

Preliminary program of RCBJSF 2018

Sections:

Phase transitions and critical phenomenon

Crystal structure and atomic dynamics

Probing the nanoscale ferroelectric behavior and size effects

Relaxor ferroelectrics

Multiferroics

Novel applications, approaches and device concept

Preliminary list of presentations

(Abstract acceptance notification including distribution into sessions and presentation type will be announcement on 1st March)

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|---------------------------|--|
| <i>Abalmassov V. A.</i> | <i>On ultrafast switching of the ferroelectric polarization by midinfrared pulses</i> |
| <i>Akhmatkhanov A. R.</i> | <i>The influence of screening efficiency on domain kinetics in KTP single crystals</i> |
| <i>Akhmatkhanov A. R.</i> | <i>Study of Superfast domain walls in KTP single crystals</i> |
| <i>Akishige Y.</i> | <i>Phase diagram of (SrBa)₂Nb₂O₇</i> |
| <i>Andronikova D.A.</i> | <i>Phase transitions in PZT with low titanium concentration studied by X-ray scattering techniques</i> |
| <i>Balashova E.</i> | <i>Polarization switching in crystals and films of 2-methylbenzimidazole</i> |
| <i>Baryshnikov S. V.</i> | <i>Size effects in ferroelectric diisopropylammonium bromide</i> |
| <i>Birks E.</i> | <i>Some aspects of electrocaloric effect in ferroelectrics.</i> |

- Burkhanov A. *Dielectric and Acoustic Properties of Modified Barium Titanate Ceramics.*
- Burkovsky R.G. *Critical scattering and incommensurate phase transition in antiferroelectric PbZrO₃ under pressure*
- Bystrov T. *Polymer Ferroelectrics-Graphene based composites*
- Charnaya E. *NMR studies of confined and bulk KDP and DKDP*
- Chezganov D.S. *The ferroelectric domain structures induced by electron beam scanning in lithium niobate*
- Chuvakova M. *Formation of the dendritic domain structures in lithium niobate single crystals*
- Darinskii B.M. *Exchange mechanism of the properties of ferroics*
- Darinskii B.M. *Distribution of Polarization in Thin Films with Incommensurate Ferroelectric Phase*
- Eglite L. *Grain growth in doped NBT*
- Flerov I. *Caloric effects in multiferroic composites La_{0.7}Pb_{0.3}MnO₃ - PbTiO₃*
- Fujiwara K. *Synchrotron Mossbauer experiment for the observation polar charge ordering in iron system*
- Gorbatenko V.V. *The dynamic features of the coefficients research in the decomposition of the A₂BX₄ group crystals free energy on the polarization using harmonic analysis method*
- Gorev M. *Thermal expansion, polarization and phase diagram of the (1-x)PNN-xPT solid solutions*
- Gorshunov B. *Ferroelectricity in channel-like structures stuffed of water molecules*
- Ikeda N. *Electric polarization observation for RFe₂O₄*
- Itoh M. *Ferroelectricity in k-Al₂O₃-type Oxides*
- Ivliev M. P. *Ferroelectric phase states in (A,A')BO₃ perovskites with a multiminimum potential for B-cations*
- Iwata M. *Temperature field phase diagram in Pb(Zn_{1/3}Nb_{2/3})O₃-PbTiO₃*
- Kano J. *PN-junction and electric polarization*

- Khramtsov A.M. Research and development of high temperature multilayer piezo stack based on $\text{Na}_{0.5}\text{Bi}_{1.5}\text{Ti}_4\text{O}_{15}$ lead-free ceramic system produced by tape-casting slurry technology*
- Kimura T. Coupled multiple order parameters and their domain switching in multiferroics*
- Kiselev D.A. Preparation and ferroelectric properties of $\text{Ba}(x)\text{Sr}(1-x)\text{TiO}_3$ thin films by RF magnetron sputtering at different substrates*
- Kitanaka Y. Competing Structural Instabilities in Ferrielectric Perovskite Oxides with Octahedral Tilts*
- Kniazeva M.A. Lead hafnate structure and intermediate phases studies*
- Kojima S. Uniaxial Relaxor Ferroelectrics with Filled and Unfilled Tungsten Bronze Structure*
- Kokhanchik L. Domain writing in ferroelectric crystals by electron beam irradiation*
- Kopil Diphenylalanine Peptide Nanotubes with Different Chirality: Structure and Properties.*
- Koroleva E. Dielectric properties of NaNbO_3 glasses*
- Kostritskii S M. Pyroelectric response of x-cut LiNbO_3 electro-optic waveguide modulators*
- Kriek G. Role of disorder on luminescence in Er doped NBT*
- Krylova S. The Features of the structural phase transitions in Rb_2BReF_6 Crystals*
- Lityagin G.A. Intermediate high-temperature phase in PbZrO_3 antiferroelectric thin films.*
- Lugovaya M.A., Finite difference simulation and experimental study of ultrasonic waves propagation in inhomogeneous piezoelectrically active composites.*
- Magomadov R. The effect of the concentration of iron impurities on the thermal conductivity of lithium niobate*
- Maiwa H. Electrocaloric effects of Antiferroelectric $\text{Pb}(\text{Nb},\text{Sn},\text{Zr},\text{Ti})\text{O}_3$ ceramics*
- Makarev D.I. Influence of low-dimensional conductive components on the properties of digital piezo-materials of the "piezoceramic-polymer-metal" system.*
- Markovin P. A. A Crystal Optical Study of Short Range Polar Order in the Ferroelectric Phase: Doped Incipient Ferroelectrics.*
- Mashiyama H. Dielectric Susceptibility of Extended ANNNI Model*
- Matsuura M. Incommensurate quasi-elastic fluctuation of relaxor ferroelectrics*

