

Poster Session

P-01 *Unconventional scaling and significant enhancement of the spin Seebeck effect in multilayers.*

A. Anadón, P. Jiménez-Cavero, R. Ramos, I. Lucas, P. Strichovanec, P.A. Algarabel, L. Morellón, M.R. Ibarra and M.H. Aguirre.

P-02 *Temperature dependence of oxide nanoparticles growth in ODS steel manufacturing process.*

Arturs Cintins, Andris Anspoks, Juris Purāns, Alexei Kuzmin, Pavel Vladimirov, Jan Hoffman, Nerea Ordas, David Pazos

P-03 *Exotic topological states in hybrid transition metal oxides.*

Wojciech Brzezicki.

P-04 *Photoresponse dynamics and photoconductivity mapping in LaAlO₃/SrTiO₃ interfaces.*

Yu Chen, Blai Casals, and Gervasi Herranz

P-05 *Exploring the diffracted Kerr effect on magneto-plasmonic systems.*

R. Cichelero, M. Kataja and G. Herranz

P-06 *Comparative study of peculiar microstructures and the functional properties of BaTiO₃-ferrite composites obtained by SPS method.*

Cristina E. Ciomaga, Mirela Airimioaei, Lavinia P. Curecheriu, Leontin Padurariu, Nicoleta Lupu and Liliana Mitoseriu

P-07 *Preparation, characterization and dielectric properties of PVDF – based composites.*

Lavinia Curecheriu, Roxana Stanculescu, Chiara Costa, Maria Teresa Buscaglia, Giovanna Canu, Elisabetta Brunengo, Lucia Conzatti, Ilaria Schizzi, Leontin Padurariu, Liliana Mitoseriu, Paola Stagnaro, Vincenzo Buscaglia.

P-08 *Interface-phase degradation as the origin of ferroelectric fatigue in epitaxial PbZr_{0.52}Ti_{0.48}O₃ thin films.*

Minh Thanh Do, Evert Houwman, Minh Duc Nguyen, Frans Blom, Gertjan Koster, Guus Rijnders

P-09 *Local Mapping of Unit Cell Distortions in BaTiO₃/SrTiO₃ Superlattices by Scanning Transmission Electron Microscopy.*

Saúl Estandía, Jaume Gázquez, Florencio Sánchez

P-10 *Electron microscopy study of octahedral tilt/hybridization/physical properties relationships in nickelate superlattices.*

N. Gauquelin, Z.L. Liao, K. Müller-Caspary, Ivan Lobato, Mark Huijben, Sandra Van Aert, Gertjan Koster, Guus Rijnders and Johan Verbeeck

P-11 *Adsorption of functionalized Wells-Dawson-type polyoxometalates on HOPG and Au(111).*

Maria Glöß, Marco Moors, Ricarda Pütt, Kirill Monakhov

P-12 *Ionic and electronic conductivity in confined heterostructures.*

Simone Sanna, Nini Pryds.

P-13 *Disorder-sensitive pump-probe measurements on Nd_{1.83}Ce_{0.17}CuO_{4±δ} films*

A. Guarino, A. Avella, C. Bonavolontà, M. Valentino, C. de Lisio, A. Leo, G. Grimaldi, S. Pace, G. Pepe, A. Nigro

P-14 *Electrolysis of water at atomically tailored epitaxial cobaltite surfaces*

Felix Gunkel, Moritz Weber, Clemens Hausner, David N. Müller, Daniel Bick, Theodor Schneller, Rainer Waser, Ilia Valov, and Regina Dittmann

P-15 *Nonlinear optical probing of ultrafast dynamics of the two-dimensional electron gas at the LaAlO₃/SrTiO₃ interface*

