

PROGRAMME

08:30-08:50 **Registration**

08:50-09:00 **Opening**

09:00-11:00 **Session 1** **ADVANCED CHARACTERIZATION METHODS**

Chair Liliana Mitoseriu

Catalin Harnagea (Invited) Characterization of individual multifunctional nanoobjects with restricted geometry

Michael Koblischka (Invited) Applications of the electron backscatter diffraction (EBSD) technique to ceramic materials

Alan Hurd (Invited) Neutron, X-ray, and Proton Characterization of Complex Materials

Robert Freer Atomic-Resolution High-Angle Dark-Field Scanning Transmission Electron Microscopy (HAADF-STEM) and EELS Chemical Analysis of Functional Ceramics

Martin Kempa Microwave Characterization of Films and Substrates by Thin Dielectric Resonators

11:00-11:10 **Coffee break**

11:10-13:10 **Session 2** **FEROICS AND MULTIFEROICS**

Chair Robert Freer

Cathy Elissalde (Invited) Linking Architecture, Interface and Functionalities in Ferroelectric Multi-Materials

José F. Fernández Domain structure of (K,Na)NbO₃ by Confocal Raman Microscopy

Bartłomiej Andrzejewski Magnetic properties of BiFeO₃ micro-cubes synthesized by microwave agitation

Leo McGilly Ferroelectric Superdomains

Ewa Markiewicz BiFeO₃ single crystal as resistance switching member for application in microelectronic devices

Cristina Ciomaga Low field permittivity of ferroelectric-ferrite ceramic composites. Experiment and modeling

Karel Maca The influence of sintering atmosphere on the phase purity of bulk Eu(Ba, Sr)TiO₃ ceramics

13:10-14:10 **Lunch**

14:10-15:55 **Session 3** **THIN FILMS AND CONFINED STRUCTURES**

Chair: Paolo Nanni

Lucian Pintilie (Invited) Interfaces, structure and electrical measurements in ferroelectric thin films

Marina Tyunina (Invited) Epitaxial ferroelectric films: experiment questions theory

Paula Ferreira New strategies to prepare multiferroic thin films

Kaupo Kukli Atomic layer deposition of bismuth ferrites

Andreja Gajovic Raman spectroscopy study of phase transitions in BaTiO₃ nanorods

15:55-16:05 **Coffee break**

16:05-17:35 **Session 4** **FUNCTIONAL CERAMICS**

Chair Michael Koblischka

Miguel Algueró Electrical properties of ferroelectric BiMnO₃-PbTiO₃ under tailored synthesis and ceramic processing

Hana Uršič Properties of Pb(Sc_{0.5}Nb_{0.5})O₃ and 0.57Pb(Sc_{0.5}Nb_{0.5})O₃–0.43PbTiO₃ ceramics prepared by mechanochemical synthesis

Klara Castkova Synthesis and sintering of Ba_{0.7}Sr_{0.3}TiO₃ ceramic

Lavinia Curecheriu Ferroelectric-relaxor crossover in Ce-doped BaTiO₃ ceramics

Marco Deluca Raman spectroscopy of B-site modified barium titanate ceramics

Brygida Dzidek Technology of PLZT ceramics micro fibres for multiferroics composites

17:35-17:50 **Coffee break**

17:50-19:00 **POSTER SESSION**

Chair. Marina Tyunina

List of posters

- P1) *M.M. Vijatović Petrović, J.D. Bobić, J. Banys, B.D. Stojanović*
Electrical properties of La- and Mn- Doped Barium Titanate.
- P2) *L.P. Curecheriu, P. Postolache, M.T. Buscaglia, V. Buscaglia, A. Ianculescu, A. Stancu, L. Mitoseriu*
Size and shape – dependent magnetic properties in α -Fe₂O₃ monodispersive particles.
- P3) *L.P. Curecheriu, M.T. Buscaglia, V. Buscaglia, M. Alexe and L. Mitoseriu*
Magnetocapacitance coupling in Fe₂O₃-BaTiO₃ ceramic composites.
- P4) *Leontin Padurariu, Marin Alexe and Liliana Mitoseriu*
Simulation of cross-talk phenomena in ferroelectric nanocapacitor systems.
- P5) *Vasilica Pascariu, Liliana Mitoseriu and Paolo Nanni*
Preparation and characterization of PbTiO₃- epoxy resin composite films.
- P6) *A. Koblishka-Veneva, M. R. Koblishka, J. Schmauch, U. Hartmann*
Dependence of texture of magnetite thin films on different substrates and orientations.
- P7) *Michal Pilch, Krzysztof Szot, Krystian Roleder*
PFM studies of the PbZrO₃ + Ti single crystals.
- P8) *Lavinia Curecheriu, Leontin Padurariu, Liliana Mitoseriu, Maria Teresa Buscaglia, Vincenzo Buscaglia and Paolo Nanni*
Grain size and interface effects in nanostructured ferroelectric ceramics.
- P9) *Nikolina Pavlovic, Christopher De Dobbelaere, Jan D'Haen, An Hardy, Marlies K. Van Bael*
'Stability windows' for bismuth ferrite thin films.
- P10) *Christopher De Dobbelaere, D. Batuk, A. M. Abakumov, A. Hardy, M. K. Van Bael*
Aqueous solution-gel precursors towards potentially new ferromagnetic oxides.
- P11) *Šarūnas Bagdzevičius, Robertas Grigalaitis, Jūras Banys, Andris Sternberg, Karlis Bormanis*
Dielectric investigation of sodium potassium niobate ceramic doped 7% of antimony.
- P12) *J. Banys, T. Ramoška, J. Matukas, S. Pralgauskaitė, F.M.M. Alawneh, V.V. Shvartsman, D.C. Lupascu*
Investigation of dielectric and noise properties of the multiferroic composite BaTiO₃ with CoFe₂O₄.
- P13) *Šarūnas Svirskas, Maksim Ivanov, Šarūnas Bagdzevičius, Jūras Banys, Marija Duncce, Maija Antonova, Eriks Birks, Andris Sternberg*
DYNAMICS OF PHASE TRANSITION IN 0.4Na_{0.5}Bi_{0.5}TiO₃-(0.6-x)SrTiO₃-xPbTiO₃.
- P14) *R. Grigalaitis, J. Banys, V. Jankauskaitė, M.M. Vijatović Petrović, J.D. Bobić, B.D. Stojanović*
Broadband dielectric studies of Nb- and Mn- Doped BaTiO₃ ceramics.
- P15) *M.Połomska, B.Hilczer, E.Markiewicz, B.Andrzejewski, I.Szafraniak-Wiza, A.Pietraszko*
XRD, dielectric and magnetic studies of Cd₂Nb₂O₇ ceramics obtained from mechano-synthesized nanopowders.

- P16) *Lucjan Kozielski, Frank Clemens*
Technology impact on phase transition of PLZT ceramics micro fibres for multiferroics composites.
- P17) *Evagelia G. Moshopoulou, Katharine. Page, Catherine. Elissalde, U-Chan Chung, Stephan Mornet and Mario Maglione*
Total neutron scattering study of the crystallization of fresnoite in nanostructured BaTiO₃/SiO₂ composite ceramics.
- P18) *R.Jiménez, I. Bretos, A. Pérez- Rivero, C. Gutierrez and M.L. Calzada*
Ferroelectric switching characterization of lossy and leaky thin films.
- P19) *Carlo Baldisserri, Carmen Galassi*
Integration of Niobium-Doped Lead Zirconate Titanate on Bare Silicon Wafer by Electrophoretic Deposition.