



Prof Michael Reece

BSc, PhD, PGCE, MIMMM, FECerS

School of Engineering and Materials Science Queen Mary University of London Mile End Road London E1 4NS

tel: +44 (0)20 7882 8732 email: m.j.reece@qmul.ac.uk web: www.sems.qmul.ac.uk/m.j.reece

2025

High-temperature compressive behaviour and failure mechanism of high entropy carbides modified by Cr addition.

. Materials Science and Engineering: A vol. 920, 147532-147532. Elsevier Bv.

2024

Ecofriendly and low-cost high-entropy sulfides with high thermal stability and ZT>1 via entropy engineering and anion compensation.

. Nano Energy vol. 131, 110288-110288. Elsevier Bv.

The effect of configurational entropy and refractory elements on the oxidation behaviour of high entropy carbides containing up to eight refractory elements.

. Ceramics International vol. 50, (23) 51589-51595. Elsevier Bv.

Enhanced thermoelectric performance of p-type BiSbTe through incorporation of magnetic CrSb.

. Applied Physics Letters vol. 125, (20). Aip Publishing.

Porous Thermoelectric Materials for Energy Conversion by Thermoelectrocatalysis.

. Energy Technology. Wiley.

Processing and characterisation of hot rolling pressed PVDF films with enhanced field-induced polarisation.

. Polymer vol. 302,.

Temperature and composition insensitivity of thermoelectric properties of high-entropy half-heusler compounds.

. Acta Materialia vol. 268, 119761-119761. Elsevier Bv.

Joining of C/C composite with high entropy alloy interlayers via spark plasma sintering and its mechanical strength at 1600.

. Journal of The European Ceramic Society vol. 44, (2) 815-821. Elsevier Bv.

Enhancing the thermoelectric properties of TiO2-based ceramics through addition of carbon black and graphene oxide.

. Carbon vol. 216, 118509-118509. Elsevier Bv.

2023

Improved oxidation resistance of (Zr-Nb-Hf-Ta)(C, N) high entropy carbonitrides.

. Corrosion Science vol. 225, 111583-111583. Elsevier Bv.

Carbon deficiency introduced plasticity of rock-salt-structured transition metal carbides.

. Journal of Materials Science & Amp; Technology vol. 164, 205-214. Elsevier Bv.

Joining graphite with ZrHfNbTa and TiZrHfTa high entropy alloy interlayers by spark plasma sintering.

. Journal of Materials Processing Technology vol. 320, 118102-118102. Elsevier Bv.

Simultaneous Increase in Dielectric Breakdown Strength and Thermal Conductivity of Oriented UHMWPE Containing Diamond Nanoparticles.

. Macromolecules. American Chemical Society.

An overview of oxidation in hybrid and glass-based protective coatings for thermoelectric materials for medium-temperature range applications.

. Advances in Applied Ceramics: Structural, Functional and Bioceramics vol. 122, (5-8) 276-286. Sage Publications.

Time dependent deformation of LaCoO3 based perovskites at different temperatures: ferroelastic and non-ferroelastic creep behaviour.

. Advances in Applied Ceramics: Structural, Functional and Bioceramics vol. 122, (5-8) 295-310.Sage Publications.

Machine learning of carbon vacancy formation energy in high-entropy carbides.

. Journal of The European Ceramic Society vol. 43, (4) 1315-1321. Elsevier Bv.

High-entropy MTiO3 perovskite oxides with glass-like thermal conductivity for thermoelectric applications.

. Journal of Alloys and Compounds vol. 937,. Elsevier.

Optimization of thermoelectric properties of carbon nanotube veils by defect engineering.

. Materials Horizons vol. 10, (9) 3601-3609. Royal Society of Chemistry (Rsc).

2022

Ultra-low energy processing of graphite: a fast-track journey towards carbon neutrality.

. Applied Materials Today vol. 29, 101594-101594. Elsevier Bv.

Grain orientation evolution and multi-scale interfaces enhanced thermoelectric properties of textured Sr0.9La0.1TiO3 based ceramics.

. Journal of The European Ceramic Society vol. 42, (15) 7017-7026. Elsevier.

Terahertz Faraday Rotation of SrFe12O19Hexaferrites Enhanced by Nb Doping.

