

Poster Session

Symposium A: Synthesis of powders

A1	Transition between two solid-solutions: effective and easy way for fine Ce1-xGdxO2-x/2 powders preparation	Adam Alemayehu
A2	Microfluidic synthesis of amino- and carboxyl-functionalized magnetite nanoparticles	Cristina Chircov
A3	Powder based on ReB2	Kinga Czechowska
A4	Preliminary Study of the Cold Sintering Process (CSP) for Geopolymer Powders	Lorenzo Lattanzi
A5	Low-temperature synthesis of britholite-(La) by sol-gel method	Thanyarat Phutthaphongloet
A6	Bio-inspired nanoplatelet-like particles of hydroxyapatite	Nilza Ribeiro
A7	Novel MAB phases	Jan Stomiński
A8	Synthesis of high entropy carbide (Ti, Zr, Hf, Nb, Ta)C	Pavlina Šolcová
A9	Homogeneous precipitation of lanthanide oxalates	Anastasiya Zakhharanka
A10	Effects of temperature, aging time, and method of introducing stabilizer oxide into solid solution on properties of Mg-PSZ materials	Marek Grabowy

Symposium B: Ceramic processing

B1	Exploring the potential of Calcium (CaO) dopant for the stabilization of Tetragonal and Cubic ZrO2 nanoceramics as an alternative to Yttria (Y2O3)	Aditya Arun
B2	Role of atmosphere during flash sintering of NiO/8YSZ composite	Subhadip Bhandari
B3	New water-thinnable acrylic polymeric binders in processing of BST/polymer composites	Weronika Bulejak
B4	LTC tapes for a new generation of SICER silicon-ceramics composite substrates	Beate Capraro
B5	The study of diamond regrowth in High-Pressure High-Temperature sintered polycrystalline diamond materials	Tuoran Chen
B6	The investigation of ZnO dopant on flash sintering of 3YSZ: Grain growth with electrochemical reactions	Ammar Eqbal
B7	Mechanical activation and HIP of ZrB2-TiB2 based composites for hypersonic system	Suzana Filipović
B8	Homogeneous densification of large YSZ cylinders by Flash Sintering	Caroline Gajdowski
B9	Ceramic cores for reproducing internal cooling channels in high pressure turbine aircraft blades	Magdalena Gromada
B10	Reactive Laser Sintering of SiC coatings on Inconel 625 substrate	Jan Huebner
B11	Microstructural evolution of Inconel 625 - WC system in different heating condition	Jan Huebner
B12	Obtaining high fire resistance, backing material clinker using local raw materials - dolomite, quartz ore sand (Georgia) and production waste	Zviad Kovziridze
B13	Ceramic-graphene composites obtained by slip casting: rheological studies and analysis of possible interactions	Michał Kukielski
B14	'Shape strain' in Nanoceramics	Lakshaman Kumar
B15	Influence of temperature gradients on flash sintering onset and quality	Daniil Lewin
B16	Discontinuous Powder Aerosol Deposition Method: Formation of ceramic films at room temperature using small powder quantities	Mario Linz
B17	Flash sintering of BZT-BCT ceramics: tuning the microstructure for properties enhancement	Samuel López Blanco
B18	Hard ferromagnetic ink-jet printed CoFe2O4 thin films	Marco Mariani
B19	Shaping KNN powder by binder jetting	Marco Mariani
B20	Novel approach to fabrication of porous polymer-derived SiOC ceramics by 3D printing of High Internal Phase Emulsions	Jan Mrówka
B21	Impact of high-energy ball milling on piezoelectric properties of the "lead-free" BCZT (Barium Calcium Zirconate Titanate) piezoceramics	Marzia Mureddu
B22	Understanding the flash sintering mechanisms through the electric current parameterization	Diego Alejandro Ochoa Guerrero
B23	Optimization of Si3N4-based feedstock for direct ink writing	Susana Olhero
B24	Effect of printing variables on the voids elimination for manufacturing highly dense bulk mullite-based ceramics via Fused Filament Fabrication	Martina Orlovská
B25	Effect of feedstock properties and process parameters on the quality of parts prepared with thermoplastic 3D printing	Ipeknaz Özden
B26	Additive manufacturing of feldspar for tooth implants by layerwise slurry deposition	Nicole Panzier
B27	Effect of microwave heating on spinel formation	Clémence Petit
B28	Conventional and high-speed microwave sintering of robocast porcelain	Clémence Petit
B29	Development of a New Range of Large Ceramic Tiles in Bla-group Stoneware Technology conforming to EN 14411, with Unique Full-body Ornaments Resembling the Patterns of Natural Materials, Including e.g. Stone of Wood	Anna Poddebniak
B30	Reactive sprak plasma sintering of B4C composites using B4C-Ti-B powder mixtures	Goire Revathi
B31	FLASH sintering applied to porcelain production: Development of Processing Maps	Camila Ribeiro
B32	Laser surface modification of Inconel 625 by molybdenum and titanium carbides	Paweł Rutkowski
B33	The microhardness improvement of titanium alloy by ZrO2 particles addition	Paweł Rutkowski
B34	Spark plasma sintering of Inconel 625 - TiZr mixed carbides	Paweł Rutkowski
B35	ZrO2-Mo composites fabricated by aqueous colloidal processing with the use of metallic precursor	Joanna Tańska
B36	SLA printed part exhibiting biomimetic nacre like structure	Amélie Touvet
B37	Fused Deposition Melting of Carbon Fibre Reinforced Ultra-High Temperature Ceramics Matrix Composites	Daorong Ye
B38	A novel approach to processing of doped hafnia ceramics	Laurent Brissonneau
B40	Novel hybrid method to additively manufacture graphite structures by Binder Jetting	Daniel Safranchik
B41	Structural Investigation of 3D Printed Reaction Bonded Silicone Carbide	Denis Zolotaryov
B42	Processing and mechanical evaluation of oxide-oxide ceramic matrix composites manufactured using automated fibre placement	Thomas Nelson

