

Sunday February 19th		
14:30		Registration
Winter School on Advanced Characterization of Piezoceramics Session 1. Chair: Luis E. Fuentes-Cobas		
15:00	Lecture 1	<i>X-ray absorption study of functional materials</i> María Elena Montero Cabrera Centro de Investigación en Materiales Avanzados, S.C., Miguel de Cervantes 120, Complejo Ind. Chihuahua, C. P. 31136, Chihuahua, Chih. Mexico.
16:00	Lecture 2	<i>Numerical Characterization of Piezoelectric Discs Using Resonance Curves</i> Nicolás Pérez. Universidad de la República, Facultad de Ingeniería, Montevideo, Uruguay
17:00		Coffee break
Winter School on Advanced Characterization of Piezoceramics Session 2. Chair: María Elena Villafuerte Castrejón		
17:30	Lecture 3	<i>Implementation of advanced microscopies in an atomic force microscope</i> J. J. Gervacio-Arciniega Centro de Nanociencias y Nanotecnología, Universidad Nacional Autónoma de México, AP 14, Ensenada 22860, B. C., México. CONACyT-Facultad de Físico Matemáticas, Benemérita Universidad Autónoma de Puebla, Ciudad Universitaria, San Manuel, C. P. 72570, Puebla, Puebla., México.
18:30		
19:15		Welcome reception

Monday February 20th	
08:00	Registration
08:30	Opening session
09:00	In Memoria: Prof. Leslie Eric Cross
Piezo2017 Session M1: Piezoelectrics, ferroelectrics , relaxors, tunable materials...	
Chair: Markys Cain	
09:15	Invited talk <i>Insight into Structure, Properties, and Mobility of Ferroelectric Domain Walls</i> Nava Setter Ceramics Laboratory, Materials Department. EPFL Swiss Federal Institute of Technology 1015 Lausanne, Switzerland
10:00	<i>Parametric study of a thin piezoelectric cantilever for energy harvesting applications</i> T. Hoang (1,2), G. Ferin (1), B. Rosinski (1), C. Bantignies (1), H. Le Khanh (1), An Nguyen-Dinh (1), G. Poulin-Vittrant (2), F. Levassort (2), M. Bavencoffe (2) 1. Advanced Research dept., VERMON S.A., Tours, France 2. Université François Rabelais de Tours, INSA Centre Val de Loire, GREMAN UMR CNRS 7347, 3 rue de la Chocolaterie, CS 23410, 41034 BLOIS Cedex, France.
10:30	Keynote <i>Non-Rayleigh dynamic nonlinearity in barium titanate</i> M. Tyunina (1,2) and M. Savinov (2) 1. Microelectronics Research Unit, Faculty of Information Technology and Electrical Engineering, University of Oulu, P.O. Box 4500, FI-90014, Finland 2. Institute of Physics, CAS, Na Slovance 2, 182 21 Prague, Czech Republic
11:00	Coffee break
Piezo2017 Session M2: Applications I	
Chair: Henrik Ræder	
11:30	<i>Aligned Porosity Pyroelectrics for Energy Harvesting</i> Yan Zhang, Mengying Xie, James Roscow, Chris R. Bowen Department of Mechanical Engineering, University of Bath, BA2 7AY, United Kingdom
11:45	<i>3D printing of ferroelectric devices using standard fused deposition modelling method</i> Andreas Geiger (1,2), Miriam Bach (1,3), Tony Lusiola (1), Mark Melnykowycz (1), Frank Clemens (1) (1) Empa Material Science and Technology, Überlandstrasse 129, 8600 Dübendorf, Schweiz (2) Fachhochschule Münster, Bismarckstraße 11, 48565 Steinfurt, Deutschland (3) Institute of Ceramic, Glass and Construction Materials, TU Bergakademie Freiberg, Agricolastrasse 17, 09599 Freiberg, Germany
12:00	Keynote <i>PLZT x/90/10 ceramics for energy storage</i> I. V. Ciuchi (1,2), L. Mitoseriu (2), and C. Galassi (1) 1. CNR-ISTEC, Istituto di Scienza e Tecnologia dei Materiali Ceramici, Via Granarolo 64, I-48018, Faenza, Italy 2. Dielectrics, Ferroelectrics & Multiferroics group, Faculty of Physics, "A.I. Cuza" Univ., Bv. Carol I, n. 11, 700506 Iasi, Romania
12:30	Keynote <i>Piezoelectric based ice protection system - preliminary modelling and experimental results</i> Erling Ringgaard, Konstantin Astafiev, Ruichao Xu, Michele Guizzetti, and Tomasz Zawada Meggitt A/S, Kvistgaard, Denmark
13:00	Lunch & PI General Assembly
14:00	

