarov, E. Wulf, A. Manzig, A. Zheludev: ESR of a Doped Quasi-One-Dimensional $S = 1$ Antiferromagnet with Two Coupled Antiferromagnetic Sublattices
- 15:40 A. Panich: Nuclear Magnetic Resonance Studies of Nano-Diamond Surface Modification

- 16:20 *E. M. Alakshin, G. A. Dolgorukov, A. V. Klochkov, E. I. Kondratyeva, V. V. Kuzmin, D. S. Nuzhina, K. R. Safiullin, A. A. Stanislavovas, M. S. Tagirov*: ^3He NMR in Nanostructures: Latest Progress
- 16:40 *S. S. Yakushkin, D. A. Balaev, G. A. Bukhtiyarova, O. N. Martyanov*: The Formation of Epsilon- $\text{Fe}_2\text{O}_3/\text{SiO}_2$ Nanoparticles: Spatial Stabilization and the Size Effect

Hall A

Session: Molecular Magnets and Liquid Crystals

Chair: *V. K. Voronkova*

Invited Talk

- 17:00 *F. Shi*: Spin Magnetic Resonance Spectroscopy from Billions of Molecules to a Single Molecule

Oral Talk

- 17:30 *V. Vieru, L. Ungur, V. Cemortan, A. Sukhanov, A. Baniodeh, V. Mereacre, C. E. Anson, A. K. Powell, V. Voronkova, L. F. Chibotaru*: Magnetic Properties, EPR and *ab initio* Investigation of a Series of Isostructural $\text{Fe}_2^{\text{III}}\text{Dy}_2^{\text{III}}$ Complexes

Hall B

Session: Modern Methods of Magnetic Resonance

Chair: *M. S. Tagirov*

Invited Talks

- 17:00 *S. V. Dvinskikh*: Characterization of Liquid-Crystalline Materials by Separated Local Field Methods
- 17:30 *B. Rameev*: Novel Approaches in Magnetic Resonance & Microwave Detection of Energetic and Illicit Material

WEDNESDAY, September 27th, 2017

Hall A

Plenary Lectures

Chair: *K. Sato*

09:00 *G. Khaliullin*: Soft Spins and Higgs Mode in Ruthenates

09:40 *R. Bittl*: Insight into Protein Function by EPR

Hall A

Session: Strong Correlated Electron System

Chair: *G. B. Teitelbaum*

Invited Talks

10:50 *V. Kataev*: Signatures of Fractionalized Spin Excitations in the Proximate Quantum Spin Liquid α - RuCl_3 from Sub-THz Spectroscopy in Strong Magnetic Fields

11:20 *S. V. Demishev, V. N. Krasnorussky, V. V. Glushkov, A. V. Semeno, M. I. Gilmanov, A. V. Bogach, A. N. Samarin, N. A. Samarin, N. E. Sluchanko, N. Yu. Shitsevalova, V. B. Filipov*: Electron Nematic Effect in CeB_6 : The ESR and Magnetoresistance Evidence

Oral Talks

11:50 *M. Iakovleva, E. Vavilova, H.-J. Grafe, A. Alfonsov, B. Büchner, Y. Skourski, R. Nath, V. Kataev*: Investigation of a Field Induced Magnetic Transition in the Low-Dimensional Magnet BiCoPO_5

12:10 *S. V. Demishev, M. I. Gilmanov, A. N. Samarin, A. V. Semeno, N. E. Sluchanko, N. Yu. Shitsevalova, V. B. Filipov, V. V. Glushkov*: Magnetic Resonance in the Strongly Correlated Topological Insulator SmB_6

12:30 *S. Anishchik*: ODMR and LAC Spectroscopy of Nitrogen-Vacancy Centers in Diamond

Hall B

Session: Magnetic Resonance Imaging

Chair: *K. Il'yasov*

Invited Talk

10:50 *U. Eichhoff*: MRI and Emotion

Oral Talks

11:20 *D. V. Volkov, M. V. Gulyaev, L. L. Gervits, D. N. Silachev, N. V. Anisimov, A. P. Chernyaev, Yu. A. Pirogov*: Several Aspects of ^{19}F Gastrointestinal MRI

11:40 *A. A. Bayazitov, V. E. Khundiryakov, Ya. V. Fattakhov, I. R. Sitdikov, A. R. Fakhrutdinov, V. A. Shagalov, R. Sh. Khabipov, A. N. Anikin*: The Design of the Receiving Coils for Specialized MRI