Symposium C: Modelling, Simulation, characterization and digitalization of materials and processes

C1	Dark-Field X-ray microscopy for the determination of oxygen vacancies	Antonella Gayoso Padula
C2	Can indentation cracks describe residual/internal stresses in Al2O3/ZrO2 laminates?	Hynek Hadraba
C3	Structural changes of Al2TiO5 - MgTi2O5 solid solutions resulting from heterogeneous nucleation	Kamil Kornaus
C4	Processing variables influencing the relative density of Alumina-Zirconia ceramic materials: statistical evidence learned from the literature	Susana Olhero

Symposium D: Structural ceramics / Ceramic coatings / Porous ceramics

D1	Improvements to the performance of alumina-based ceramics through the reaction sintering of alumina-mullite nanocomposites	Douglas Andrews
D2	Investigation of energy harvesting properties in porous Ba0.85Ca0.15Ti0.90Zr0.10O3 ceramics with enhanced piezoelectric figure of merits	Cristina Ciomaga
D3	Taguchi's method applied to manufacture of porous alumina by reactive spark plasma sintering and sacrificial carbon template	Manuela González-Sánchez
D4	Dielectric strength analysis of Al2O3 anodic layer deposited on Al substrate	Mykola Maksymuk
D5	Interface optimization of hybrid polymer-ceramic microdevices for transdermal applications.	Susana Olhero
D6	Utilization of waste diatomaceous earth for cellular glass fabrication	Martin Sedláčik
D7	Characterization of transparent conducting ITO-Al2O3 composite thin films deposited by aerosol deposition	Kazuki Shinozuka
D8	Mechanical properties and hydrothermal aging of AlZr composites prepared from zirconia powders with different yttria content	Agnieszka Wilk
D9	Microstructural evaluation of zinc oxide thin films deposited by aerosol deposition method	Yumeng Zheng

