# POSTER PROGRAM

## SP- Synthesis, Processing and Sintering of Electroceramics

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| Phase evolution during mechanochemical synthesis of the PMN powders<br>**Zorica Brankovic**<br>*Instituto de Quimica, UNESP, Araraquara, SP, Brazil* | SP-011-P |
| Effect of $PbTiO_3$ addition on $Pb(Mg_{1/3}Nb_{2/3})O_3$ thin film obtained from citrate solution<br>**Priscila Delegu Spagnol**<br>*Universidade Estadual Paulista Julio de Mesquita Filho-UNESP, Araraquara, Sao Paulo, Brazil* | SP-014-P |
| Low temperature synthesis of PMN-PT composite thick films for electromechanical applications<br>**Aiying Wu**<br>*Department of Ceramics and Glass Engineering, Universiry of Aveiro, CICECO, Aveiro, Portugal* | SP-015-P |
| Effect of boron oxide addition on sintering zirconia-yttria ceramics<br>**Daniel Zanetti de Florio**<br>*Energy and Nuclear Research Institute, Multidisciplinary Center for the Development of Ceramic Materials, S. Paulo, SP, Brazil* | SP-016-P |
| Low temperature formation of $SnO_2$ thin films by a spray pyrolysis deposition method<br>**Shoji Kaneko**<br>*Department of Materials Science and Technology, Shizuoka University, Johoku, Hamamatsu, Japan* | SP-017-P |
| Crystallisation of $KTiOPO_4$ from potassium titanium phosphate glasses containing $B_2O_3$ and $Si_2$<br>**Antonio Aronne**<br>*Department of Materials and Production Engineering, University of Naples Federico II, Naples, Italy* | SP-018-P |
| Pyroelectric composites and ceramics based on $LaBGeO_5$ stillwellite<br>**Pasquale Pernice**<br>*Department of Materials and Production Engineering, University of Naples Federico II, Naples, Italy* | SP-020-P |
| New ferroelectric materials on the basis of $PbSc_{1/2}Nb_{1/2}O_3$ –$PbLu_{1/2}Nb_{1/2}O_3$ solid solutions<br>**Karlis Bormanis**<br>*Institute of Solid State Physics, University of Latvia, Riga, Latvia* | SP-021-P |
| Synthesis and characterization of (La, Sr)(Ga, Mg)$O_3$-Ag cermets<br>**Pradyot Datta**<br>*Max-Planck-Institute for Metallforschung, PML, Stuttgart, Germany* | SP-022-P |
| $SnO_2$-based materials with tailored electrical resistivity<br>**Gualtiero Fabbri**<br>*CNR-ISTEC, Institute of Science and Technology for Ceramics, Faenza, Italy* | SP-023-P |
| Combustion synthesis and processing of lanthanum modified lead titanate ferroelectric ceramics<br>**Ducinei Garcia**<br>*Physics Department, Federal University of Sao Carlos, Sao Carlos, SP, Brasil* | SP-025-P |
| Microstructure and optical transmittance of tungsten doped PLZT as a function of the hot pressing conditions<br>**Ducinei Garcia**<br>*Physics Department, Federal University of Sao Carlos, Sao Carlos, SP, Brasil* | SP-026-P |
| BST powder with sol-gel process in tape casting and firing<br>**Tao Hu**<br>*Microelectronics and Material Physics Laboratories, Research Group of Infotech Oulu, University of Oulu, Linnanmaa, Oulu, Finland* | SP-027-P |

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| Synthesis and characterization of compositionally modified PZT by wet chemical preparation from aqueous solution<br>**Byeong Woo Lee**<br>*Dept. of Materials Engineering, Korea Maritime University, Pusan, Korea* | SP-029-P |
| Technology and properties of ceramic ferroelectrics of $A_{m-1}Bi_2B_mO_{3m+3}$- type with $m$ =1.5<br>**Agata Lisinska-Czekaj**<br>*Institute of Physics, Rostov State University, Rostov-on-Don, Russia* | SP-030-P |
| Zirconia-yttria (8% mol) powders hydrothermally synthesized from different $Y_2O_3$-based precursors<br>**Giuseppe Mascolo**<br>*DIMSAT – Università di Cassino, Cassino (FR), Italy* | SP-031-P |
| Preparation and evaluation of $LaNiOA_3$ thin film with chemical solution deposition<br>**Hidetoshi Miyazaki**<br>*Satellite venture business laboratory, Shizuoka University, Hamamatsu, Shizuoka, Japan* | SP-032-P |
| Optimisation design for a laboratory scale process preparing for the scale up: pyroelectric ceramic tape casting as a case study<br>**Letizia Mortara**<br>*School of Industrial and Manufacturing Science, Cranfield University, Cranfield, Bedfordshire, United Kingdom* | SP-033-P |
| Processing and electrical properties of the $YNi_{0.33}$ $Mn_{0.67}O_3$ perovskite prepared by a polymerized method<br>**Carlos Moure**<br>*Instituto de Cerámica y Vidrio-CSIC, Madrid, Spain* | SP-034-P |
| Effect of the calcination temperature on the physical properties of $Ce_{0.8}Gd_{0.2}O_{1.9}$ prepared by the cation complexation technique<br>**E. N. S. Muccillo**<br>*Energy and Nuclear Research Institute, Multidisciplinary Center for the Development of Ceramic Materials, S. Paulo, SP, Brazil* | SP-036-P |
| $PbZr_{0.52}Ti_{0.4\,8}O_3$ thin films obtained using a modified methoxyethanol method<br>**Javier Perez**<br>*Department of Ceramic and Glass Engineering, University of Aveiro, CICECO, Aveiro, Portugal* | SP-037-P |
| Pyroelectric texture based on stillwellite-like $LaBGeO_5$, produced by crystallisation of extruded glass<br>**Vladimir N. Sigaev**<br>*Mendeleev University of Chemical Technology of Russia, Moscow, Russia* | SP-038-P |
| Aqueous tape casting of Yttrium Stabilised Zirconium oxide<br>**Frans Snijkers**<br>*Materials Technology Vito, Boeretang, Belgium* | SP-039-P |
| Structure and microstructure of $SrTiO_3$ doped with Mg<br>**A. Tkach**<br>*Department of Ceramics and Glass Engineering, Universiry of Aveiro, CICECO, Aveiro, Portugal* | SP-040-P |
| Study of the solid solution of $LaAlO_3$ with $Sr^{2+}$ and $Eu^{3+}$ prepared by chemical coprecipitation<br>**Maria Elena Villafuerte**<br>*Instituto de Investigaciones en Materiales, UNAM, Mexico, D.F.* | SP-041-P |
| Acid effect on the preparation of PZT fibers by sol-gel<br>**Mei Zhang**<br>*Department of Ceramics and Glass Engineering, University of Aveiro, CICECO, Aveiro, Portugal* | SP-043-P |
| Correlations between processing parameters and microstructure for YSZ films produced by plasma spray technique<br>**Romualdas Kezelis**<br>*Plasma Processing Laboratory, Lithuanian Energy Institute, Lithuania* | SP-044-P |
| Mechanisms of $Er^{3+}$ incorporation into $BaTiO_3$<br>**Maria Teresa Buscaglia**<br>*Institute for Energetics and Intephases, National Research Council, Genoa, Italy* | SP-045-P |