Hall B

Session: Magnetic Resonance Instrumentation

Chair: *I. A. Garifullin*

Invited Talk

12:00 *K. Zick*: Latest Developments in Pulsed Field Gradient and High Speed Magic Angle Spinning NMR

12:30 *M. Tseytlin*: Rapid Scan EPR

Hall A

Session: Electron Spin Based Methods for Electronic and Spatial Structure Determination in Physics, Chemistry and Biology

Chair: *R. Bittl*

Invited Talks

14:30 *K. M. Salikhov*: Manifestations of the Collective Motion of Spins Induced by Stochastic Relaxation Processes

15:00 *H. Matsuoka, M. Retegen, L. Schmitt, S. Höger, F. Neese, O. Schiemann*: Time-Resolved EPR and Theoretical Investigations of Metal-Free Triplet Emitters for Organic Light Emitting Diodes

- 15:30 S. A. Dzuba, M. E. Kardash, V. N. Syryamina, E. F. Afanasyeva: Nanoclustering of Spin-Labeled Molecules in Lipid Membranes as Revealed by “Instantaneous Diffusion” Effects in Electron Spin Echo Decay
- 16:30 M. V. Fedin, A. M. Sheveleva, S. L. Veber: EPR of Metal-Organic Stimuli-Responsive Materials

Oral Talk

- 17:00 E. Vavilova, R. Zaripov, A. Vyalikh, M. Zschornak, T. Köhler, M. Nentwich, T. Weige, S. Gemming, E. Brendler, D. C. Meyer: Defects Structure in Congruent Lithium Tantalite by NMR, ESR, FTIR Spectroscopies and DFT Calculations
- 17:20 S. B. Orlinskii, A. A. Rodionov, A. V. Galukhin, I. N. Gracheva, G. V. Mamin, M. R. Gafurov: Stable Self-Organized Paramagnetic Complexes in the Asphaltenes’ Structures from the W-band EPR and ENDOR

Hall B

Session: Chemical and Biological Systems

Chair: R. Kaptein

Invited Talks

- 14:30 G. Likhtenshtein: A Combine ESR – Fluorescence Approach for Investigation of Structure, Molecular Dynamics and Mechanism of Electron Transfer in Biological Systems: 50 Years of History
- 15:00 A. I. Kokorin, I. V. Kolbanev, T. V. Sviridova, D. V. Sviridov: Structure and Properties of Mechanically Activated $\text{TiO}_2/\text{MoO}_3$, $\text{TiO}_2/\text{V}_2\text{O}_5$ and $\text{TiO}_2/\text{MoO}_3:\text{V}_2\text{O}_5$ Oxides Studied by EPR and XRD
- 15:30 N. Enkin, S.-H. Liou, T. Orlando, I. Tkach, M. Bennati: Fullerene-Nitroxide Derivatives: Polarizers with New Properties for DNP in Liquid State
- 16:30 P. M. Tolstoy, S. A. Pylaeva, E. Yu. Tupikina, G. S. Denisov, H. Elgabarty, D. Sebastiani: Proton Dynamics in Strong Hydrogen Bonds: Solvent-Induced Distribution of NMR Chemical Shifts

Oral Talks

17:00 V. I. Polshakov: NMR Methods to Study Protein-Ligand Interactions

18:00 **Poster Session**

THURSDAY, September 28th, 2017

Hall A

Special Session Devoted to the 110 Anniversary of E. K. Zavoisky

Chair: B. I. Kochelaev

Invited Talks

09:00 M. S. Tagirov: E. Zavoisky and Kazan University

09:30 K. M. Salikhov: About E. Zavoisky and His Discovery

Plenary Lectures

10:20 M. K. Bowman, H. Chen, B. R. Fowler, A. G. Maryasov: The Different Faces of Free Radical Spin Dynamics in Frozen Solution

11:00 V. F. Tarasov: Dimer Self-Organization of Rare-Earth Impurity Ions in Synthetic Forsterite

Zavoisky Readings (Kazan Federal University)

14:00 R. Grimm: The Magic of Ultracold Matter

FRIDAY, September 29th, 2017

Hall A

Session: Other Applications of Magnetic Resonance / Perspective of Magnetic Resonance in Science and Spin-Technology

Chair: V. F. Tarasov

Invited Talks

09:00 Yu. M. Bunkov, T. R. Safin, A. R. Farhutdinov, M. S. Tagirov: Supermagnonics in YIG Film

09:30 A. A. Sukhanov, Yu. E. Kandrashkin, V. K. Voronkova, V. S. Tyurin: Continuous Wave and Time Resolved EPR Studies of Aggregation CuCPP-I