Symposium E: Functional ceramics

E1	Ferroelectric properties and phase transitions dynamics of Ag1-xLixNbO3 (x≤0.08) ceramics	Juras Banys
E2	Spectroscopic investigation of glassy carriers of cobalt ions for plants	Anna Berezicka
E3	Photoluminescence studies of Eu- and Tb-doped (1-x)Na0.5Bi0.5TiO3 - xBaTiO3 ceramics	Vincenzo Buscaglia
E4	Effect of Zr content on the wetting of BaTi1-xZrxO3 perovskites by Ag-based liquids	Vincenzo Buscaglia
E5	Towards a light-driven actuator based on ferroelectric ceramics	José E. García
E6	UHTC composites in the system 40% vol. ZrB2-40% vol. HfB2-20% vol. MX (MX= SiC, B4C, WC, MoSi2 and CrSi2)	Agnieszka Gubernat
E7	Broadband dielectric investigations of 0.7BFeO3-0.3BaTiO3 ceramics	Vadzim Haronin
E8	Revealing defects and domains in bulk ferroelectrics with dark-field X-ray microscopy	Marion Höfling
E9	Microstructure properties and thermal conductivity of PbTe nanopowder prepared by Pulsed Plasma in Liquid technique	Rafal Knura
E10	Obtaining and Study Nanocomposites in the B4C-SiC-Si-Al-Al2O3 -Carbon fiber System	Zviad Kovziridze
E11	Investigation of electrical properties of potassium sodium niobate ceramics obtained via the sol-gel method	Marta Lubszyk
E12	Nanogenerators based on BaTiO3/PDMS composites for high-frequency applications	Darya Meisak
E14	How the addition of chemically synthesized powder affects the final properties of KNN ceramics	Elisa Mercadelli
E15	Robocasting of Alkaline Niobate-based Piezoelectric Ceramics	Mahmoud Mobin
E16	Effect of B2O3 and/or Sb2O3 addition on microwave dielectric properties of Ba(Mg1/3Ta2/3)O3	Kento Onogi
E17	Synthesis and characterization of 0.15SrTiO3-0.85BaTiO3.95Zr0.05O3 composites	Leontin Padurariu
E18	BaTiO3 - CoFe2O4 unsintered magnetolectric composites	Aryom Plyushch
E19	Paper-templated, porous piezoceramics as functional platforms	Kevin Pree
E20	Scanning Thermoelectric Microscope - characterization of electronic properties of functional materials	Maja Sajdak
E21	Quantitative mapping of nanotwin variants in the bulk of ferroelectric/ferroelastic materials	Jan Schultheiß
E22	BaTiO3-based thermistor hollow fibers prepared using a phase inversion spinning process for energy efficient gas sorption	Michael Stuer
E23	Magnetic performance of SrFe12O19 magnets consolidated by Sintering by Intense thermal radiation (SITR)	Aleksander Učakar
E24	Synthesis and Photoluminescent Properties of Pr3+-Doped (Ba,Ca)Ti3Zr(1-x)O3 Perovskite Diphasic Ceramics Obtained by the Modified Pechini Method	Agnieszka Wilk
E25	Effect of sintering temperature on microstructure and thermoelectric properties of pure and Al-doped n-type ZnO	Alan Wilmański
E26	Fabrication and Evaluation of Composites of Sendust-Al2O3	Yoshiaki Yamane
E27	Thermoelectric Properties and Phase Analysis of Cu-Rich Tetrahydrite Prepared by Solvothermal Synthesis	Karolina Zazakówny
E30	Synthesis and characterization of 50% vol. GdIG-50% vol. YIG ceramic material fabricated by a new reactive sintering method	Magdalena Stan

Symposium F: Electronic Ceramics

F1	Broadband dielectric spectroscopy of BaTi1-xSnxO3 solid solutions	Jūras Banys
F2	Ultra-thin zirconia diaphragm for electromechanical sensors	Achim Bittner
F3	Analytical modeling of the effective properties of lead-free piezoelectric ceramics	Soňa Hříbalová
F4	Investigation of Structural Properties of Celsian Ceramics in the BaO-Al2O3-SiO2 System	Zviad Kovziridze
F5	Elaboration of complete PCFCs and study of their performances	Victoire Lescure
F6	Tuning the Electro-Catalytic Properties of Mixed Conducting Perovskite-Type Oxides	Melanie Maurer
F7	Investigation of the transport mechanism in (Ba)0.5(La)0.5(Co)0.5-x(Fe)0.5(Zn)0.5-xO3-δ	Francis Oseko
F8	Characterization and stability of metal exsolved perovskites as sofc electrodes	Juan Carlos Pérez-Flores
F9	The role of the electrolyte for the oxygen exchange mechanism close to the triple phase boundary of Pt YSZ microelectrodes	Kirsten Rath
F10	Composition-dependent characteristics of sol-gel BaTi1-xHfxO3 ceramics	Cătălina-Andreea Stanciu
F11	Temperature dependent dielectric behavior of (Ba,Sr)TiO3 solid solutions sintered from sol-gel derived powders	Cătălina-Andreea Stanciu
F12	Tuning Oxygen Non-Stoichiometry in Spark Plasma Sintered LiNi0.5Mn1.5O4 High Voltage Cathode Materials	Michael Stuer
F13	Laminated lithium-conducting oxide ceramics for use as solid state electrolytes	Leonhard Tannesia
F14	Developing Composition Stability of La0.6Sr0.4Co0.8Fe0.2O3-δ (LSCF) Under Reducing Conditions by Molybdenum Doping for Anode Applications in LT-SOFCs	Kimia Yousefi Javan
F15	The effect of synthesis method and Sr-dopant amount on the electrical conductivity of strontium-doped lanthanum manganites	Andreja Žužič