. Acs Applied Materials and Interfaces vol. 14, (41) 46738-46747.

The role of Cr addition on the processing and mechanical properties of high entropy carbides.

. Journal of The European Ceramic Society vol. 42, (13) 5273-5279. Elsevier Bv.

Low thermal conductivity in A-site high entropy perovskite relaxor ferroelectric.

. Applied Physics Letters vol. 121, (11). American Institute of Physics.

Dielectric polymer composites with ultra-high thermal conductivity and low dielectric loss.

. Composites Science and Technology vol. 229, Elsevier.

A novel high-entropy perovskite ceramics Sr0.9La0.1(Zr0.25Sn0.25Ti0.25Hf0.25)O3 with low thermal conductivity and high Seebeck coefficient.

. Journal of The European Ceramic Society vol. 42, (8) 3480-3488. Elsevier.

Ablation behavior of (HfTaZrNbTi)C highentropy carbide and (HfTaZrNbTi)CxSiC composites.

. Journal of The American Ceramic Society vol. 105, (10) 6395-6406. Wiley.

Ablation behaviour of (Hf-Ta-Zr-Nb)C high entropy carbide ceramic at temperatures above 2100C.

. Journal of Materials Science & Amp; Technology vol. 113, 40-47. Elsevier Bv.

Synthesis, microstructure, and mechanical properties of novel high entropy carbonitrides.

. Acta Materialia vol. 231, 117887-117887. Elsevier Bv.

Low-cost Free-standing ferroelectric polymer films with high polarization produced via pressing-and-folding.

. Journal of Materiomics vol. 8, (3) 640-648. Elsevier.

The effects of dual-doping and fabrication route on the thermoelectric response of calcium cobaltite ceramics.

. Journal of Alloys and Compounds vol. 902, 163819-163819. Elsevier Bv.

Fabrication and characterisation of single-phase Hf2Al4C5 ceramics.

. Journal of The European Ceramic Society vol. 42, (4) 1292-1301. Elsevier Bv.

Synthesis and densification of (Zr-Hf-Nb-Ta)C-Co high entropy cermet prepared by pressureless melt infiltration using spark plasma sintering.

. Journal of Alloys and Compounds vol. 900, 163412-163412. Elsevier Bv.

Phase transformations in an Aurivillius layer structured ferroelectric designed using the high entropy concept. . Acta Materialia 117815-117815. Elsevier.

Thermal and electrical properties of a high entropy carbide (Ta, Hf, Nb, Zr) at elevated temperatures.

. Journal of The American Ceramic Society vol. 105, (6) 4426-4434. Wiley.

Thermoelectric Performance of n-Type Magnetic Element Doped Bi2S3.

. Acs Applied Energy Materials vol. 5, (3) 3845-3853. American Chemical Society (Acs).

Synthesis and thermoelectric properties of high-entropy half-Heusler MFe1xCoxSb (M = equimolar Ti, Zr, Hf, V, Nb, Ta).

. Journal of Alloys and Compounds vol. 892, 162045-162045. Elsevier Bv.

High-entropy (Ca0.2Sr0.2Ba0.2La0.2Pb0.2)TiO3 perovskite ceramics with A-site short-range disorder for thermoelectric applications.

. Journal of Material Science and Technology vol. 97, 182-189. Elsevier.

High-Entropy Ceramics.

. Encyclopedia of Materials: Metals and Alloys 308-317. Elsevier.

Ultra-high energy density integrated polymer dielectric capacitors.

. Journal of Materials Chemistry A vol. 10, (18) 10171-10180. Royal Society of Chemistry (Rsc).

2021

A review on advances in doping with alkali metals in halide perovskite materials.

. Discover Applied Sciences vol. 3, (12). Springer Nature.

Terahertz Characterization of Lead-Free Dielectrics for Different Applications.

. Acs Applied Materials & Interfaces vol. 13, (45) 53492-53503. American Chemical Society (Acs).

Hardness anisotropy and active slip systems in a (Hf-Ta-Zr-Nb)C high-entropy carbide during nanoindentation.

. International Journal of Refractory Metals and Hard Materials vol. 100, 105646-105646. Elsevier Bv.