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| The substrate effects of undoped and Al doped ZnO thin films prepared by PLD technique<br>**Si-Wong Jang**<br>*Research Center for Electronic Ceramics, Department of Computer Science & Statistics, DongEui University, Pusan, Korea* | SP-047-P |
| Electric and dielectric properties of $Bi_4Ti_3O_{12}$ ceramics sintered by $CO_2$ laser heating<br>**Zelia Macedo**<br>*Universidade Federal de Sergipe, Jdim Rosa Elze - Sao Cristovao - SE, Brazil* | SP-048-P |
| The structure properties correlation of Ce-doped $SnO_2$ materials obtained by different synthesis routes<br>**Susana Mihaiu**<br>*Romanian Academy, Bucharest, Romania* | SP-049-P |
| Thermal decomposition of compounds from the $Bi_2O_3$ - $TeO_2$ system prepared in an oxygen atmosphere<br>**Marko Udovic**<br>*Jozef Stefan Institute, Ljubljana, Slovenia* | SP-050-P |
| Microwave sintering of $(Bi_{0.75}Ca_{1/2}Y_{1.05})(V_{0.6}\ Fe_{4.4})O_{12}$ microwave magnetic marnet materials<br>**Chien-Yi Tsay**<br>*Department of Materials Science and Engineering, National Tsing-Hua University, Hsin-Chu, Taiwan, R.O.C.* | SP-051-P |
| Fabrication of $SrTiO_3$ based layered films by chemical solution deposition<br>**Kengo Ueno**<br>*Dept. of Applied Chem., Graduate School of Engineering, Nagoya University, Nagoya, Japan* | SP-053-P |
| Effect of chemical composition and sintering temperature on microstructure and dielectric property of $Ba_{1-x}Sr_xTiO_3$<br>**Jae-Ho Jeon**<br>*Institute of Materials Science and Technology, Department of Materials Technology, Korea Institute of Machinery and Materials, Changwon, Korea* | SP-054-P |
| Microstructure and properties of Mg-Zn ferrite as a result of sintering temperature<br>**Zbigniew Pedzich**<br>*Faculty of Materials Science and Ceramics, University of Mining and Metallurgy, Cracow, Poland* | SP-057-P |
| Semiconducting $SnO_2$ dense ceramics obtained by a novel technique<br>**Oana Scarlat**<br>*Institute of Physical Chemistry "I. G. Murgulescu", Romanian Academy, Bucharest, Romania* | SP-058-P |
| Oxide ferroelectric ceramic films deposited from air flow<br>**Eugene Stytsenko**<br>*Industrial Research Limited, Gracefield, Lower Hutt, New Zealand* | SP-059-P |
| Effect of BaO-CaO-$SiO_2$ sintering aids on the electrical properties of base-metal-electroded capacitor materials<br>**Wei-Chun Yang**<br>*Department of Materials Science and Engineering, National Tsing-Hua University, Hsin-Chu, Taiwan, R.O.C.* | SP-061-P |
| MnZn ferrites processed using an aqueous powder coating approach<br>**William J. Walker**<br>*NYS Center for Advanced Ceramic Technology, Alfred University, NY, USA* | SP-062-P |
| Characterization of barium titanate powder which was pressed heavily<br>**Hiroyuki Ikawa**<br>*Department of Applied Chemistry, Kanagawa Institue of Technology, Atugi-shi, Japan* | SP-063-P |
| **CH- Advances in Characterization Techniques** | |
| A study of electronic states of $Ni_xMn_{3-x}O_{4+d}$ thin films using scanning tunneling microscopy and current imaging tunneling spectroscopy<br>**A. Basu**<br>*Department of Physics, University of Durham, Durham, United Kingdom* | CH-008-P |

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| Conductive mode imaging of thermistor grain boundaries<br>**Colin Leach**<br>*Manchester Materials Science Centre, University of Manchester and UMIST, Manchester, United Kingdom* | CH-009-P |
| Elastic properties of single crystal $LiIO_3$ by Brillouin scattering spectroscopy<br>**Byeong-hyeon Min**<br>*Department of Mechanical Engineering, Research Center for Electronic Ceramics, Dongeui University, Busan, Korea* | CH-010-P |
| Analysis of the intrinsic lattice deformation and 180-domain switching in PZT ceramics during bipolar electric cycling<br>**Jan-Thorsten Reszat**<br>*Institut für Keramik im Maschinenbau, Universität Karlsruhe, Karlsruhe, Germany* | CH-011-P |
| Magnetic study of the aluminium iron oxide $Fe_{1+x}Al_{1-x}O_3$ compounds<br>**Maria Elena Villafuerte-Castrejon**<br>*Instituto de Investigaciones en Materiales, Universidad Nacional Autonoma de Mexico A.P., Mexico* | CH-012-P |
| Determination of crystal axis in cubic BSO crystal by Brillouin scattering spectroscopy<br>**Yun Sik Yu**<br>*Research Center for Electronic Ceramics, DongEui University, Physics Department, Korea* | CH-013-P |
| Observation of polariton dispersion in LNO and LTO crystals by near-forward Raman scattering<br>**Yun Sik Yu**<br>*Research Center for Electronic Ceramics, Physics Department, DongEui University, Korea* | CH-014-P |
| XPS analysis of surface layer of sol-gel derived lead zirconate titanate thin films<br>**Osamu Sugiyama**<br>*Fuji Industrial Research Institute of Shizuoka Prefecture Obuchi, Fiji, Japan* | CH-015-P |
| ATR/FTIR spectroscopic study of the ceramic effect in novel ionoconductor gels for biomedical application in space<br>**Paola Romagnoli**<br>*Dipartimento di Scienze e Tecnologie Chimiche, Università di Roma Tor Vergata, Rome* | CH-017-P |
| Raman investigation on PZN-PT poled crystals<br>**Alejandro Pedro Ayala**<br>*Universidade Federal do Ceara, Fortaleza CE, Brazil* | CH-001-O |
| **NA- Nanocrystalline Materials** | |
| Growth of epitaxial nano-scale $CeO_2$ films on sapphire substrates by sol-gel dip-coating<br>**Isabel Van Driessche**<br>*Dep. of Inorganic and Physical Chemistry, Ghent University, Gent, Belgium* | NA-001-P |
| Role of space charge in partial electronic and ionic conductions in nanocrystalline ceria<br>**Sangtae Kim**<br>*Max-Planck-Institut für Festkoerperforschung, Stuttgart, Germany* | NA-002-P |
| Preparation of anatase ($TiO_2$) nanoceramics by the hot-pressing technique<br>**Alicia Weibel**<br>*Laboratoire MADIREL (Materiaux Divises, Revtements, Electroceramiques), Université de Provence-CNRS, Marseille, France* | NA-003-P |
| MnZn ferrites prepared by a microemulsion technique<br>**Aljosa Kosak**<br>*Jozef Stefan Institute, Ljubljana, Slovenia* | NA-004-P |
| Nature of structural changes in nanocrystalline ZnO powders under linear heating conditions<br>**Lidija Mancic**<br>*Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Yugoslavia* | NA-005-P |
| Combustion synthesis and influence of precursor packing on sintering properties of LCC nanopowders<br>**Marjan Marinsek**<br>*Faculty of Chemistry and Chemical Technology, Ljubljana, Slovenia* | NA-006-P |