J.R. Hortensius, D. Afanasiev, A.M.R.V.L. Monteiro, A.D. Caviglia

P-16 *X-ray absorption spectroscopy for structural analysis of CuMoO₄*

Inga Jonane, Arturs Cintins, Andris Anspoks, Alexei Kuzmin

P-17 *Si-based magnetophotonic crystal with large Faraday rotation*

Soheila Kharratian, Mehmet Cengiz Onbaşlı, Hakan Ürey

- P-18** *Plasmon-induced demagnetization and magnetic switching in nickel nanoparticle arrays*
Mikko Kataja, Francisco Freire-Fernandez, Jorn P. Witteveen, Tommi Hakala, Päivi Törmä and Sebastiaan van Dijken
- P-19** *Oxide tunnel junctions as electrically controllable synapse devices for neuromorphic computing.*
Hongwei Tan, Qihang Qin, Sayani Majumdar, Sebastiaan van Dijken
- P-20** *NFFA-Europe: the widest range of tools for research at the nanoscale*
E. Narducci and the NFFA-Europe collaboration
- P-21** *Spin-Orbital Polarons in the Photoemission Spectra of Doped Mott Insulators with Orbital Degeneracy*
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- P-22** *Modelling of cross-talk phenomena in thin film ferroelectric nanocapacitor arrays by Finite Element Method combined with Monte Carlo calculations*
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- P-23** *Lateral inhomogeneity of 2DEG formation at LaAlO₃/SrTiO₃ heterointerfaces characterized by scanning probe techniques*
Marc-André Rose, Jacqueline Börgers, Felix Hensling, Christoph Bäumer, Regina Dittmann, Felix Gunkel
- P-24** *Strain relaxation mechanisms in epitaxial ultra thick LAO/STO films*
A.Sambri, M.Scuderi, A. Guarino, R. Di Capua, E. Di Gennaro, U. Scotti di Uccio, G. Nicotra, F. Miletto Granozio
- P-25** *Epitaxial growth of ferroelectric oxides on GaN/Si (111)*
L. Bégon-Lours, L. Li, Z.L. Liao, N. Gauquelin, Minh D. Nguyen, E. P. Houwman, J. Verbeeck, G. Koster & G. Rijnders
- P-26** *Electron transport and microwave dynamics of hybrid heterostructures with oxide superconductor/magnetic interfaces*
A.V. Shadrin, K.Y. Constantinian, Yu.V. Kislinkii, A.M. Petrzhik, G.A. Ovsyannikov
- P-27** *First-principles modeling of SrTiO₃/Si interfaces*
Wen-Yi Tong, Eric Bousquet, and Philippe Ghosez
- P-28** *Berry Phase Engineering At Oxide interfaces*
D.J. Groenendijk, T.C. van Thiel, C. Autieri, N. Gauquelin, J. Verbeeck, S. Picozzi and A.D. Caviglia
- P-29** *Porous barium titanate as a potential hydrogen and humidity sensor*
M.M. Vijatovic Petrovic, A. Radojkovic, J.D. Bobic, A. Dzunuzovic, J. Banys, B.D. Stojanovic
- P-30** *Improving TbMnO₃ magnetoelectric effect by magnetic tailoring with Fe³⁺*
R. Vilarinho, M. Mihalik jr., M. Zentkova, M. Mihalik, M. Pascal, D. Khalyavin, F. Orlandi, A. Almeida and J. Agostinho Moreira
- P-31** *Photoferroelectric solid solutions: the Ba(Sn,Ti)O₃ case*
H.Volkova, P.Nukala, P.Gemeiner, J.Guillot, P.Lenoble, N.Chauvin, F.Karolak, C.Bogicevic, B.Dkhil, I.C. Infante
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Jun Wang, Gertjan Koster, Guus Rijnders
- P-33** *Growth-control of 2DEG properties in crystalline and amorphous LaAlO₃/SrTiO₃ bilayers*
J. M. Börgers, F. V. E. Hensling, M.A. Rose, C. Bäumer, M. Andrä, R.Dittmann, F. Gunkel
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Y. Z. Chen, M. Döbeli, E. Pomjakushina, Y. L. Gan, N. Pryds, and T. Lippert
- P-36** *Preparation and study of B₄Ti₃O₁₂ films morphology for bolometric applications*
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- Daniel Diaz-Fernandez, Matjaž Spreitzer, Tjaša Parkelj, Danilo Suvorov
P-38 *Development of sustainable materials for application in flexible electronic and energy harvesting devices*
Paula Ferreira, Paula Vilarinho
- P-39** *A novel in-situ piezoelectricity tuning of $Pb(Zr_{0.58}Ti_{0.42})O_3$ films on PMN-PT substrates.*
Sizhao Huang, Evert Houwman, Gertjan Koster, Minh Duc Nguyen, Frans Blom, Guus Rijnders
- P-40** *Lead based ferroelectric thin films deposited by magnetron sputtering*
A. Iljinas, V. Stankus, L. Marcinauskas, M. Ivanov, J. Banys
- P-41** *Deposition of Low Cost Metal Oxides for Photovoltaic Applications*
Hamide Kavak, Teoman Özdal, Mehmet Selim Aslan
- P-42** *Tuning lattice strain and ferroelectric polarization of epitaxial $BaTiO_3$ films on Si(001)*
J. Lyu, I. Fina, R. Solanas, J. Fontcuberta, and F. Sánchez
- P-43** *Addressing boundary problems in solar cells by introducing ferroelectric modification to the nano-structured layer of charge transfer oxide material*
Vilko Mandić, Ivana Panžić, Milivoj Plodinec, Krunoslav Juraić, Katarina Mužina
- P-44** *Influence of deposition temperature on ferroelectric properties of bismuth ferrate and bismuth titanate films*
L. Marcinauskas, A. Iljinas, V. Stankus
- P-45** *Texturing of Potassium Sodium Niobate Based Oxides using Sodium Niobate Oxide Single Crystal Templates*
Ebru Mensur-Alkoy, Haluk Er, Ayse Berksoy-Yavuz.
- P-46** *Epitaxial Oxides on Flexible Mica Substrates*
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- P-47** *Atomic structure of Sr-buffered Si(001) grown by Pulsed Laser Deposition*
Tjaša Parkelj, Matjaž Spreitzer, Daniel Diaz-Fernandez, Erik Zupanič, Danilo Suvorov
- P-48** *Photocatalytic properties of TiO_2 thin films doped with noble metals (Ag, Au, Pd and Pt).*
Tjaša Parkelj, Matjaž Spreitzer, Daniel Diaz-Fernandez, Erik Zupanič, Danilo Suvorov
- P-49** *Investigation of $(K_{0.5}Na_{0.5})_{0.99}Sr_{0.01}NbO_3$ thin films by piezo-response force microscopy*
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- P-50** *Multi Process Thin Film Deposition and complex Sample Preparation Cycle under protected Atmosphere - a flexible Solution for Materials in Battery Research*
Wolfgang Stein, Patrick Schichtel
- P-51** *Ferroelectric/transition metal dichalcogenides hybrid structures for resistive random access memories*
J. P. B. Silva, C. Almeida Marques, J. Agostinho Moreira, O. Conde
- P-52** *On Electrochromism of Nb_2O_5 anodic oxide films under Pulse Electrochemical Polarization*
Leonid Skatkov
- P-53** *Ultrafast spin and charge carrier dynamics in the photo-doped spin-orbit Mott insulator Sr_2IrO_4*
D. Afanasiev, A. Gatilova, D. J. Groenendijk, B. A. Ivanov, M. Gibert, S. Gariglio, Th. Rasing, A. D. Caviglia, and A. V. Kimel
- P-54** *Dominant switchable magnetoresistance in half-metallic $La_{0.7}Sr_{0.3}MnO_3$ epitaxial films at room temperature*
Fernando Ajejas, Davide Maccariello, José Manuel Díez Toledano, Ruben Guerrero, L. Méchin, S. Flament, J. Santamaria, Julio Camarero, Rodolfo Miranda, and Paolo Perna
- P-55** *Structure - Property Relationships in Lead-free Barium Calcium Titanate - Barium Zirconate Titanate (BCT-BZT) based Piezoceramic Oxides*
Sedat Alkoy, Önder Tuna, M. Yunus Kaya, Ömer Çakmak
- P-56** *Probabilistic distribution of switching electric field in $BaTiO_3$ devices.*
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- P-57** *The origin of mixed ionic-electronic conduction in grain boundary dominated strontium-doped lanthanum manganite thin films*