- Mikhaleva E. *Effect of interaction of components on thermal properties of ferroelectric nanocomposites.*
- Mizuno H. *Photophysical properties in zinc phthalocyanine-based photovoltaic cells*
- Mori S. *Unusual Inhomogeneous Microstructures in Charge-Glass State of PbCrO₃*
- Mori T. *Boson peak and fracton in glass and single crystal*
- Moriwake H. *Theoretical calculations of ferroelectricity in thin-film HfO₂ using comprehensive soft-mode analysis*
- Moriyoshi C. *Off-center behavior of partially substituted ions in Barium Titanate*
- Mukhortov V.M. *Features of the ferroelectric state in nano-sized ferroelectric heterostructures on semiconductor and dielectric substrates*
- Nagata T. *Charge Order in YbFe₂O₄ Film*
- Nakajima N. *Dielectric response of BaTiO₃ thin film under AC electric field studied by time-resolved X-ray absorption spectroscopy*
- Ohwada K. *Dynamics of domain boundaries in BaTiO₃*
- Petrova E.I., *Anomalies in the complex parameters of the transparent ferroelectric piezoceramics PLZT in the vicinity of the diffused phase transition*
- Politova E. *Structure and ferroelectric properties of KNN- based perovskite ceramics*
- Politova E. *Phase formation, phase transitions, ferroelectric and relaxor properties of nonstoichiometric NBT ceramics*
- Ponomarev S. *Effect of powder grain size on the microstructural, dielectric, ferroelectric and piezoelectric properties of K_{0.5}Na_{0.5}NbO₃ ceramics*
- Pryakhina V.I. *Charged domain walls in lithium tantalate with spatially nonuniform stoichiometry deviation*
- Pugachev A. *Investigations of nonlinear-optical response and inelastic light scattering on local inhomogeneities in strontium barium niobate crystals of different chemical compositions.*
- Reznichenko A.N. *Lead-free porous and composite materials for ultrasonic transducers applications*
- Rybyanets A.N. *Piezoactive and ultrasonic reverse osmosis, ultra- and microfiltration membranes with improved selectivity and productivity*
- Sadykov S. *Structure and dielectric properties of B_{1-x}Sm_xFeO₃ (x = 0 - 0.20) ceramics*
- Sakai A. *Micro-Raman and AFM observations of domain in barium titanate*

- Shcherbinin S. A. *Finite element simulation and experimental study of ultrasonic standing wave fields inside cylindrical piezoelectric transducers*
- Shikanai F. *Multiferroic properties of $Tb_2(MoO_4)_3$*
- Shikhova T. *Polarization reversal in relaxor SBN single crystals and PLZT ceramics by tip of scanning probe microscope, chemical etching and electron beam scanning*
- Shnidshtein I. *The background specific heat of ferroelectrics*
- Shur V.Ya. *Forward domain growth in uniaxial ferroelectrics*
- Shur V.Ya. *Domain shape in uniaxial ferroelectrics. Micro- and nano-domain engineering.*
- Shvetsov I.A., *Experimental study of focused acoustic fields generated by HIFU piezocomposite transducers.*
- Shvetsova N.A., *Ultrasonic transducer designs for combinational treatment of biological tissues.*
- Stukova E.B. *Size effects in a ferroelectric NH_4IO_3*
- Takashima H. *Preparation of $SrTiO_3$ films with single crystal like behavior*
- Tanaka H. *A method determining the Born effective charge uniquely from X-ray diffraction data*
- Ter-Oganessian N. V. *Magnetoelectric States of Complex Oxides: Experiment, Crystallographic and Thermodynamic Description*
- Tomita Y. *A numerical simulation of structural phase transition by using a spin model*
- Tsuda K. *Nanometer-scale local structural study of paraelectric-ferroelectric phase transitions using convergent-beam electron diffraction*
- Tsukada S. *Relation between Fractal Inhomogeneity and In/Nb-Arrangement in $Pb(In_{1/2}Nb_{1/2})O_3$*
- Tumarkin A.V. *Structure and microwave properties of film solid solutions of barium-strontium titanates, zirconates and stannates.*
- Tumarkin A.V. *Ferroelectric tunable capacitors on silicon carbide for high power microwave applications.*
- Tumarkin A.V. *Multilayered structures for ferroelectric tunnel junction applications.*
- Udovenko S.A. *Investigations of the external electric field influence on phonon spectra in a PZT with a low Ti concentration.*
- Uesu Y. *Is polar state in twin boundaries of ferroelastic insulators ubiquitous?*

- Ugakov V. Investigation of piezoelectric and elastic properties of diphenylalanine microtubes after annealing and hydration*
- Uskova N. NMR studies of organic ferroelectric DIPAC*
- Vakhrushev S.B. Critical dynamics and formation of the intermediate ferroelectric phase in the Zr-rich $PZr_{1-x}Ti_xO_3$*
- Vlasov E.O. Second Harmonic Generation in PPLN waveguides poled by electron beam irradiation*
- Wada S. Solvothermal Synthesis of $BaTiO_3$ Nanocubes without Any Surfactants and Their Assembly for Dielectric Measurements*
- Yoneda Y. Local Structure Analysis of $PbTiO_3$ in high-temperature phase*
- Zelenovskiy P. Crystal structure and lattice dynamics of piezoelectric diphenylalanine nanotubes*