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| Hydrothermal synthesis of polar ceramics<br>**Roxana Mioara Piticescu**<br>*Institute for Non-Ferrous and Rare Metals, Ilfov, Romania* | NA-007-P |
| Synthesis and sintering behaviour of hydrothermally synthesised YTZP nanopowders for ion-conduction applications<br>**Robert Radu Piticescu**<br>*Institute for Non-Ferrous And Rare Metals, Ilfov, Romania* | NA-008-P |
| Nanopowder in $Ba_{1-x}Sr_xTiO_3$ system: structural and dielectric characterizations<br>**Brahim Dkhil**<br>*Laboratoire Structures, Proprietes et Modelisation des Solides, Ecole Centrale Paris, Chatenay-Malabry, Paris* | NA-011-P |
| Characterisation of PZT nanopowder suspensions<br>**Silvia Marson**<br>*Nanotechnology Group, School of Industrial and Manufacturing Science, Cranfield University, Cranfield, Bedfordshire, United Kingdom* | NA-012-P |
| Nanosize $Ni_{0.5}Zn_{0.5}Fe_2O_4$,: synthesis, sintering and magnetic properties<br>**Ruth H. G. A. Kiminami**<br>*Departamento de Engenharia de Materiais, Universidade Federal de Sao Carlos, Sao Carlos, SP, Brazil* | NA-013-P |
| Influence of rare earth doping concentration on crystallite size and surface area of nanostructured $SnO_2$ powders<br>**Ingrid Tavora Weber**<br>*Universidade Federal de Sao Carlos, Sao Carlos, SP, Brazil* | NA-014-P |
| Microstructural investigation of the PZT films prepared from the suspension of nanocrystalline powders<br>**Zorica Brankovic**<br>*UNESP, Instituto de Quimica, Araraquara, SP, Brazil* | NA-016-P |
| **NT- New Trends for Electroceramics** | |
| Fabrication of novel type solid electrolyte membrane reactors for exhaust gas purification<br>**Hae Jin Hwang**<br>*Synergy Materials Research Center, National Institute of Advanced Industrial Science and Technology, Nagoya, Japan* | NT-008-P |
| Electrochemical activity of methylene blue in mesostructured surfactant-containing silica of MCM-41 type<br>**Silvia Bodoardo**<br>*Department of Material Science and Chemical Engineering, Politecnico di Torino, Torino, Italy* | NT-009-P |
| SAXS study of potassium-doped siloxane-poly(oxyethylene) ormolytes<br>**Karim Dahmouche**<br>*UNESP, Instituto de Quimica, Araraquara, SP, Brazil* | NT-010-P |
| Sol-gel synthesis of polymer-YSZ hybrid materials for SOFC technology<br>**Petra Egger**<br>*Dipartimento di Ingegneria dei Materiali, Università di Trento, Trento, Italy* | NT-011-P |
| Mesoporous silica thin films for humidity sensing applications<br>**Johnny Mio Bertolo**<br>*PSM-CNR, Area di Ricerca di Roma-Tor Vergata, Roma, Italy* | NT-012-P |
| Intense visible light emission from three-dimensional periodical arrays of Si clusters<br>**Seiichi Sato**<br>*Department of Material Science, Himeji Institute of Technology, Hyogo, Japan* | NT-013-P |
| Heat treatment effect on formation of mesoporous silica<br>**Kyu-Sung Park**<br>*ECRL, Dept. of MS&E, KAIST Yusong-gu, Taejon, South Korea* | NT-014-P |
| **GB- Grain Boundary Engineering** | |
| Microstructure and electrical relationships in PZT-BIT composites<br>**Teresa Jardiel**<br>*Electroceramics Department, Instituto de Ceramica y Vidrio - CSIC, Madrid, Spain* | GB-015-P |

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| Novel piezoactive composites “single crystal-ceramic” based on lead titanate<br>**Vitali Yu. Topolov**<br>*Department of Physics, Rostov State University, Rostov, Russia* | GB-016-P |
| Analysis of impedance spectra of polycrystalline materials: from microcrystals to nanocrystals<br>**Renaud Bouchet**<br>*Laboratoire MADIREL (Materiaux Divises Revtements, Electroceramiques),Université de Provence-CNRS, Centre St Charles, Marseille, France* | GB-017- P |
| Temperature dependence of chemically induced interface migration in $Zr_{0.8}Sn_{0.2}TiO_4$ ceramics and its microwave dielectric characteristics<br>**Sang-Hee Cho**<br>*Department of Inorganic Materials Engineering, Kyungpook National University, Daegu, Korea* | GB-018-P |
| **VA- Varistors, PTCR and NTCR** | |
| Impedance spectroscopy of bulk and thick film NTC thermistor ceramics<br>**Rainer Schmidt**<br>*Department of Physics, University of Durham, Durham, United Kingdom* | VA-007-P |
| Variable-range hopping conduction in NTC thermistors<br>**Rainer Schmidt**<br>*Department of Physics, University of Durham, Durham, United Kingdom* | VA-008-P |
| Thick film sandwich varistors based on a mechanically activated ZnO powders<br>**Verica Pejovic**<br>*"IRITEL", Belgrade, Yugoslavia* | VA-009-P |
| New NTC electroceramics based on transition-metal manganites in thick-film performance<br>**Julian Plewa**<br>*Fachhochschule Münster University of Applied Sciences, Steinfurt, Germany* | VA-010-P |
| Peculiarities of manganese ion distribution and their effect on the properties of PTCR ceramics<br>**Anatolii Belous**<br>*Institute of General & Inorganic Chemistry, Kyiv, Ukraine* | VA-011-P |
| Relevant parameters for sintering $ZnO\text{-}Bi_2O_3$ based varistors<br>**Miguel Angel De la Rubia**<br>*Electroceramics Department, Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Cientificas, Madrid, Spain* | VA-013-P |
| Dense fine-grained doped-ZnO varistors with improved nonlinearity properties by thermal processing optimization<br>**Pedro Duran**<br>*Electroceramics Department Instituto de Cerámica y Vidrio, CSIS, Madrid, Spain* | VA-014-P |
| New tin dioxides based varistor ceramics with high nonlinearity coefficient<br>**Alexander Glot**<br>*Dep. of Radioelectronics, Dniepropetrovsk National University, Dniepropetrovsk, Ukraine* | VA-015-P |
| Low frequency current oscillation in $In_2O_3\text{-}Bi_2O_3$ non-ohmic ceramics<br>**Alexander Glot**<br>*Dep. of Radioelectronics, Dniepropetrovsk National University, Dniepropetrovsk,Ukraine* | VA-016-P |
| High temperature NTC ceramic resistors<br>**David Houivet**<br>*Laboratoire Universitaire des Sciences Appliques, de Cherbourg (LUSAC, EA2607) Site Universitaire, Cherbourg Octeville, France* | VA-017-P |
| Heywang-Jonker model for barium titanate ceramics with PTCR properties<br>**Liliana Mitoseriu**<br>*Dept. of Electricity, Al. I. Cuza University, Iasi, Romania* | VA-019-P |
| Ageing phenomena in mixed transition-metal manganite NTC electroceramics: quantitative features, microstructural model and some modification possibilities<br>**Oleh Shpotyuk**<br>*Lviv Scientific Research Institute of Materials, Scientific Research Company "Carat", Lviv, Ukraine* | VA-021-P |