- F. Chiabrera, L. López-Conesa, I. Garbayo, A. Morata, A. Ruiz-Caridad, S. Estradé, F. Peiró, A. Tarancón
- P-58** *Thin films for transparent thermoelectric modules, by magnetron sputtering*
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- P-59** *A simple and beneficial design for WO₃ hybrids-based flexible electrochromic devices*
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- P-60** *Bi₂V_{0.9}Cu_{0.1}O_{5.35} thin films as alternative electrolytes for low temperature μ SOFC*
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- P-61** *Quantitative analysis of the longitudinal spin Seebeck Effect*
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- P-62** *Sensing characteristics of CuO and CuO:Au thin films deposited by Pulsed Laser Deposition method onto pyrex tubes*
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- P-63** *Surface Acoustic Waves of Strained K_{0.7}Na_{0.3}NbO₃ Thin Films*
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- P-65** *Mechanical characterization of (La,Sr)MnO₃ microbridges across their phase transition for all-oxides MEMS sensors*
F. Remaggi, L. Pellegrino, N. Manca, C. Bernini and D. Marré
- P-66** *Porosity-induced enlargement of the electromechanical response in ferroelectric thin films*
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- P-69** *Functional Thin Metal Oxide Coatings by Plasma Deposition Techniques*
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- P-70** *Plasma Modification of Different Metal Oxide for Flexible Electrochromic Applications*
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- P-71** *Ferroelectric and non-ferroelectric contributions to electroresistance in BaTiO₃ capacitors*
M. Qian, I. Fina, F. Sánchez, J. Fontcuberta
- P-72** *Photocatalytic properties of TiO₂ thin films doped with noble metals (Ag, Au, Pd and Pt)*
G. Petropoulou, Cherif Moslah, M. Kandyla, Muhammad Monirul Islam, G. Petropoulou, Mohamed Ksibi and George A. Mousdis
- P-73** *Berry Phase Engineering at Oxide Interfaces*
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