Monday February 20th

Piezo2017 Session M3: New processing techniques		
Chair: Barbara Malič		
14:00	Invited talk	<i>New trends on the synthesis of piezoelectric lead-free materials</i> <u>María Elena Villafuerte</u> Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México (UNAM), México
14:45		<i>Processing of strontium doped sodium potassium niobate thick films obtained by electrophoretic deposition</i> Hugo Mercier (1,2,3), Barbara Malic (1,2), Hana Ursic (1), Jitka Hreščak (1), Franck Levassort (3), Danjela Kuscer (1) 1: Jozef Stefan institute, Electronic Ceramics Department, 1000 Ljubljana, Slovenia 2: Jozef Stefan International Postgraduate School, Jamova cesta 39, 1000 Ljubljana, Slovenia 3: Université François-Rabelais de Tours, GREMAN UMR7347 CNRS, Tours, France
15:00		<i>Exploring the Potential of Bismuth Sodium Titanium Thick films for Microelectronic Applications</i> <u>Amit Mahajan</u> , Ewa.M.Jakubczyk, Rebecca.L.Townsend, Haixue Yan, and Mike J Reece and Robert A Dorey Queen Mary University of London, UK
15:15	Keynote	<i>High piezoelectric response and evolution of ferroelectric properties of single crystals grown in BaTiO₃-CaTiO₃-BaZrO₃ pseudo-ternary solid-solution</i> G. Buse (1,2), <u>P. Veber</u> (1,2), M. Pham-Thi (3), C. Xin (1,2,4) and M. Maglione (1,2) 1. CNRS, ICMCB, UPR 9048, 87 av. A. Schweitzer, Pessac F-33600, France 2. Université de Bordeaux, ICMCB, UPR 9048, 87 av. A. Schweitzer, Pessac F-33600, France 3. THALES Research and Technology, 1, av. Fresnel, Campus de l'Ecole Polytechnique – F-91767 PALAISEAU Cedex, France 4. Luxembourg Institute of Science and Technology, Department of Materials Research & Technology, 41 rue du Brill, L-4422 Belvaux, Luxembourg
15:45	Keynote	<i>Texturation of lead-free BaTiO₃ based piezoelectric ceramics</i> A. Prato, F. Levassort, C. Bantignies, M. Pham Thi, <u>P. Marchet</u> Univ. Limoges SPCTS UMR 7315, France
16:15		<i>Self-poling of BiFeO₃ thick films induced by the annealing through the ferroelectric-to-paraelectric phase transition</i> <u>Evgeniya Khomyakova</u> (1,2), Matej Sadl (1), Hana Ursic (1,2) John Daniels (3) Barbara Malic (1,2) Andreja Bencan (1,2) Dragan Damjanovic (4) and Tadej Rojac (1,2), 1. Electronic Ceramics Department, Jozef Stefan Institute, Jamova cesta 39, Ljubljana, Slovenia 2. Jozef Stefan International Postgraduate School, Jamova cesta 39, Ljubljana, Slovenia 3. School of Materials Science and Engineering, University of New South Wales, NSW 2052, Australia 4. Ceramics Laboratory, Swiss Federal Institute of Technology in Lausanne-EPFL, 1015 Lausanne, Switzerland
16:30		<i>Highly-Sensitive Pressure Detection by AlN Piezoelectric Thin Film on a Flexible Substrate</i> <u>H. Bishara</u> , S. Berger Faculty of materials science and engineering, Technion, Haifa, ISRAEL 32000
16:45		Coffee break
Piezo2017 Session M4: Lead-free ceramics and other sustainable materials		
Chair: Carmen Galassi		
17:15	Keynote	<i>Solution-derived sodium potassium niobate thin films: influence of donor doping on microstructure...</i> <u>B. Malič</u> (1,2), K. Vojisavljević (1), T. Pečnik (1), H. Uršič (1), A. Matavž (1,2), V. Bobnar (1,2) 1. Jozef Stefan Institute, Jamova cesta 39, Ljubljana, Slovenia 2. Jozef Stefan International Postgraduate School, Jamova cesta 39, Ljubljana, Slovenia
17:45		<i>Tuning ferroelectric properties of BiFeO₃-BaTiO₃ ceramics via isovalent and donor substitution using La³⁺</i> <u>Ilkan Calisir</u> and David A. Hall The University of Manchester, Oxford Road, Manchester, M13 9PL, Lancashire, UK
18:00	Keynote	<i>Demonstration of lead-free piezo components</i> <u>Guttorm Syvertsen-Wiig</u> , Andreas B. Richter, Sophie Labonnote-Weber. Ceramic Powder Technology AS, Kvenildmyra 6, 7093 Tiller, Norway
18:30		Poster session
20:00		Dinner
21:00		