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| Microstructural and nonohmic characteristics of Ta - Bi doped $TiO_2$ system<br>**Vania C. Sousa**<br>*CMDMC - LIEC - DQ - UFSCar, Sao Carlos, SP, Brasil* | VA-022-P |
| Effect of powder preparation on barium titanate PTCR properties<br>**Biljana Stojanovic**<br>*UNESP-Institute of Chemistry, Araraquara, SP, Brasil* | VA-023-P |
| Ageing phenomena in mixed transition-metal manganite NTC electroceramics: on the problem of mathematical description of relative resistance drift<br>**Mykola Vakiv**<br>*Scientific Research Company "Carat", Lviv Scientific Research Institute of Materials, Lviv, Ukraine* | VA-024-P |
| Ageing phenomena in mixed transition-metal manganite NTC electroceramics: on the role of thermally stimulated mass-transfer processes<br>**Mykola Vakiv**<br>*Scientific Research Company "Carat", Lviv Scientific Research Institute of Materials, Lviv, Ukraine* | VA-025-P |
| Semiconducting barium titanate ceramics with yittrium hexaboride as sintering aid<br>**Xiaoxing Wang**<br>*Department of Applied Physics, The Hong Kong Polytechnic, University Hunghom, Kowloon, Hong Kong, China* | VA-026-P |
| Effect of oxygen partial pressure on the NTC characteristics of sputtered $Ni_xMn_{3-x}O_{4+d}$ thin films<br>**A Basu**<br>*Department of Physics, University of Durham, Durham, United Kingdom* | VA-027-P |
| **IM- Ionic, Mixed, and Electronic Conductors** | |
| Lattice parameters of Yttria-doped ceria solid electrolytes<br>**E. N. S. Muccillo**<br>*Multidisciplinary Center for the Development of Ceramic Materials, Energy and Nuclear Research Institute, SP, Brasil* | IM-008-P |
| Synthesis, structure and densification behaviour of $CeO_2$-8 mol%$Y_2O_3$ solid electrolyte<br>**E. N. S. Muccillo**<br>*Multidisciplinary Center for the Development of Ceramic Materials-CCTM, Energy and Nuclear Research Institute, S. Paulo, SP, Brasil* | IM-009-P |
| The crystal structure of ionic conductor $La_xCe_{1-x}O_{2-x/2}$<br>**Jong Sung Bae**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Daejon, Korea* | IM-011-P |
| Solid electrolytes based on lithium-containing lanthanum metaniobates with defect-perovskite structure<br>**Anatolii Belous**<br>*Institute of General & Inorganic Chemistry, Kyiv, Ukraine* | IM-012-P |
| Ionic conductivity of CaO-$Y_2O_3$-$ZrO_2$ materials with constant oxygen vacancy concentration<br>**Miroslaw M. Bucko**<br>*Faculty of Materials Science and Ceramics, University of Mining and Metallurgy, Cracow, Poland* | IM-013-P |
| DFT modeling of local-level structures in (Ce, Zr) mixed oxide<br>**Jose C. Conesa**<br>*Instituto de Catalisis, CSIC Campus de Cantoblanco, Madrid, Spain* | IM-014-P |
| Redox and ion diffusion studies of mixed (Ce, Zr, Ca) oxide nanoparticles prepared by microemulsion methods<br>**Jose C. Conesa**<br>*Instituto de Catalisis, CSIC Campus de Cantoblanco, Madrid, Spain* | IM-015-P |
| Oxygen transport through dense $La_{0.6}Sr_{0.4}Fe_{0.8}Co_{0.2}O_{3-\delta}$ perovskite-type permeation membranes<br>**Stefan Diethelm**<br>*Laboratory for Industrial Energy Systems (LENI), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland* | IM-016-P |

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| Effect of Fe Content on the Grain Boundary Behaviour of $CaTi_{1-x}Fe_xO_3$<br>**Filipe Figueiredo**<br>*Ceramics and Glass Eng. Dep., University of Aveiro, Aveiro, Portugal* | IM-017-P |
| Atomistic simulations of oxide ion diffusion in doped $LaCoO_3$<br>**Craig Fisher**<br>*Japan Fine Ceramics Center, Nagoya, Japan* | IM-018-P |
| Phase investigation in the antimony doped $Bi_2O_3$ system<br>**Victor Fruth**<br>*Institute of Physical and Chemistry, Romanian Academy, Bucharest, Romania* | IM-019-P |
| Synthesis and electrical properties of three new indium containing perovskites<br>**Antonio F. Fuentes**<br>*Cinvestav Unidad Saltillo, Coahuila, Mexico* | IM-020-P |
| Mixed conductivity of garnet phases based on gadolinium ferrite<br>**Fernando Marques**<br>*Department of Ceramics and Glass Engineering, CICECO, University of Aveiro, Aveiro, Portugal* | IM-021-P |
| Electrical properties of $Ba(Dy_{0.67}B_{0.33})O_3$ (B = W(VI) and Mo(VI)) prepared by the polymeric precursors method<br>**Guillermo Mendoza-Suarez**<br>*Cinvestav Unidad Saltillo, Coahuila, Mexico* | IM-022-P |
| Alumina-dispersion dependent ionic conductivity of (Sr, Mg)-doped lanthanum gallates<br>**Isabella Natali-Sora**<br>*Structural Chemistry Lab., Department of Mechanical Engineering, University of Brescia, Brescia, Italy* | IM-023-P |
| Effect of synthetic route on sintering behaviour, phase purity and conductivity of Sr-and Mg-doped $LaGaO_3$ perovskites<br>**Arianna Pamio**<br>*Dipartimento di Scienze e Tecnologie Chimiche, Università di Roma "Tor Vergata", Rome, Italy* | IM-024-P |
| Constitution and electrical conductivity of melilite-type $La_{1+x}Sr_{1-x}Ga_3O_{7-\delta}$<br>**Michael Rozumek**<br>*Max-Planck-Institut für Metallforschung, Stuttgart, Germany* | IM-025-P |
| Sol-gel synthesis of beta-$Na_2O_xAl_2O_3$<br>**Sabrina Sartori**<br>*Dipartimento di Ingegneria Meccanica – Settore Materiali, Università di Padova, Padova, Italy* | IM-027-P |
| Oxygen incorporation into acceptor-doped wide bandgap oxides: mechnistic case studies of $SrTiO_3$ and $ZrO_2$<br>**Rotraut Merkle**<br>*Max-Planck-Institute for Solid State Research, Stuttgart Germany* | IM-028-P |
| An impedance study on praseodymia-zirconia system<br>**Claudio Fontanesi**<br>*Dept. of Chemistry, Università di Modena, Modena, Italy* | IM-029-P |
| Electric conductivity of YSZ electrolyte doped by $Al_2O_3$<br>**Andrei Ustyugov**<br>*Research Institute of Technical Physics, Russian federal Nuclear Center - Ac. Zababakhin, Snezhinsk, Chelyabinsk region, Russia* | IM-030-P |
| Transparent and conductive ZnO: Al thin films prepared by sol-gel dip-coating<br>**Celso Santilli**<br>*IQ/UNESP Caixa, SP, Brasil* | IM-031-P |
| **FC- Fuel Cells and Batteries** | |
| Mixed lithium phosphates as cathode materials for Li-ion cells<br>**Silvia Bodoardo**<br>*Department of Material Science and Chemical Engineering, Politecnico di Torino, Torino, Italy* | FC-009-P |