Symposium G: Ceramics for energy and environmental technology / Membranes

G1	The effect of manganese dioxide on dielectric properties of 0.3BT - 0.1BMT - 0.6BF composite	Sergejus Balčiūnas
G2	Synthesis method as a factor controlling phase composition and ionic conductivity of Na3Zr2Si2PO12 NASICON - Towards improved electrolyte for sodium-metal solid state battery	Aleksandra Boroi
G3	Synthesis and characterization of Nano TiO2/Expanded Perlite applied to the photocatalytic degradation of 4-nitrophenol	Antonia Ekonomakou
G4	Improved performance of Ni-rich NMC using a chemically activated coating process	Yiran Guo
G5	High power factor in isovalently substituted Ca3Co4O9 ceramic through a rapid preparation method	María A. Madre
G6	Deep eutectic solvents as possible electrolytes for Al-ion cells	Magda Mączka
G7	Suppression of interfacial reactions in lithia-based cathodes for lithium ion batteries	Yong Joon Park
G8	The influence of preparation conditions and microstructure of hydrothermally derived MnO2 electrode materials on electrochemical performance of pseudocapacitors	Paweł Pasierb
G9	TiO2 nanotubes on translucent spinel substrate: degradation of different pollutants under UVA irradiation in water	Patricia Petrisková
G10	Phase relationships, electrical transport properties and redox behavior of oxides in the PrVO4-Ca2V2O7 system for SOFC applications	Rui Pinto
G11	Formation mechanism of organosilica layers towards periodic porosity	Marie Alix Pizzocaro-Zilamy
G12	Substrate-induced modification of microstructure and thermoelectric properties in Sr-doped Ca3Co4O9 thick films	Andres Sotelo
G13	Thorough understanding of degradation in composite CO2 separation membranes	Maksim Starykevich
G14	Investigation and characterization of SrTiO3 thin films for high temperature solar cells	Stefanie Taibl
G15	Alginate-derived activated carbon hybridized with NiMn2O4 for use in supercapacitors	Milena Dojcinovic

Symposium H: Ceramics and glasses for healthcare, Bioceramics and Optical ceramics, Bio-Electroceramics

H1	Ceramic 3D printing with adjustable multi-scale porosities	Gyubin Choe
H2	Influence of ceramic slurry composition on the physicochemical properties of bioceramic scaffolds	Ewelina Cichoń
H3	Modification of the surface layer of silicon nitride using oxyacetylene flame	Guido Manuel De la Torre Olvera
H4	YAG-based transparent ceramics: study of nanopowders synthesis by batch or continuous co-precipitation	Florian Delaunay
H5	Co and Zn co-doped bioactive glasses: comparison between standard sol-gel method and sol-gel combined with solvent evaporation-induced self-assembly (EISA) synthesis	Michał Dziadek
H6	Photocurable 3D plotting technique for microporous shell / hollow core hydroxyapatite scaffolds using core-shell feedrod	Jong Won Jeon
H7	Production of high translucent 5Y PSZ dental applications with high strength using DLP technique	Jaemin Jung
H8	Characterization and Environmental-friendly preparation of Calcium-Silicates	Maroua Houria Kaou
H9	Local controlled "Cancerthermia" for treating cancer diseases	Zviad Kovziridze
H10	Surface modification of boron-rich boron carbide as a potential carrier in Boron Neutron Capture Therapy	Dawid Kozień
H11	Influence of various liquid phases on properties of α-TCP based bioactive bone cements	Piotr Pańtak
H12	YAG-based transparent ceramics: comparison between HIP and SPS post-sintering treatments	Francesco Picelli
H13	Biological evaluation of ZrO2 ceramic scaffolds with biomimetic and nanoparticle coating as drug delivery systems	Iwona Pudelko
H14	Optimization of additively manufactured Si/Hydroxyapatite scaffolds by selective laser melting for bone tissue engineering applications	Antonia Ressler
H15	Toughening robocast chitosan/ceramic composite scaffolds with silk fibroin	Nilza Ribeiro
H16	Borate bioactive glasses: the effect of synthesis method on structural and bioactive properties	Szymon Sklagierski
H17	Composite scaffolds based on β tricalcium phosphate and short and medium chain length polyhydroxyalkanoates for bone tissue regeneration	Szymon Skabiński
H18	Structural role of sulfur in the soil active glasses	Justyna Sułowska
H19	LiF as a luminescence component of the oxyfluoride glass and glass-ceramics	Marcin Środa
H20	Production and characterisation of dense Nd: Y2O3 ceramics as a potential candidate for a solid-state laser	Łukasz Zych
H21	Boron carbide nanoparticles as potential carriers in boron-neutron capture therapy - physicochemical characterization	Paulina Żeliszewska