Tuesday February 21th

Piezo2017 Session T1: Applications II

Chair: Nicolás Pérez

09:00	Invited talk	<i>Using photonic crystals to stop progressive waves in piezoceramic resonators</i> Francisco Montero de Espinosa Instituto de Tecnologías Físicas y de la Información Leonardo Torres Quevedo (ITEFI) C/ Serrano, 144 28006-Madrid, Spain
09:45		<i>Sodium Bismuth Titanate thick films fabricated by screen printing method for high temperature ultrasonic sensor</i> O. Gatsa (1,2), P. Combette (1,2), E. Rosenkrantz (1,2), D. Fourmentel (3), C. Destouches (3), and J.Y. Ferrandis (1,2). 1 University Montpellier, IES, UMR 5214, F-34000, Montpellier, France 2 CNRS, IES, UMR 5214, F-34000, Montpellier, France 3 CEA Cadarache, DEN/DER/SPEX/LDCI, St Paul lez Durance, France
10:00		<i>Bulk PZT Transformers Fabricated by Micro-Powder Blasting: Modeling and Experimental Results</i> Oliver M. Barham, Mona Mirzaei, Professor Don L. DeVoe University of Maryland, Dept of Mechanical Engineering, 2181 Glenn L. Martin Hall, Building 088, College Park, 20742, USA
10:15	Keynote	<i>Piezoelectric MEMS development in SINTEF</i> H. Ræder, F. Tyholdt, A. Vogl, T. Bakke, P. M. Rørvik and F. Lapique SINTEF, P.O.Box 124 Blindern, Oslo, Norway
10:45		Coffee break