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| Synthesis and characterization of $LiFePO_4$ in lithium-ion polymer battery<br>**Alessandra D'Epifanio**<br>*Dipartimento di Scienze e Tecnologie Chimiche, Università di Roma Tor Vergata, Rome, Italy* | FC-012-P |
| Synthesis and characterization of nanometric $ZrO_2$ as ceramic filler for PEO based composite polymer electrolytes<br>**Francesca Serraino Fiory**<br>*Dipartimento di Scienze e Tecnologie Chimiche, Università di Roma Tor Vergata, Rome, Italy* | FC-013-P |
| Preparation of uniformly distributed NiO/YSZ composite by the polymer complex solution method<br>**Pedro Duran**<br>*Electroceramics Department, Instituto de Ceramica Y Vidrio, CSIC, Madrid, Spain* | FC-014-P |
| An electrochemical AC impedance study of substituted perovskite manganites for solid oxide fuel cells<br>**Maurizio Ferretti**<br>*INFM e Dipartimento di Chimica e Chimica Industriale, Università di Genova, Genova, Italy* | FC-015-P |
| Zirconia nanolayers prepared by chemical vapor deposition<br>**Johannes Seydel**<br>*Institute of Materials Science, Thin Films Division, Darmstadt University of Technology, Darmstadt, Germany* | FC-016-P |
| Cathodic properties of $LaMnO_3$ electrode for fuel cells based on $LaGaO_3$ solid electrolyte<br>**Jae Yeon Yi**<br>*Department of Materials Science and Engineering, Pohang University of Science and Technology, Pohang, South Korea* | FC-017-P |
| Synthesis, characterization and electrical properties of $CeO_2$-based anodes for SOFC<br>**Joseph Sfeir**<br>*Department of Chemistry Htceramix, Laboratory of Photonics and Interfaces, EPFL Science Park, Lausanne, EPFL, Switzerland* | FC-018-P |
| **SE-Chemical Sensors** | |
| Ceramics response to reducing gases: porosity influence<br>**Pedro Manuel Faia**<br>*Departamento de Engenharia Electrotecnica e Computadores- Faculdade de Ciencias e Tecnologia, Universidade de Coimbra, Coimbra, Portugal* | SE-008-P |
| Binary Cr/W mixed oxide thin films prepared by physical methods for gas sensing applications<br>**Carlo Cantalini**<br>*Dept. of Chemistry, University of L'Aquila, L'Aquila, Italy* | SE-010-P |
| Separation techniques for nanostructured chemoresistive sensors<br>**Matteo Ferroni**<br>*INFM and Physics Dept. of Ferrara University, Ferrara, Italy* | SE-011-P |
| Electrical properties of non-ohmic $SnO_2$-based ceramics in different relative humidity environnments<br>**Alexander Glot**<br>*Dep. of Radioelectronics, Dniepropetrovsk National University, Dniepropetrovsk, Ukraine* | SE-012-P |
| Degradation of oxide varistors ceramics in air atmosphere with $NO_2$ impurities at elevated temperature<br>**Alexander Glot**<br>*Dep. of Radioelectronics, Dniepropetrovsk National University, Dniepropetrovsk, Ukraine* | SE-013-P |
| Solid-state amperometric $CO_2$ sensor using a sodium ion conductor<br>**Ji-Sun Lee**<br>*School of Materials Science and Engineering, Seoul National University, Seoul, Korea* | SE-015-P |
| Low temperature sol-gel synthesis and sensing properties of $Cr_{2-x}Ti_xO_3$<br>**Giovanni Neri**<br>*Dipartimento di Chimica Industriale e Ingegneria dei Materiali, Università di Messina, Messina, Italy* | SE-016-P |
| Electrical modeling of the humidity sensing properties of doped $Fe_2O_3$ thin films<br>**Giovanni Neri**<br>*Dipartimento di Chimica Industriale e Ingegneria dei Materiali, Università di Messina, Messina, Italy* | SE-017-P |

| FE- Ferroelectrics | |
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| Specifics of polarisation switching in PNN-PT-PZ ferroelectric ceramics<br>**Karlis Bormanis**<br>*Institute of Solid State Physics, University of Latvia, Riga, Latvia* | FE-009-P |
| Superionic phase transitions in the series of $Li_xNa_{1-x}Ta_yNb_{1-y}O_3$ solid solutionceramics<br>**Karlis Bormanis**<br>*Institute of Solid State Physics, University of Latvia, Riga, Latvia* | FE-010-P |
| Broad-band dielectric response of doped incipient ferroelectrics<br>**Viktor Bovtun**<br>*Department of Dielectrics, Institute of Physics, Academy of Sciences of the Czech Republic, Prague, Czech Republic* | FE-011-P |
| Glass-ceramic materials with regulated dielectric properties based on the system BaO-PbO-$TiO_2$-$B_2O_3$-$Al_2O_3$<br>**Alexander Gorokhovsky**<br>*Centro de Investigacion y Estudios Avanzados, CINVESTAV Unidad Saltillo, Saltillo, Coahuila, Mexico* | FE-013-P |
| Compositional evolution of structural phase transitions in sodium niobate<br>**Basilio Jimenez**<br>*Instituto de Ciencia de Materiales de Madrid, CSIC, Madrid, Spain* | FE-014-P |
| X-ray study and dielectric properties of Sc-substituted Pb $(Yb_{1/2}Ta_{1/2})O_3$ ceramics<br>**Jai-Hyun Kim**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Taejon, Korea* | FE-015-P |
| X-ray study and dielectric properties of Ti.-substituted Pb $(Yb_{1/2}$ Nb_$)O_3$ ceramics<br>**Jai-Hyun Kim**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Taejon, Korea* | FE-016-P |
| The dielectric properties and phase transition of (1-x)Pb $(Yb_{1/2}Ta_{1/2})O_3$ - $xPbZrO_3$<br>**Heesan Kim**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Taejon, Korea* | FE-017-P |
| Novel $Cd_2Nb_2O_7$ pyrochlore based ferroelectric relaxors and glasses<br>**N.N. Kolpakova**<br>*A.F.Ioffe Physico-Technical Institute, St.Petersburg, Russia* | FE-018-P |
| Electric properties of Pb$(Mg_{1/3}$ $Nb_{2/3})O_3$-$PbTiO_3$ ceramics obtained by conventional sintering and hot-pressing<br>**Manuel H. Lente**<br>*Departamento de Fisica-Grupo de Ceramicas Ferroeletricas, Universidade Federal de Sao Carlos, Sao Carlos - S.P., Brazil* | FE-020-P |
| Ferroelectric versus relaxor behaviour in some bismuth layered oxide ceramics<br>**Jean-Pierre Mercurio**<br>*Science des Procedes Ceramiques et de Traitements de Surface, Faculte des Sciences et Techniques, Universite de Limoges, Limoges, France* | FE-022-P |
| Raman and magnetic study of (1-x)$PbFe_{2/3}W_{1/3}O_3$-$xPbTiO_3$ ceramics<br>**Liliana Mitoseriu**<br>*Dept. of Electricity, Cuza University, Iasi, Romania* | FE-023-P |
| Broad-band dielectric response of $SrTiO_3$:Bi ceramics<br>**Viktor Porokhonskyy**<br>*Institut of Physics ASCR , Prague, Czech Republic* | FE-025-P |
| Interface solid-state reactions between $BaTiO_3$–$KNbO_3$ and $KNbO_3$–$TiO_2$<br>**Irena Pribosic**<br>*Josef Stefan Institute, Ljubljana, Slovenia* | FE-026-P |
| Pb(B',B")$O_3$ binary system as electrocaloric materials for room temperature refrigeration<br>**Leonids Shebanovs**<br>*Institute of Solis State Physics, University of Latvia, Riga, Latvia* | FE-028-P |