Flash Spark Plasma Sintering of SiC: Impact of Additives.

. Silicon vol. 14, (12) 7377-7382. Springer Science and Business Media Llc.

Ultrafast high-temperature sintering (UHS) of fine grained -Al2O3.

. Journal of The European Ceramic Society vol. 41, (13) 6626-6633. Elsevier Bv.

Thermally-insulated ultra-fast high temperature sintering (UHS) of zirconia: A master sintering curve analysis.

. Scripta Materialia vol. 203, 114076-114076.Elsevier Bv.

Solidification microstructures of multielement carbides in the high entropy Zr-Nb-Hf-Ta-Cx system produced by arc melting.

. Scripta Materialia vol. 203, 114091-114091.Elsevier Bv.

Densifying (Hf0.2Zr0.2Ta0.2Nb0.2Ti0.2)C highentropy ceramics by twostep pressureless sintering.

. Journal of The American Ceramic Society vol. 105, (1) 76-81. Wiley.

Scalable and environmentally friendly mechanochemical synthesis of nanocrystalline rhodostannite (Cu2FeSn3S8).

. Powder Technology vol. 388, 192-200. Elsevier Bv.

Strength Analysis and Stress-Strain Deformation Behavior of 3 mol% Y-TZP and 21 wt.% Al2O3-3 mol% Y-TZP.

. Materials vol. 14, (14) 3903-3903. Mdpi Ag.

Low temperature densification mechanism and properties of Ta1-Hf C solid solutions with decarbonization and phase transition of Cr3C2.

. Journal of Materiomics vol. 7, (4) 672-682. Elsevier Bv.

Enhanced mechanical and thermal properties of ferroelastic high-entropy rare-earth-niobates.

. Scripta Materialia vol. 200, 113912-113912.Elsevier Bv.

Effect of Loading and Heating History on Deformation of LaCoO3.

. Materials vol. 14, (13) 3543-3543.Mdpi Ag.

Pressureless sintering and properties of (Hf0.2Zr0.2Ta0.2Nb0.2Ti0.2)C high-entropy ceramics: The effect of pyrolytic carbon.

. Journal of The European Ceramic Society vol. 41, (6) 3823-3831. Elsevier Bv.

Pressure assisted flash sintering of Mn-Co based spinel coatings for solid oxide electrolysis cells (SOECs).

. Ceramics International vol. 47, (12) 17804-17808. Elsevier Bv.

A review of electromagnetic processing of materials (EPM): Heating, sintering, joining and forming.

. Journal of Materials Science & Amp; Technology vol. 69, 239-272. Elsevier Bv.

Dual-phase rare-earth-zirconate high-entropy ceramics with glass-like thermal conductivity.

. Journal of The European Ceramic Society vol. 41, (4) 2861-2869. Elsevier Bv.

Oxidation resistance of (Hf-Ta-Zr-Nb)C high entropy carbide powders compared with the component monocarbides and binary carbide powders.

. Scripta Materialia vol. 193, 86-90.Elsevier Bv.

Pyrochlore-fluorite dual-phase high-entropy ceramic foams with extremely low thermal conductivity from particle-stabilized suspension.

. Scripta Materialia vol. 194, 113714-113714.Elsevier Bv.

Thermoelectric CuS-Based Materials Synthesized via a Scalable Mechanochemical Process.

. Acs Sustainable Chemistry & Amp; Engineering vol. 9, (5) 2003-2016. American Chemical Society (Acs).

Effect of processing on the structures and properties of bismuth sodium titanate compounds.

. Journal of Materials Research 1-11. Springer.

Multi elements substituted Aurivillius phase relaxor ferroelectrics using high entropy design concept.

. Materials and Design 109447-109447. Elsevier.

ZrB2, HfB2, OsB2 and IrB2 Boride Ceramics: Processing, Structure, and Properties.

. Encyclopedia of Materials: Technical Ceramics and Glasses 200-215. Elsevier.

Response to comment on point defect structure of La-doped SrTiO3 ceramics with colossal permittivity.

. Scripta Materialia vol. 190, 118-120.

Ultra-low thermal conductivity and enhanced mechanical properties of high-entropy rare earth niobates (RE3NbO7, RE = Dy, Y, Ho, Er, Yb).