Piezo2017 Session T2: Applications III

Chair: Erling Ringgaard

11:15		<i>Effects of the LGT crystal quality on the resonance frequency stability of Bulk Acoustic Waves Resonators</i> M. Allani, JJ Boy, X. Vacheret, N. Batis, T. Laroche, A. Nehari, K. Lebbou, C. Pecheyran, H. Cabane Institut FEMTO-ST, 26, rue de l'Épitaphe, BESANCON, 25000, France
11:30		<i>Piezoelectric Transistor Memory</i> M.G. Cain (1), A.Oladipo (2), D. Poelman and P. Smet (3), C. Felser, S. Parkin (4), F. Tyholdt (5), G. Martyna (6), I. Rungger and M. Stewart (7), J. Fompeyrine (8), L. Salminen, N. Hoffmann (9), N. Hildenbrand (10), T. Schmitz and S. Tiedke (11). 1. Electrosciences Ltd, 1 Osborn Road, Farnham, GU9 9QT, Surrey, UK 2. Bio Nano Consulting (London, UK), 3. University of Gent (Gent, Belgium) 4. Max Planck Institute (Dresden and Halle, Germany) 5. SINTEF (Oslo, Norway), 6. IBM TJ-Watson Research Centre (New York, USA), 7. National Physical Laboratory (Teddington, UK) 8. IBM Research (Zurich, Switzerland), 9. DCA (Turku, Finland), 10. Solmates (Enschede, The Netherlands), 11. Aixacct (Aachen, Germany)
11:45		<i>Elasto-optic behavior in epitaxial films of perovskite oxide ferroelectrics</i> Alexandr Dejneka (1) and Marina Tyunina (2) 1. Institute of Physics CAS, Na Slovance 2, 182 21 Prague 8, Czech Republic 2. Microelectronics and Materials Physics Laboratories, University of Oulu, Finland
12:00		<i>Insight into processing, structure and properties of BiFeO₃-SrTiO₃ ferroelectric ceramics</i> M. Makarović ^{1,2} , J. Walker ³ , A. Bencan ^{1,2} , B. Malic ^{1,2} and T. Rojac ^{1,2} 1 Jozef Stefan Institute, Electronic Ceramics Department, Jamova cesta 39, 1000 Ljubljana, Slovenia 2 Jozef Stefan International Postgraduate School, Jamova cesta 39, 1000 Ljubljana, Slovenia 3 Materials Research Institute, Pennsylvania State University, USA
12:15		<i>First-principles study of (Ba,Ca)(Ti,Zr)O₃ solid solution</i> D. Amoroso (1,2), A. Cano (2) and Ph. Ghosez (1) 1) Physique Théorique des Matériaux, CESAM, Université de Liège (B5), B-4000 Liège, Belgium 2) ICMCB, UPR 9048, Université de Bordeaux, F-33600 Pessac, France
12:30		Lunch & free time for skiing or hiking
17:30		

Tuesday February 21th		
17:30		Coffee break
Winter School on Advanced Characterization of Piezoceramics Session 3. Chair: María Elena Montero Cabrera		
17:30	Lecture 4	<i>Mechanical Characterization of Piezoelectric Ceramics</i> Kyle G. Webber Friedrich-Alexander Universität Erlangen-Nürnberg, Department of Materials Science. Erlangen, Bavaria, Germany.
18:30		
Piezo2017 Session T3: Modelling Chair: Franck Levassort		
18:30	Keynote	<i>Virtual Instrument to obtain electrical model in piezoelectric elements used in Energy Harvesting</i> Francisco Javier Jiménez Martínez, Manuel Vázquez Rodríguez, David Alonso Sáez, José de Frutos Vaquerizo Universidad Politécnica de Madrid, Spain
19:00		<i>FEM modelling of interdigitated structures with respect to poling process</i> Ruichao Xu, Michele Guizzetti, Konstantin Astafiev, Erling Ringgaard Meggitt A/S, Kvistgaard, Denmark
19:15		<i>The Representation Of Coupling Interactions In The Material Properties Open Database (MPOD)</i> L. E. Fuentes-Cobas (1), D. Chateigner (2), G. Pepponi (3), S. Grazulis (4) (1) Centro de Investigación en Materiales Avanzados (CIMAV), Miguel de Cervantes 120, Complejo Industrial Chihuahua, Chihuahua 31136, Mexico (2) Normandie Université, IUT Caen, Université de Caen Normandie, CNRS UMR 6508 CRISMAT-ENSICAEN, F-14032 Caen, France (3) MiNALab, CMM-irst, Fondazione Bruno Kessler, 38123 Povo, Trento, Italy (4) Department of Mathematical Computer Science, Vilnius University, Faculty of Mathematics and Informatics, Naugarduko 24, LT-03225 Vilnius, Lithuania
19:30		
20:00		CONFERENCE DINNER
22:00		