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| Relaxor and ferroelectric properties of PMN-PT ceramic samples<br>**Ryszard Skulski**<br>*Department of Material Science, Faculty of Engineering Science, University of Silesia, Sosnowiec, Poland* | FE-029-P |
| From incipient ferroelectricity in $CaTiO_3$ to real ferroelectricity in $Ca_{1-x}Pb_xTiO_3$ solid solutions<br>**Andrei V. Sotnikov**<br>*Institute of Solid State and Materials Research, Dresden, Germany* | FE-031-P |
| E-T phase diagram of 6.5/65/35 PLZT ceramics<br>**Boris Vodopivec**<br>*Josef Stefan Institute, Ljubljana, Slovenia* | FE-033-P |
| The dielectric properties and phase transitions of (1-x)Pb $(Yb_{1/2}Ta_{1/2})O_3$ - xPb $(Fe_{1/2}Ta_{1/2})O_3$<br>**Sang Chul Youn**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Taejon, Korea* | FE-034-P |
| Electrical properties of $SrBi_2Ta_2O_9$ single-crystals grown from high temperature self-flux solution<br>**Harvey Amorin**<br>*Department of Ceramic & Glass Engeenering, University of Aveiro, CICECO, Aveiro, Portugal* | FE-035-P |
| Effect of $Ta_2O_5$ doping on the crystal structures and ferroelectromagnetic properties of $PrFeO_3$-$PbTiO_3$ and $BiFeO_3$-$PbTiO_3$ solid solution systems<br>**Jeong Seog Kim**<br>*Dept. of Materials Engineering, Hoseo University, Chungnam-do, Korea* | FE-036-P |
| Coexistence of relaxor and ferroelectric phase in PLZT 6.5/65/35 ceramics<br>**Cene Filipic**<br>*Institute Josef Stefan Jamova, Ljubljana, Slovenia* | FE-037-P |
| Dielectric and pyroelectric properties of the $(Pb_{0.8}Ba_{0.2})$ $[(Zn_{1/3}Nb_{2/3})_{0.7}Ti_{0.3}]O_3$ ferroelectric ceramic system with Ca and Sr impurities<br>**Aime Pelaiz Barranco**<br>*Physics Faculty-Institute of Materials and Reagents, Havana University, La Habana, Cuba* | FE-038-P |
| New ferroelastic phase in $SrBiTa_2O_9$ and study of the ferroelectric phase-transition dynamics<br>**Stanislav Kamba**<br>*Institute of Physics ASCR , Prague, Czech Republic* | FE-040-P |
| **PZ- Piezoelectrics** | |
| The influence of the $Zr^{4+}$/ $Ti^{4+}$ ratio on the properties of lead zirconate titanate piezoelectric ceramics<br>**Ana Maria Moisin**<br>*R&D Institute for Electrical Engineering, Bucharest, Romania* | PZ-009-P |
| Piezoelectric PMN-PT ceramics from mechanochemically activated precursors<br>**Miguel Alguero**<br>*Instituto de Ciencia de Materiales de Madrid, CSIC, Cantoblanco, Madrid, Spain* | PZ-010-P |
| Low temperature firing of PZT thick films prepared by screen printing method<br>**Chae-il Cheon**<br>*Dept. of Materials Science & Eng., Hoseo University, Asan, Chungnam, Korea* | PZ-011-P |
| The structural phase diagram of PSN-PT system<br>**Raphael Haumont**<br>*Laboratoire SPMS Structures, Proprits et Modelisation des Solides, Ecole Centrale Paris, Chitenay-Malabry, Paris, France* | PZ-013-P |
| Low-temperature fabrication of $Pb(Ni_{1/3}Nb_{2/3})O_3$- $Pb(Zr_{0.3}Ti_{0.7})O_3$ ceramics with $LiBiO_2$ as a sintering aid<br>**Takashi Hayashi**<br>*Department of Materials Science, Shonan Institute of Technology, Fujisawa, Kanagawa, Japan* | PZ-014-P |
| Piezoelectric and optical properties of strontium doped PZT-NN ceramics<br>**Elena Dimitriu**<br>*National Institute for Materials Physics, Magurele, Jud.Ilfov, Romania* | PZ-015-P |

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| Nonlinear piezoelectric coefficient of $Pb(Ni, Nb)O_3Pb$ $(Zn, Nb)O_3$-$PbZrO_3$-$PbTiO_3$ system ceramics<br>**Keisuke Ishii**<br>*Department of Materials Science and Engineering, The National Defense Academy, Yokosuka, Kanagawa, Japan* | PZ-016-P |
| Effect of simultaneous addition of $BiFeO_3$ and $Ba(Cu_{0.5}W_{0.5})O_3$ on low temperature sintering of coprecipitated $Pb(Zr,Ti)O_3$ powders<br>**Shoji Kaneko**<br>*Department of Materials Science and Technology, Shizuoka University, Hamamatsu, Japan* | PZ-019-P |
| Sodium-lithium niobate ceramics prepared by mechanochemical assisted methods<br>**Lorena Pardo**<br>*Instituto de Ciencia de Materiales de Madrid., Madrid, Spain* | PZ-020-P |
| Fabrication of fluoridated PZT ceramics by solid state reaction<br>**Benya Cherdhirunkorn**<br>*Manchester Materials Science Centre, University of Manchester and UMIST, Manchester, United Kingdom* | PZ-021-P |
| 1-3-type composites “ceramic bar-polymer matrix” and “ceramic bar- ceramic matrix”<br>**Vitali Yu. Topolov**<br>*Department of Physics, Rostov State University, Rostov-On-Don, Russia* | PZ-022-P |
| New trends in development of high-anisotropic piezoactive composite (Review)<br>**Vitali Yu. Topolov**<br>*Department of Physics, Rostov State University, Rostov-on-Don, Russia* | PZ-023-P |
| Electrical properties of alkali oxide piezoelectric materials<br>**Masaaki Ichiki**<br>*Institute of Mechanical System Engineering, National Institute of Advanced Industrial Science and Technology, 1-2 Namiki, Tsukuba, Ibaraki, Japan* | PZ-025-P |
| Electrical properties of photovoltaic PLZT in application for energy transducers<br>**Masaaki Ichiki**<br>*Institute of Mechanical System Engineering, National Institute of Advanced Industrial Science and Technology, Ibaraki, Japan* | PZ-026-P |
| **DI- Dielectrics** | |
| Structural and dielectric characterization of a new pyrochlore type family of materials: tin and lead tin niobates<br>**Luisa Paula Valente Cruz**<br>*Dep. Environment, Polytechnic Institute of Viseu, Viseu, Portugal* | DI-007-O |
| Dielectric properties of $BaFe_xTi_{(1-x)}O_3$<br>**Salah Eddine Barama**<br>*Ceramics Laboratory, Mentouri University, Constantine, Algeria* | DI-009-P |
| Dielectric properties of $BaTiO_3$-$NaNbO_3$ composites<br>**Med. Tahar Benlahrache**<br>*Ceramics Laboratory, Mentouri University, Algeria* | DI-010-P |
| Effect of hygrometry on dielectric materials<br>**Jerome Bernard**<br>*Laboratoire Universitaire des Sciences Appliques de Cherbourg (LUSAC EA2607), Site Universitaire, Cherbourge Octeville, France* | DI-011-P |
| $BaTiO_3$ with a lithium salt sintered at low temperatures in a reducing atmosphere<br>**Jerome Bernard**<br>*Laboratoire Universitaire des Sciences Appliques de Cherbourg (LUSAC EA2607), Site Universitaire, Cherbourge Octeville, France* | DI-012-P |
| Effects of depressor addition on dielectric properties of $Pb(Mg_{1/3}Nb_{2/3}O_3$-$PbTiO_3)$ ceramics<br>**Masafumi Kobune**<br>*Department of Applied Chemistry, Faculty of Engineering, Himeji Institute of Technology, Hyogo, Japan* | DI-013-P |