Symposium I: HT materials / Refractories / Composites

I1	Additive manufacturing of CMCs by Direct Ink Writing	Filippo Da Rin Betta
I2	Magnetic Biasing and Magnetocaloric Effect in a Large Temperature Window in Magnetic Composite of Alloy and Oxide	Subhadeep Datta
I3	Development of new tool materials synthesized from WC-Ti composite powders by HEBM and SPS	Dariusz Garbiec
I4	Efficient experimentally-based exploration of the High Entropy Alloys as fillers, brazers and coating materials for CMCs: the FCC-CoCrFeMnNi alloy as case study	Donatella Giuranno
I5	Wetting, interfacial reaction and joining of monolithic SiC and Cf/SiC composites by ZrSi2 alloy	Naser Hosseini
I6	The reactive sintering composites of B4C with additives consolidated by hot-pressing and pressureless sintering	Dawid Kozień
I7	Modification of the microwave heating properties of alumina fibre preforms by microwave absorbing coatings	Zhongmin Li
I8	Thermoelectric properties of conductive polymer/ceramic composites	Adrianna Lis
I9	High Performance Steel Ceramic Composites for Refractory Applications in Molten Aluminum Alloys	Piotr Malczyk
I10	Enhancement of reduced remanent and magnetic energy product through exchange spring phenomenon in BaFe12O19+CoFe2O4 composite	Murli Kumar Manglam
I11	Synthesis of fireproof gels based on organic polymers and soluble silicates	Joanna Mastalska-Popławska
I12	Oxidation of Fe-16Cr ferritic steel modified with gadolinium oxide nanoparticles in different atmospheres	Łukasz Mazur
I14	SiC materials based on binder from MgO-SiO2-H2O phase system	Ryszard Prorok
I15	Spark plasma sintering of B4C-boride ceramics	Paweł Rutkowski
I16	Pressureless and spark plasma sintering of composites in B4C-Ta-B system	Paweł Rutkowski
I17	Development of a shear thinning gel for the purpose of composite production	Becky Steadman
I18	The RF-CVI Optimization on Cf/ZrB2 Composites Production	Shaokai Tang
I19	Ceramic Matrix Composites (CMCs) for Ultra High Temperature Applications	Ertug İhsan Tanisan
I20	Effect of stoichiometry of magnesium-aluminum spinel on mechanical and thermomechanical properties of no-cement and ultra-low cement refractory castables	Karina Warmuz
I21	The Influence of High Temperature on the SiC/SiC Composites	Paulina Wójcik
I22	Polymer Derived Ceramics For High Temperature Applications	Muhammed Younas
I23	Polymer-derived Ultra-High Temperature Ceramic Matrix Composites	Elia Zancan
I24	Theoretical predictions and synthesis of high-entropy diboride systems with different molar ratios of transition metals	Inga Zhukova

Symposium J: Silicate/Traditional ceramics, Arts + Design

J1	Decreasing Usage of Zinc Oxide and Zircon in Sanitaryware Glazes	Ebru Çırakman
J2	Determination of the subcritical crack growth parameters in C130 electroporcelain	Michał Krasnopolski
J3	Processing and properties of use of porous silicate ceramics using kaolinic and illitic clay with peanut shells addition	Gisele Lecomte-Nana
J4	Physical, chemical and thermal properties of fly ashes with various grain sizes	Paweł Murzyn
J5	Scale and Agglomeration dust for preparing ceramic glaze	Hana Ovčáčíková
J6	An impact of strontium oxide addition on the crystallization of zirconium glazes	Katarzyna Pasiut
J7	Characteristics of ceramic masses as materials for the construction of a violin resonance body	Katarzyna Pasiut
J8	Development of an innovative, environment-friendly production technology of large-format, deeply structured ceramic tiles using a pioneering method of recycling green scraps generated at the product forming stage	Izabela Puchyrska
J9	Suitability research of waste material from hard coal beneficiation process in the production of traditional porous ceramics	Michał Pyzalski
J11	Elastic property evolution of silicate ceramics in the CaO-Al2O3-SiO2 system determined via temperature-dependent impulse excitation	Petra Šimonová
J12	The impact of the addition of different grain size of limestone to cream-firing clays on the color properties of sintered ceramics	Kornelia Wiśniewska
J13	Ring shear based powder analyzer as a device for testing the rheological properties of granules for the production of ceramic tiles	Łukasz Wójcik