Wednesday February 22th		
Piezo2017 Session W1: Advanced Characterization		
Chair: David Hall		
09:00	Invited talk	<i>The influence of non-stoichiometry and chemical doping on the electrical properties of Na_{1/2}Bi_{1/2}TiO₃ ceramics</i> Derek C Sinclair Functional Materials & Devices Group, Department of Materials Science & Engineering, University of Sheffield, Sheffield, UK.
09:45		<i>Influence of tetragonal platelets on the dielectric permittivity of 0.964Na_{1/2}Bi_{1/2}TiO₃-0.036BaTiO₃</i> Florian Pforr (1), Márton Major (1), Uwe Stuhr (2), Bertrand Roessli(2), Wolfgang Donner(1) 1. Institute of Materials Science, Technische Universität Darmstadt, 64287 Darmstadt, Germany 2. Laboratory for Neutron Scattering and Imaging, Paul Scherrer Institut, 5232 Villigen PSI, Switzerland
10:00		<i>POLARIZATION AND DEPolarIZATION EFFECTS ON STRESS DISTRIBUTION IN LEAD-FREE CERAMICS STUDIED BY RAMAN RESPONSE</i> Patricia Val Gómez, Adolfo del Campo García, Fernando Rubio Marcos, Jose Francisco Fernández Lozano, Alberto Moure Arroyo Electroceramics Department, Institute of Ceramics and Glass ICV-CSIC, Kelsen 5, 28049 Madrid, Spain.
10:15		coffee break
Winter School on Advanced Characterization of Piezoceramics		
Session 4.		
Chair: J. J. Gervacio-Arciniega		
10:45	Lecture 5	<i>Venice, Symmetry and Characterization of Functional Materials</i> Luis E. Fuentes-Cobas Centro de Investigación en Materiales Avanzados, S.C., Chihuahua, Chih. México.
11:45		Farewell session
12:30		BUS to MADRID (Chamartin Cercanías train station)