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| Compositional variation and electrical properties of low-dielectric constant LTCC substrate<br>**Jae-Hwan Park**<br>*Div. of Materials, Korea Institute of Science and Technology, Seoul, South Korea* | DI-015-P |
| Cyclic unipolar electric fatigue of bulk PZT<br>**Cyril Verdier**<br>*Institute of Materials Science, Darmstadt, Germany* | DI-017-P |
| The role of C-impurities in alumina dielectrics<br>**Rafael Vila**<br>*CIEMAT, Madrid, Spain* | DI-018-P |
| Ultra-fine $Ba_2Ti_9O_{20}$ microwave dielectric materials synthesized by inverse microwave process<br>**Li-Wen Chu**<br>*Department of Chemical Engineering, National Tsing-Hua University, Hsinchu, Taiwan* | DI-022-P |
| **TF- Ferroelectric Thin Films** | |
| Anomalously high electromechanical response of a (Pb, La) $TiO_3$ thin film on a circular thin plate with clamped edge<br>**Miguel Alguero**<br>*Instituto de Ciencia de Materiales de Madrid, CSIC, Cantoblanco, Madrid, Spain* | TF-009-P |
| Structural and photoelectrical properties of niobium doped PZT thin films deposited by pulsed laser ablation<br>**Iulian Boerasu**<br>*Physics Center, University of Minho, Braga, Portugal* | TF-011-P |
| Strontium titanate films prepared by spray pyrolysis<br>**Goran Brankovic**<br>*Instituto de Quimica, UNESP, Araraquara, SP, Brazil* | TF-012-P |
| The influence of neodymium and lanthanum doping in the pyroelectric properties of strontium barium niobate (SBN) thin films<br>**Jose Antonio Eiras**<br>*Grupo de Ceramicas Ferroeletricas, Departamento de Fisica, Universidade Federal de Sao Carlos, Sao Carlos, SP, Brazil* | TF-014-P |
| Ferroelectric properties of nano-sized Pb(Zr, Ti)$O_3$ islands<br>**Hironori Fujisawa**<br>*Department of Electronics, Faculty of Engineering, Himeji Institute of Technology, Himeji, Hyogo, Japan* | TF-015-P |
| Stoichiometry and crystal orientation of YAG-PLD derived ferroelectric PZT thin film<br>**Ken-ichi Kakimoto**<br>*Department of Materials Science and Engineering, Inorganic Materials Division, Nagoya Institute of Technology, Nagoya, Japan* | TF-016-P |
| Low temperature recrystallization of non stoichiometric $SrBi_3Nb_2O_9$ thin films and its effects on ferroelectric characteristics<br>**Yong Tae Kim**<br>*Semiconductor Materials Laboratory, Korea Institute of Science and Technology, Seoul, Korea* | TF-017-P |
| PZT multilayer films: modeling polarization effects caused by microstructural inhomogeneities<br>**Johannes Roedel**<br>*Institute of Materials Science, Dresden University of Technology, Dresden, Germany* | TF-019-P |
| $Pb(Yb_{1/2}Nb_{1/2})O_3$- $PbTiO_3$ thin films near morpotropic phase boundary compositions: sol-gel processing and structural characterization<br>**Bong Jin Kuh**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Yusong-Gu, Taejon, Korea* | TF-020-P |
| Residual stress in lead titanate thin film on different substrates<br>**Tomoya Ohno**<br>*Faculty of Engineering, Shizuoka University, Hamamatsu, Shizuoka, Japan* | TF-021-P |
| Influence of oxygen atmosphere on crystallization and properties of lithium niobate thin films<br>**Alexandre Simoes**<br>*Department of Chemistry-Physics, Chemistry Institute, UNESP, Araraquara-SP, Brazil* | TF-022-P |

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| Compositional and structural study of ferroelectric multilayer (Pb, La)$TiO_3$/(Pb, Ca)$Ti_3$ sol-gel thin films<br>**Rosalia Poyato**<br>*Inst. Ciencia de Materiales de Madrid (CSIC), Madrid, Spain* | TF-023-P |
| A statistical analysis of macroscopic and local responses in degraded hysteresis loops of PZT films<br>**Dan Ricinschi**<br>*Graduate School of Engineering Science, Osaka University, Toyonaka, Osaka, Japan* | TF-025-P |
| Ferroelectric properties of $PbZr_xTi_{1-x}O_3$ thin films by low-temperature MOCVD<br>**Masaru Shimizu**<br>*Department of Electronics, Faculty of Engineering, Himeji Institute of Technology, Hyogo, Japan* | TF-027-P |
| Antiferroelectric $PbZrO_3$ thin films: structure, properties and irradiation effects<br>**Andrisb Sternberg**<br>*Institute of Solid State Physics, University of Latvia, Riga, Latvia* | TF-028-P |
| The influence of cation substitution on the crystallization of $SrBi_2Ta_2O_9$ thin films<br>**Yun-Mo Sung**<br>*Department of Materials Science & Engineering, Functional Nanostructured Materials Laboratory, Daejin University Pochun-koon, Kyunggi-do, South Korea* | TF-029-P |
| Recostructive phase transitions of the pyrochlore- perovskite-type in PZT-based thin films<br>**Zygmunt Surowiak**<br>*Faculty of Physics, Rostov State University, Rostov-on-Don, Russia* | TF-030-P |
| Effects of $Bi_2O_3$ seeding layer on crystallinity and electrical properties of sol-gel derived $Bi_{4-x}La_xTi_3O_{12}$ ferroelectric thin films<br>**Daichi Togawa**<br>*Department of Materials Science, Shonan Institute of Technology, Fujisawa, Kanagawa, Japan* | TF-031-P |
| Preparation and characterization of PZT thin films deposited by laser ablation on template layer<br>**Zhan Jie Wang**<br>*Department of Materials Processing, Graduate School of Engineering, Tohoku University, Sendai, Japan* | TF-032-P |
| Preparation and characterization of a-/b-axis-oriented epitaxially grown bismuth layer-structured ferroelectrics<br>**Takayuki Watanabe**<br>*Tokyo Institute of Technology, Yokohama-shi, Kanagawa, Japan* | TF-033-P |
| Aqueous solution-gel synthesis of $SrRuO_3$<br>**J. Pagnaer**<br>*Laboratory of Inorganic and Physical Chemistry, Limburgs Universitair Centrum, IMO, Diepenbeek, Belgium* | TF-036-P |
| Phase shift behavior of RHEED intensity oscillation in intermediate growth mode between layer-by-layer mode and step flow mode<br>**Byoung Chul Shin**<br>*Dept. of Advanced Materials Engineering, Dong-Eui University, Busan, South Korea* | TF-037-P |
| Residual stresses in Pt bottom electrodes for sol-gel derived lead zirconate titanate thin films<br>**Lulu Zhang**<br>*National Institute of Advanced Industrial Science and Technology, Tsukuba, Ibaraki, Japan* | TF-039-P |
| **MW- Microwave Dielectrics and Applications** | |
| Dielectric relaxation of $SrBi_2(Nb_{0.75}Ta_{0.25})_2O_9$ ceramics from 1 kHz to 1GHz<br>**Junzheng Liu**<br>*Department of Applied Physics and Materials Research Center, The Hong Kong Polytechnic University, Hong Kong, China* | MW-010-P |
| Relationship between Sr substitution for Ba and dielectric characteristics in $Sm_2BaZnO_5$ ceramics<br>**Kenkichi Mori**<br>*Faculty of Science and Technology, Meijo University, Nagoya, Japan* | MW-011-P |