Oral Talks

- 10:00 *R. Eremina, K. Konov, V. F. Tarasov, T. P. Gavrilova, A. V. Sheshtakov, Yu. D. Zavartsev, A. I. Zagumennyi, S. A. Kutovoi*: ESR Study of $\text{Sc}_2\text{SiO}_5\text{:Nd}^{143}$ Isotopically Pure Crystals
- 10:40 *V. Sakhin, E. Kukovitskii, N. Garifyanov, R. Khasanov, Yu. Talanov, G. Teitel'baum*: ESR Study of Intrinsic Magnetic Moments in Topological Insulators
- 11:00 *D. Bizyaev, A. Bukharaev, N. Nurgazizov, T. Khanipov*: Investigation of Magnetic Anisotropy Field in Stressed Permalloy Microparticles by FMR
- 11:20 *V. A. Ulanov, A. M. Sinicin, R. R. Zainullin*: Influence of Free Charge Carriers on EPR Parameters of Gd^{3+} Centers in the $\text{Pb}_{1-x}\text{Ag}_x\text{S}$ and $\text{Pb}_{1-x}\text{Cu}_x\text{S}$ Semiconductors
- 11:40 *A. Esmaeili, I. R. Vakhitov, N. P. Nikitin, I. V. Yanilkin, A. I. Gumarov, B. M. Khaliulin, B. F. Gabbasov, M. N. Aliyev, R. V. Yusupov, L. R. Tagirov*: FMR Studies of Ultra-Thin Epitaxial PD1-XFEX Films

POSTER SESSIONS

1. *M. M. Akhmetov, G. G. Gumarov, V. Yu. Petukhov, G. N. Konygin, D. S. Rybin*: EPR Investigation of Mechanoactivated Copper Gluconate
2. *N. K. Andreev*: Cross-Correlation Effects in Spin-lattice Relaxation and Symmetry Restricted Spin Diffusion in Single Crystals of Amino Acids
3. *E. Anisimova, R. Zaripov, I. Khairuzhdinov, K. Salikhov, T. Ruffer, E. Vavilova*: Application of the Multi-Pulse Protocols in Solid State ^1H NMR in Cu(II)-Oxamidato Complex
4. *M. M. Bakirov, R. T. Galeev, K. M. Salikhov*: Routine of Determination of the Spin Exchange Rate Constants from EPR Line Shape Analysis of Nitroxyl Radicals in Liquids
5. *V. V. Chirkov, G. G. Gumarov, V. Yu. Petukhov, M. M. Bakirov*: FMR Investigation of Magnetic Anisotropy in Films were Synthesized by Co^+ Implantation into Si
6. *N. E. Domracheva, V. E. Vorobeva, M. S. Gruzdev*: EMR Searching of Quantum Behavior of $\gamma\text{-Fe}_2\text{O}_3$ Nanoparticles Encapsulated in Dendrimeric Matrix
7. *N. E. Domracheva, V. E. Vorobeva, V. I. Ovcharenko, A. S. Bogomyakov, E. M. Zueva, M. S. Gruzdev, U. V. Chervonova, A. M. Kolker*: Action of Counterion on Spin-Crossover Behavior in Iron(III) Dendrimeric Complexes
8. *M. L. Falin, V. A. Latypov, S. L. Korableva*: EPR of Er^{3+} Ions in CsCaF_3 Single Crystals
9. *M. L. Falin, V. A. Latypov, A. M. Leushin, G. M. Safullin*: Structural Models of the Yb^{3+} Ion in the Hexagonal Perovskite RbMgF_3 Single Crystal
10. *E. Frolova, T. Ivanova, O. Turanova, L. Mingalieva, E. Zueva, M. Petrova, I. Ovchinnikov*: Spin States of $[\text{Fe}(\text{Salten})\text{Cl}]$ Complexes in Acetonitrile
11. *B. F. Gabbasov, D. G. Zverev, S. I. Nikitin, I. F. Gilmutdinov, R. G. Batulin, A. G. Kiiamov, R. V. Yusupov*: EPR Spectroscopy of the Gd^{3+} Ions in the SrY_2O_4 Crystal