	Monday February 20th	18:30-19:30
	Piezo2017 Poster Session Chair: Jean-Jacques Boy	
P1	<p><i>PiezoMEMS in realistic environments</i> <u>Runar Plünnecke Dahl-Hansen</u> (1,2), Frode Tyholdt (2) and Per Thomas Martin Tybell (1) (1) Dep. Electronics and Telecommunication, Norwegian University of Science and Technology (NTNU), NO-7491 Trondheim, Norway (2) SINTEF MiNaLab, Gaustadalleen 23C, NO-0373 Oslo, Norway</p>	
P2	<p><i>Valuation of variations in piezoelectric constants after aging process</i> <u>Mariana del Castillo</u> (1), Flabio Buiochi (2) and Nicolás Pérez (1) 1 Universidad de la República, Facultad de Ingeniería, Instituto de Ingeniería Eléctrica. 11200 Montevideo, Uruguay. 2 Dpto de Engenharia Mecatrônica, Universidade São Paulo, 05508-010 São Paulo, Brazil.</p>	
P4	<p><i>Piezoelectrical properties of BNBT ceramics via self-switching PFM</i> <u>Oscar Solís-Canto</u>(1,2), María Elena Montero-Cabrera(1), Lorena Pardo(3) (1) Centro de Investigación en Materiales Avanzados (CIMAV), Chihuahua, Mexico (2) Laboratorio Nacional de Nanotecnología, Centro de Investigación en Materiales Avanzados (CIMAV), Chihuahua, Mexico (3) Instituto de Ciencia de Materiales de Madrid (ICMM), Spain</p>	
P5	<p><i>Characterization of Lead Free piezoelectric ceramic</i> <u>Nicolás Pérez</u> (1), Mariana del Castillo (1) and Lorena Pardo (2) 1 Universidad de la República, Facultad de Ingeniería, Instituto de Ingeniería Eléctrica. 11200 Montevideo, Uruguay. 2 Instituto de Ciencia de Materiales (ICCM), Consejo Superior de Investigaciones Científicas (SCIC), Cantoblanco, 28049 Madrid, Spain.</p>	
P6	<p><i>Effect of Ta on structure, microstructure and properties of K0.5Na0.5NbO3 ceramics sintered by various techniques.</i> F. Jean (1), M. Bah (1), F. Schoenstein (2), M. Zaghrioui (1), P. Marchet (3), J. Bustillo (1), F. Giovannelli (1), <u>J. Monot-Laffez</u> (1), (1) Laboratoire GREMAN UMR 7347, Université François Rabelais de Tours-CNRS-CEA-ENIVL, IUT de Blois 15 rue de la chocolaterie, CS 2903, 41029 Blois Cedex, France. (2) Laboratoire des Sciences des Procédés et des Matériaux, CNRS, LSPM – UPR 3407, Université Paris 13, Sorbonne Paris Cité, 99 Avenue J.B. Clément, 93430 Villetaneuse, France. (3) Laboratoire Science des Procédés Céramiques et de Traitements de Surface - Centre Européen de la Céramique, 12 Rue Atlantis, 87068 Limoges Cedex, France.</p>	
P7	<p>Homogenized electroelastic moduli of 1-3 piezocomposite with various pillar shapes Antoine Bale [1,2] , <u>Franck Levassort</u> [1] , Renald Brenner [3] , Anne-Christine Hladky-Hennion [2] [1] Université Francois-Rabelais, GREMAN UMR 7347 CNRS, 37071, Tours, FR [2] IEMN UMR 8520 CNRS, département ISEN, 59046 Lille, FR [3] Institut Jean Le Rond D'Alembert, CNRS-U. Pierre et Marie Curie, 75006 Paris, FR</p>	
P8	<p>MODELING OF THE MECHANICAL RESPONSE OF PIEZOELECTRIC STRUCTURES FROM MILLIMETER TO MICROMETER <u>M. Bavencoffe</u>(1), N. Tembhurnikar(1), B. Negulescu(2), J. Wolfman(2), G. Feuillard(1) (1)GREMAN, UMR CNRS 7347, INSA Centre Val de Loire, 3 rue de la Chocolaterie, 41034 Blois, France (2)GREMAN, UMR CNRS 7347, Université François Rabelais, Faculté des Sciences et Techniques, Parc de Grandmont, 37200 Tours, France</p>	
P9	<p><i>Optimization of synthesis of Bi4Ti3O12 platelets for templated grain growth of ceramics</i> <u>Angel Prato</u>, Pascel Marchet , Université de Limoges, SPCTS, UMR 7315, F-87000 LIMOGES</p>	