. Journal of The European Ceramic Society vol. 41, (1) 1052-1057. Elsevier Bv.

Fast synthesis of n-type half-heusler TiNiSn thermoelectric material.

. Scripta Materialia vol. 191, 71-75.Elsevier Bv.

2020

Ultrafast Electric Field-Induced Phase Transition in Bulk Bi0.5Na0.5TiO3 under High-Intensity Terahertz Irradiation.

. Acs Photonics. American Chemical Society.

Flash cold sintering: Combining water and electricity.

. Journal of The European Ceramic Society vol. 40, (15) 6266-6271. Elsevier Bv.

Electronic structure and thermal properties of Sm3+doped La2Zr2O7: Firstprinciples calculations and experimental study.

. Journal of The American Ceramic Society vol. 104, (3) 1475-1488. Wiley.

High Tunability and Low Loss in Layered Perovskite Dielectrics through Intrinsic Elimination of Oxygen Vacancies.

. Chemistry of Materials. American Chemical Society (Acs).

Low-loss High Entropy Relaxor-like Ferroelectrics with A-site Disorder.

. Journal of The European Ceramic Society. Elsevier.

Small scale fracture and strength of high-entropy carbide grains during microcantilever bending experiments.

. Journal of The European Ceramic Society vol. 40, (14) 4774-4782. Elsevier Bv.

The role of multi-elements and interlayer on the oxidation behaviour of (Hf-Ta-Zr-Nb)C high entropy ceramics.

. Corrosion Science vol. 176, 109019-109019. Elsevier Bv.

$Multiscale\ understanding\ of\ electric\ polarization\ in\ poly(vinylidene\ fluoride)-based\ ferroelectric\ polymers.$

. Journal of Materials Chemistry C.Royal Society of Chemistry.

Enhancing the Thermoelectric Performance of Calcium Cobaltite Ceramics by Tuning Composition and Processing.

. Acs Applied Materials & Amp; Interfaces vol. 12, (42) 47634-47646. American Chemical Society (Acs).

Hybrid Flash-SPS of TiNiCu0.05Sn with reduced thermal conductivity.

. Journal of Alloys and Compounds vol. 837, 155058-155058. Elsevier Bv.

Oxidation protective glass coating for magnesium silicide based thermoelectrics.

. Ceramics International vol. 46, (15) 24312-24317. Elsevier Bv.

Enhanced Hardness in HighEntropy Carbides through Atomic Randomness.

. Advanced Theory and Simulations vol. 3, (9). Wiley.

Hierarchically porous lanthanum zirconate foams with low thermal conductivity from particlestabilized foams.

. Journal of The American Ceramic Society vol. 103, (11) 6088-6095. Wiley.

Improved creep resistance of high entropy transition metal carbides.

. Journal of The European Ceramic Society vol. 40, (7) 2709-2715. Elsevier Bv.

Interfacial reaction between ZrNbHfTa foil and graphite: Formation of high-entropy carbide and the effect of heating rate on its microstructure.

. Journal of The European Ceramic Society vol. 40, (7) 2699-2708. Elsevier Bv.

Substitutional doping of hybrid organic-inorganic perovskite crystals for thermoelectrics.

. Journal of Materials Chemistry A.Royal Society of Chemistry (Rsc).

Colossal thermoelectric enhancement in Cu2+xZn1xSnS4solid solution by local disordering of crystal lattice and multi-scale defect engineering.

. Journal of Materials Chemistry A vol. 8, (21) 10909-10916. Royal Society of Chemistry.

An investigation of the corrosion behavior of 316L stainless steel fabricated by SLM and SPS techniques.

. Materials Characterization vol. 163, 110204-110204. Elsevier Bv.

Magnetic Field-Induced Alignment of Nanofibrous Supramolecular Membranes: A Molecular Design Approach to Create Tissue-like Biomaterials.

. Acs Applied Materials & Amp; Interfaces vol. 12, (20) 22661-22672. American Chemical Society (Acs).

Highly textured and strongly anisotropic TiB2 ceramics prepared using magnetic field alignment (9T).

. Journal of The European Ceramic Society vol. 40, (4) 1111-1118. Elsevier Bv.