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| Microwave dielectric properties-structure relationship in $Y_2Ba(Cu_{1-x}M_x)O_5$ (M=Co and Mg) solid soulutions<br>**Katsuhiro Mori**<br>*Faculty of Science and Technology, Meijo University, Nagoya, Japan* | MW-012-P |
| Low-temperature sintering of $Ba_{6-3x}Sm_{8+2x}Ti_{18}O_{54}$ microwave dielectric ceramics by $B_2O_3$ and $GeO_2$ addition<br>**Yutaka Ota**<br>*Department of Materials Science and Engineering, Nagoya Institute of Technology, Nagoya, Japan* | MW-013-P |
| Local cationic ordering behaviour in $Ba(Mg_{1/3}Nb_{2/3})O_3$ ceramics<br>**Jae-Gwan Park**<br>*Division of Materials, Korea Institute of Science and Technology, Seoul, Korea* | MW-014-P |
| Microwave dielectric properties of low temperature sintering $Ca[(Li_{1/3}M_{2/3}),Ti]O_{3-y}$ (M=Nb,Ta) ceramics<br>**Liu Peng**<br>*Faculty of Science and technology, Meijo University, Nagoya, Japan* | MW-015-P |
| Vibrational spectroscopy study of the lattice defects in $CaZrO_3$ ceramics<br>**Michael Pollet**<br>*Laboratoire CRISMAT, Caen, France* | MW-016-P |
| Far-infrared reflection and microwave properties of Ba $([Mg_{1-x}Zn_x]_{1/3}Ta_{2/3})O_3$ ceramics<br>**Takeshi Shimada**<br>*R&D Center, Sumitomo Special Metals Co., Shimamoto-cho, Mishima-gun, Japan* | MW-017-P |
| Processing and properties of BST and BZT thin films for tunable dielectric devices<br>**Jin Xu**<br>*Institut für Werkstoffe der Electrotechnik, Universitaet Karlsruhe (TH), Karlsruhe, Germany* | MW-019-P |
| Influence of Zn and Ni substitution of Mg on dielectric properties of $(Mg_{4-x}M_x)Nb_2O_9$ (M=Zn and Ni) solid solutions<br>**Atsushi Yoshida**<br>*Faculty of Science and Technology, Meijo University, Nagoya, Japan* | MW-020-P |
| Investigation of $Ag(Ta,Nb)O_3$ as tunable microwave dielectric<br>**Frederic Zimmermann**<br>*Institut für Werkstoffe der Elektrotechnik (IWE), Universitaet Karlsruhe, Karlsruhe, Germany* | MW-021-P |
| Low temperature co-friable ceramics glass-ceramic composites for microwave device application<br>**Cheng-Sao Chen**<br>*Department of Mechanical Engineering, National Taiwan University of Science and Technology, Taipei, Taiwan* | MW-022-P |
| Effect of composition on low temperature sinterable Ba-Nd-Sm-Ti-O microwave dielectric materials<br>**Chung-Chin Cheng**<br>*Department of Materials Science and Engineering, National Chiao-Tung University, Hsinchu, Taiwan* | MW-023-P |
| Correlation of microwave dielectric properties and crystallinity for pulsed laser deposited $BI_2(ZN_{1/3}Nb_{2/3})_2O_7$ thin films<br>**Hsiu-Fung Cheng**<br>*Department of Physics, National Taiwan Normal University, Taipei, Taiwan* | MW-024-P |
| **ED- Electroceramic Devices** | |
| Defect properties of langasite and effects on bulk acoustic sensor performance at high temperatures<br>**Harry Tuller**<br>*Massachusetts Institute of Technology, Boston, USA* | ED-008-P |
| Grains size effects on electric and piezoelectric constants of PZT ceramic transducers<br>**Mohammed Kadri**<br>*Department of Electronic, Faculty of Electrical Engineering, University of Sciences and Technology of Oran, Oran, Algeria* | ED-009-P |

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| Modeling of polycrystal piezoceramic transducers<br>**Mohammed Kadri**<br>*Department of Electronic, Faculty of Electrical Engineering, University of Sciences and Technology of Oran, Oran, Algeria* | ED-010-P |
| High-power characteristics of piezoceramic resonators<br>**Eberhard Hennig**<br>*PI Ceramic GmbH Lindenstrasse, Lederhose, Germany* | ED-012-P |
| Effect of the laser processing in RAINBOW actuators<br>**Jari Juuti**<br>*Microelectronics and Material Physics Laboratories, Research Group of Infotech Oulu, University of Oulu, Oulu, Finland* | ED-013-P |
| Synthesis of functional ceramic coatings on the surface of glassy substrates by treatment with molten salt mixtures<br>**Alexander Gorokhovsky**<br>*Centro de Investigacion y Estudios Avanzados, CINVESTAV Unidad Saltillo, Coahuila, Mexico* | ED-014-P |
| Piezoresistive anisotropy of thick-film resistors<br>**Claudio Grimaldi**<br>*Laboratoire de Production Microtechnique, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland* | ED-015-P |
| Integration and high-strain response of piezoresistive thick-film resistors on titanium alloy substrates<br>**Thomas Maeder**<br>*Laboratoire de Production Microtechnique, Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland* | ED-016-P |
| Temperature stability of pyroelectric parameters of PZT-based multi-component electroceramics<br>**Dionizy Czekaj**<br>*Departament of Materials Science, Faculty of Engineering, University of Silesia, Sosnowiec, Poland* | ED-017-P |
| **SM- Superconductors and Magnetic Ceramics** | |
| Transport properties of polycrystalline $La_{0.6}Y_{0.1}Ca_{0.3}MnO_3$ compounds with different pore concentrations<br>**Fabio C. Fonseca**<br>*Instituto de Fisica, Universidade de S. Paulo, S. Paulo, SP, Brazil* | SM-006-P |
| The origin of room temperature ferromagnetism in the Co- doped ZnO thin films fabricated by pulsed laser deposition<br>**Jae Hyun Kim**<br>*Department of Materials Science and Engineering, Korea Advanced Institute of Science and Technology, Taejon, Korea* | SM-007-P |
| Production by solid/liquid reaction and characterisation of high purity $MgB_2$ for superconducting application<br>**Silvia Bodoardo**<br>*Department of Material Science and Chemical Engineering, Politecnico di Torino, Torino, Italy* | SM-009-P |
| High-Tc phase obtained in the Pb/Sb doped Bi-Sr-Ca-Cu-O system<br>**Victor Fruth**<br>*Institute of Physical Chemistry, Romanian Academy, Bucharest, Romania* | SM-012-P |
| Growth and characterisation of lead hexaferrite films by pulsed laser deposition<br>**Bernard Watts**<br>*Istituto IMEM/CNR, Parma, Italy* | SM-014-P |
| Chemical solution techniques for epitaxial growth of oxide buffer and YBCO layers<br>**Andrea Cavallaro**<br>*Institut de Ciencia de Materials de Barcelona-CSIC, Bellaterra, Barcelona, Spain* | SM-015P |

| **OP- Optical and Photonics** | |
|---|---|
| Preparation of $TiO_2$ photocatalyst and feasibility of visible light application<br>**Tae Kyung Yoon**<br>*Research Center for Electronic Ceramics, Department of Environmental Engineering, Dongeui Institue of Technology, Dongeui University, Pusan, Korea* | OP-006-P |
| Synthesys and characterization of spherical $TiO_2$ nanoparticles for photonic applications<br>**Giovanni Neri**<br>*Dipartimento di Chimica Industriale e Ingegneria dei Materiali, Università di Messina, Messina, Italy* | OP-007-P |
| Electro-optical properties of Er-doped $SnO_2$ thin films<br>**Luis Scalvi**<br>*Departamento de Fisica - FC, UNESP, Bauru, Brazil* | OP-008-P |
| Fabrication of transparent lead lanthanum scandium niobate ceramics by two-stage atmosphere sintering<br>**Yoshio Yoshikawa**<br>*College of Engineering, Nihon University, Koriyama, Japan* | OP-009-P |
| Optical properties of As doped ZnO thin films prepared by PLD technique<br>**Yun Sik Yu**<br>*Research Center for Electronic Ceramics, Physics Department, Dongeui University, Pusan, Korea* | OP-010-P |
| Optical characteristics of Ge doped ZnO compound<br>**Yun Sik Yu**<br>*Research Center for Electronic Ceramics, Physics Department, Dongeui University, Pusan, Korea* | OP-011-P |
| Band gap energy of pure ZnO and Al doped ZnO thin films fabricated by PLD technique<br>**Yun Sik Yu**<br>*Research Center for Electronic Ceramics, Physics Department, Dongeui University, Pusan, Korea* | OP-012-P |
| Synthesis and characterization of visible light-active photocatalytic $TiO_2$<br>**Duksu Kim**<br>*Dept. of MS&E, ECRL, KAIST, Taejon, South Korea* | OP-013-P |