12. *L. Gafiyatullin, E. Frolova, E. Zueva, O. Turanova, E. Milordova, I. Ovchinnikov*: Studies of $[\text{Fe}(\text{Salten})\text{L}]\text{BPh}_4$ Complexes Solutions in Acetonitrile
13. *Kh. L. Gainutdinov, V. V. Andrianov, V. S. Iyudin, G. G. Yafarova, M. I. Sungatullina, I. I. Khabibrakhmanov, N. I. Ziatdinova, T. L. Zefirov*: Dynamics of Nitric Oxide Production in Heart and Liver of Rats During Increasing 30-Days Restriction of Motor Activity and Subsequent Recovery
14. *I. A. Goenko, G. G. Gumarov, M. M. Bakirov, R. B. Zaripov, V. Yu. Petukhov, D. S. Rybin, G. N. Konygin*: EPR Investigation of the Conformation of the Irradiated Calcium Gluconate
15. *A. I. Gorbovanov, S. N. Polulyakh, V. N. Berzhansky, A. A. Gippius*: Multiple Spin Echoes from ^{57}Fe Nuclei in Ferrimagnetic Yttrium Iron Garnet Films
16. *Yu. V. Goryunov, A. N. Nateprov*: Topological Interactions of Magnetic Impurities in Topological Semimetal: ESR Data
17. *G. G. Gumarov, O. N. Lis, A. V. Alekseev, M. M. Bakirov, V. Yu. Petukhov*: Temperature Dependence of Magnetic Anisotropy in Iron Silicide Films Ion-Synthesized in External Magnetic Field
18. *M. I. Ibragimova, D. K. Khaibullina, A. I. Chushnikov, I. V. Yatsyk, V. Yu. Petukhov, R. G. Esin*: The Possibilities of EPR for the Connective Tissue Dysplasia Diagnosis
19. *A. Imaev, A. Sayakhov, S. Gorshenin, M. Gorshenin, A. Sadikov, A. Bragin, V. Murzakaev, L. Gilyazov, A. Golubey, D. Zverev, I. Mumdzhi, S. Nikitin, D. Ivanov, D. Melnikova, A. Ivanov, O. Gnezdilov, R. Archipov, A. Aleksandrov, V. Skirda, Ya. Fattakhov, V. Shagalov, A. Fakhrutdinov, D. Konovalov, R. Khabipov, A. Anikin*: Downhole Laboratory for Reservoir Fluid Real-Time Extended NMR, Optical and Dielectric Spectroscopy Analysis and Sampling
20. *T. Ivanova, I. Gilmutdinov, O. Turanova, L. Mingalieva, I. Ovchinnikov*: Magnetic Interactions in the Chain Structure $[\text{Fe}(\text{salen})(2\text{-Me-Him})]_n$
21. *G. S. Kupriyanova, G. V. Mozzhukhin, A. Maraşlı, B. Z. Rameev*: ^1H NMR Detection of Olive Oil
22. *I. Kurganskii, M. Ivanov, M. Fedin, S. Prikhod'ko, N. Adonin*: Investigation of Fullerenes C_{60} and PCBM Triplet States Spin Dynamics in Ionic Liquids by Time-Resolved EPR Spectroscopy

23. *A. M. Kusova, A. E. Sitnitsky, B. Z. Idiyatullin, D. R. Bakirova, Yu. F. Zuev*: Protein Translational Diffusion under Crowding Conditions
24. *D. Kuzmina, A. Sheveleva, A. Poryvaev, M. Fedin*: Spin Probe EPR Study of CO₂/O₂/N₂ Gas Sorption in ZIF-8
25. *N. T. Le, E. A. Konstantinova, B. B. Iversen*: Spin Centers in Nanocrystalline Titania, Synthesized with Supercritical Flow Reactor Technique
26. *V. N. Lisin, A. M. Shegeda, V. V. Samartsev*: The Coherence of the Exciting Radiation and Amplitude of Oscillations of Echo Intensity vs External dc Magnetic Field
27. *S. Lvov, E. Kukovitsky*: ESR Study of CuEr Dilute Alloys
28. *S. Mamadzizov, M. Shelyapina, G. Kupriyanova*: DFT Calculations of the ¹⁴N NQR Spectra of Some Heterocycles
29. *I. Mershev, B. Blümich* ¹⁴N NQR with Frank Sequence Excitation
30. *L. V. Mingalieva, Y. Peng, V. K. Voronkova, A. K. Powell*: EPR of {Dy^{III}-Me^{III}₂-Dy^{III}} Clusters, Me^{III} = Cr^{III}, Mn^{III}
31. *A. A. Minnekhanov, E. V. Vakhrina, E. A. Konstantinova*: Investigation of Charge Accumulation Processes in TiO₂-Based Nanoheterostructures
32. *G. V. Mozzhukhin, G. S. Kupriyanova, A. Maraşlı, B. Z. Rameev*: Nitrogen ¹⁴N NMR Detection of Liquids
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