Spark Plasma Sintered B4CStructural, Thermal, Electrical and Mechanical Properties.

. Materials vol. 13, (7) 1612-1612.Mdpi Ag.

The Contribution of Electrical Conductivity, Dielectric Permittivity and Domain Switching in Ferroelectric Hysteresis Loops.

. Progress in Advanced Dielectrics 1-20. World Scientific Publishing.

Giant energy storage density in PVDF with internal stress engineered polar nanostructures.

. Nano Energy vol. 72,.Elsevier.

A review of cold sintering processes.

. Advances in Applied Ceramics vol. 119, (3) 115-143. Sage Publications.

High thermoelectric performance of Ca3Co4O9 ceramics with duplex structure fabricated via two-step pressureless sintering.

. Journal of Materials Science: Materials in Electronics vol. 31, (4) 2938-2948.Springer Science and Business Media

Photocatalytic activity of 2D nanosheets of ferroelectric DionJacobson compounds.

. Journal of Materials Chemistry A vol. 8, (14) 6564-6568. Royal Society of Chemistry (Rsc).

Structural and electronic evolution in the Cu3SbS4Cu3SnS4solid solution.

. Journal of Materials Chemistry C vol. 8, (33) 11508-11516.Royal Society of Chemistry (Rsc).

2019

Flash joining of conductive ceramics in a few seconds by flash spark plasma sintering.

. Journal of The European Ceramic Society vol. 39, (15) 4664-4672. Elsevier Bv.

European Radioisotope Thermoelectric Generators (RTGs) and Radioisotope Heater Units (RHUs) for Space Science and Exploration.

. Space Science Reviews vol. 215, (8). Springer Science and Business Media Llc.

The structure and thermoelectric properties of tungsten bronze Ba6Ti2Nb8O30.

. Journal of Applied Physics vol. 126, (12). Aip Publishing.

High temperature stiffening of ferroelastic LaCoO3.

. Journal of The European Ceramic Society vol. 39, (11) 3338-3343. Elsevier Bv.

(Invited)Tuning of Catalytic Activity By Thermoelectric Effect.

. Ecs Meeting Abstracts vol. MA2019-02, (26) 1204-1204. The Electrochemical Society.

Strength enhancement and slip behaviour of high-entropy carbide grains during micro-compression.

. Scientific Reports vol. 9, (1). Springer Science and Business Media Llc.

Design and development of ring-on-ring jig for biaxial strength testing of brittle ceramic composite materials: ZrB2-30wt-%SiB6.

. Advances in Applied Ceramics vol. 118, (4) 159-168. Sage Publications.

Flash spark plasma sintering of 3YSZ.

. Journal of The European Ceramic Society vol. 39, (5) 1932-1937. Elsevier Bv.

A novel microstructural design to improve the oxidation resistance of ZrB2-SiC ultra-high temperature ceramics (UHTCs).

. Journal of Alloys and Compounds vol. 785, 958-964. Elsevier Bv.

Microstructure and broadband dielectric properties of Zn 2 SiO 4 ceramics with nano-sized TiO 2 addition.

. Ceramics International.

Twostep processing of thermoelectric (Ca 0.9 Ag 0.1) 3 Co 4 O 9 /nanosized Ag composites with high ZT.

. Journal of The European Ceramic Society.

Anomalous slip of ZrB2 ceramic grains during in-situ micropillar compression up to 500C.

. International Journal of Refractory Metals and Hard Materials vol. 80, 270-276. Elsevier Bv.

High entropy Sr((Zr0.94Y0.06)0.2Sn0.2Ti0.2Hf0.2Mn0.2)O3x perovskite synthesis by reactive spark plasma sintering.

. Journal of Asian Ceramic Societies vol. 7, (2) 127-132. Informa Uk Limited.

Remarkably enhanced polarisability and breakdown strength in PVDF-based interactive polymer blends for advanced energy storage applications.

. Polymer vol. 168, 246-254.

Oxidation Protective Hybrid Coating for Thermoelectric Materials.

. Materials vol. 12, (4) 573-573.Mdpi Ag.

Mechanochemistry for Thermoelectrics: Nanobulk Cu6Fe2SnS8/Cu2FeSnS4 Composite Synthesized in an Industrial Mill.