P10	<p><i>Reduction of PbO loss in PZT-cobalt ferrite composites through quite-fast sintering and its quantification by means of XRD analysis.</i></p> <p><u>Pietro GALIZIA</u>, Claudio CAPIANI, Carmen GALASSI CNR-ISTEC, Istituto di Scienza e Tecnologia dei Materiali Ceramici, I-48018 Faenza, ITALY</p>
P11	<p><i>Digital Image Correlation for piezoelectric strains characterisation</i></p> <p><u>Valentin Segouin</u>, Mathieu Domenjoud, Yves Bernard, Laurent Danuiel, GeePs Group of electrical engineering - Paris, UMR CNRS 8507, CentraleSupélec, Univ. Paris-Sud, Université Paris-Saclay, Sorbonne Universités, UPMC Univ Paris 06, 3 & 11 rue Joliot-Curie, Plateau de Moulon 91192 Gif-sur- Yvette CEDEX, France</p>
P12	<p><i>Influence of KBT on the structural and electrical properties of BCZT ceramics</i></p> <p><u>Mohammed Al-Aaraji</u> (1), Dr.David A. Hall (2)</p> <p>1-Ceramics and construction materials department, College of Materials Engineering, University of Babylon, Babylon, Iraq. 2- School of Materials, University of Manchester, Manchester, United Kingdom.</p>
P13	<p><i>Effect of dc bias and pO2 on the conductivity of undoped-BaTiO3 and Y-doped BaTiO3 Ceramics</i></p> <p><u>Adil Alshoaibi</u>, University Of Sheffield, United Kingdom</p>
P15	<p><i>Phase transformations and chemical heterogeneity in KNNS-BNKZ piezoceramics</i></p> <p><u>Jirapa Tangsritrakul</u> and David Hall School of Materials, University of Manchester, Oxford Road, Manchester, United Kingdom</p>
P16	<p><i>Dielectric, elastic and piezoelectric coefficients including all losses of lead-free Ba1-xCaxTi0.9Zr0.1O3 ceramics</i></p> <p><u>A. Reyes</u> (1), <u>L. Pardo</u> (2) <u>M.E. Villafuerte-Castrejón</u> (1), <u>A.García</u> (2) and <u>A.M.Gonzalez</u> (3) 1.Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México, Circuito Exterior S/N, A.P. 70-360, México, D.F. (Mexico) 2.Instituto de Ciencia de Materiales de Madrid. (ICMM-CSIC). c/ Sor Juana Inés de la Cruz, 3. Cantoblanco. 28049-Madrid (Spain) 3.CEMDATIC, ETSIS Telecomunicación, Campus Sur UPM, Ctra. De Valencia, km 7. 28031- Madrid (Spain)</p>
P18	<p><i>Lead-free Strontium and Lithium Doped Bismuth Sodium Titanate Ceramics for high power Energy Storage</i></p> <p><u>Jiyue Wu</u> (1,2), Amit Mahajan (1,2), Haixue Yan (1,2) and Mike J Reece (1,2)</p> <p>1. School of Engineering & Materials Science, Queen Mary University of London, Mile End Road, E1 4NS, London, United Kingdom 2. Nanoforce Technology Limited, London, Mile End Road, E1 4NS, London, United Kingdom</p>
P19	<p><i>Ba1-xCaxTiO3 Microwave-assisted hydrothermal synthesis</i></p> <p><u>P. Salcedo</u>(1), <u>E.Morán</u>(1), <u>M.E. Villafuerte-Castrejón</u>(2), <u>R. Vivar-Ocampo</u>(2), <u>L. Pardo</u>(3) 1. Dpt. Q. Inorgánica I. Fac. C. Químicas. Universidad Complutense de Madrid. 28040 Madrid, 2. Instituto de Investigaciones en Materiales. Universidad Nacional Autónoma de México. AP 70-360. México DF. CP04510. 3. Instituto de Ciencia de Materiales de Madrid. CSIC. Cantoblanco 28049 Madrid.</p>
P20	<p><i>Functional characterization of improved doped BaTiO3 piezoelectric Ceramics</i></p> <p><u>R. Ul</u>,(1-2) <u>M. Pham-Thi</u>,(2) <u>P. Marchet</u>,(3) <u>L-P. Tran-Huu-Hue</u>,(1) 1. GREMAN, INSA Centre Val de Loire, Rue de la Chocolaterie, Blois, France 2. Thales Research & Technology, Route Départementale, Palaiseau, France 3. SPCTS - UMR CNRS 7315, Centre Européen de la céramique, 12 Rue Atlantis, Limoges, France</p>