. Journal of Electronic Materials vol. 48, (4) 1846-1856. Springer Science and Business Media Llc.

Glass-ceramic oxidation protection of higher manganese silicide thermoelectrics.

. Journal of The European Ceramic Society vol. 39, (1) 66-71. Elsevier Bv.

Crystal structure and improved thermoelectric performance of iron stabilized cubic Cu3SbS3compound.

. Journal of Materials Chemistry C vol. 7, (2) 394-404. Royal Society of Chemistry (Rsc).

Realizing a stable high thermoelectric zT 2 over a broad temperature range in Ge1xyGaxSbyTe via band engineering and hybrid flash-SPS processing.

. Inorganic Chemistry Frontiers vol. 6, (1) 63-73. Royal Society of Chemistry (Rsc).

Review of high entropy ceramics: design, synthesis, structure and properties.

. Journal of Materials Chemistry A vol. 7, (39) 22148-22162. Royal Society of Chemistry (Rsc).

Anisotropy and enhancement of thermoelectric performance of Sr0.8La0.067Ti0.8Nb0.2O3ceramics by graphene additions.

. Journal of Materials Chemistry A vol. 7, (42) 24602-24613. Royal Society of Chemistry (Rsc).

Refined SPS modeling based on calibrated current and voltage measurements.

. Spark Plasma Sintering 163-184. Elsevier.

2018

In-situ synthesis of n-type unfilled skutterudite with reduced thermal conductivity by hybrid flash-spark plasma sintering.

. Scripta Materialia vol. 157, 58-61. Elsevier Bv.

Bioactive sol-gel glass-coated wood-derived biocarbon scaffolds.

. Materials Letters vol. 232, 14-17.Elsevier Bv.

Time and frequency dependent mechanical properties of LaCoO3-based perovskites: Neutron diffraction and domain mobility.

. Journal of Applied Physics vol. 124, (20). Aip Publishing.

Time and frequency dependent mechanical properties of LaCoO3-based perovskites: Internal friction and negative creep.

. Journal of Applied Physics vol. 124, (20). Aip Publishing.

Graphene-reinforced silicon oxycarbide composites prepared by phase transfer.

. Carbon vol. 139, 813-823. Elsevier Bv.

Flash spark plasma sintering of HfB2 ceramics without pre-sintering.

. Scripta Materialia vol. 156, 115-119.Elsevier Bv.

Point defect structure of La-doped SrTiO3 ceramics with colossal permittivity.

. Acta Materialia vol. 164, 76-89.

Effect of the Processing Route on the Thermoelectric Performance of Nanostructured CuPb18SbTe20.

. Inorganic Chemistry vol. 57, (20) 12976-12986. American Chemical Society (Acs).

Data-Driven Design of Ecofriendly Thermoelectric High-Entropy Sulfides.

. Inorganic Chemistry vol. 57, (20) 13027-13033. American Chemical Society (Acs).

Microstructure characterization and thermoelectric properties of Sr0.9La0.1TiO3 ceramics with nano-sized Ag as additive.

. Journal of Alloys and Compounds vol. 762, 80-89.

Effect of Heat Treatment on the Properties of Wood-Derived Biocarbon Structures.

. Materials vol. 11, (9) 1588-1588.Mdpi Ag.

Microstructure of (Hf-Ta-Zr-Nb)C high-entropy carbide at micro and nano/atomic level.

. Journal of The European Ceramic Society vol. 38, (12) 4303-4307. Elsevier Bv.

Effectiveness of boria welding flux in improving the wettability of ZrB2 in contact with molten Cu.

. Journal of The European Ceramic Society vol. 38, (12) 4198-4202. Elsevier Bv.

Preparation and properties of biomorphic potassium-based geopolymer (KGP)-biocarbon (CB) composite.

. Ceramics International vol. 44, (11) 12957-12964. Elsevier Bv.

Enhanced thermoelectric performance of Sn-doped Cu3SbS4.

. Journal of Materials Chemistry C vol. 6, (31) 8546-8552.

Investigation of Electrochemical, Optical and Thermal Effects during Flash Sintering of 8YSZ.

. Materials vol. 11, (7) 1214-1214.Mdpi Ag.

DC-electro softening in soda lime silicate glass: An electro-thermal analysis.

. Scripta Materialia vol. 151, 14-18. Elsevier Bv.

Processing and Properties of High-Entropy Ultra-High Temperature Carbides.

. Scientific Reports vol. 8, (1). Springer Science and Business Media Llc.

SrFe12O19 based ceramics with ultra-low dielectric loss in the millimetre-wave band.

. Applied Physics Letters. Aip Publishing.

Magnéli phase titanium suboxides by Flash Spark Plasma Sintering.

. Scripta Materialia vol. 146, 241-245. Elsevier Bv.

Enhanced dielectric tunability and energy storage properties of plate-like Ba0.6Sr0.4TiO3/poly(vinylidene fluoride) composites through texture arrangement.

. Composites Science and Technology vol. 158, 112-120.

Enhanced thermoelectric performance of Cs doped BiCuSeO prepared through eco-friendly flux synthesis.

. Journal of Alloys and Compounds vol. 735, 861-869. Elsevier Bv.

Topotactic anion-exchange in thermoelectric nanostructured layered tin chalcogenides with reduced selenium content.

. Chemical Science vol. 9, (15) 3828-3836. Royal Society of Chemistry (Rsc).

2017

Impact of Coinage Metal Insertion on the Thermoelectric Properties of GeTe Solid-State Solutions.

. The Journal of Physical Chemistry C vol. 122, (1) 227-235. American Chemical Society (Acs).

Enhancement in thermoelectric performance of n-type Pb-deficit Pb-Sb-Te alloys.

. Journal of Alloys and Compounds vol. 729, 198-202. Elsevier Bv.

Understanding and quantification of grain growth mechanism in ZrO2carbon nanotube composites.

. Materials & Amp; Design vol. 133, 325-331. Elsevier Bv.

The deformation and fracture behaviors of 316L stainless steels fabricated by spark plasma sintering technique under uniaxial tension.

. Materials Science and Engineering: A vol. 707, 362-372. Elsevier Bv.

Influence of spark plasma sintering parameters on magnetic properties of FeCo alloy.

. Aip Advances vol. 8, (4). Aip Publishing.

Tuning of Catalytic Activity by Thermoelectric Materials for Carbon Dioxide Hydrogenation.

. Advanced Energy Materials vol. 8, (5). Wiley.

Flash joining of CVD-SiC coated Cf/SiC composites with a Ti interlayer.

. Journal of The European Ceramic Society vol. 37, (13) 3841-3848. Elsevier Bv.

The effect of processing conditions on phase and microstructure of CaGeO3 ceramics.

. Ceramics International vol. 43, (15) 12035-12043. Elsevier Bv.

Impact of spark plasma sintering (SPS) on mullite formation in porcelains.

. Journal of The American Ceramic Society vol. 101, (2) 525-535. Wiley.

High coercivity, anisotropic, heavy rare earth-free Nd-Fe-B by Flash Spark Plasma Sintering.

. Scientific Reports vol. 7, (1). Springer Science and Business Media Llc.

Rapid spark plasma sintering to produce dense UHTCs reinforced with undamaged carbon fibres.

. Materials & Amp; Design vol. 130, 1-7. Elsevier Bv.

Enhancement in the elongation, yield strength and magnetic properties of intermetallic FeCo alloy using spark plasma sintering.

. Journal of Materials Science vol. 52, (22) 13284-13295. Springer Science and Business Media Llc.

Sintering trials of analogues of americium oxides for radioisotope power systems.

. Journal of Nuclear Materials vol. 491, 18-30. Elsevier Bv.

Titanium Dioxide Engineered for Near-dispersionless High Terahertz Permittivity and Ultra-low-loss.

. Scientific Reports vol. 7, (1). Springer Nature.

Pressureless spark plasmasintered Bioglass 45S5 with enhanced mechanical properties and stressinduced new phase formation.

. Journal of The European Ceramic Society vol. 37, (7) 2727-2736. Elsevier Bv.

Flash spark plasma sintering of cold-Pressed TiB 2 - h BN.

. Journal of The European Ceramic Society vol. 37, (8) 2787-2794. Elsevier Bv.

Crystallization kinetics and enhanced dielectric properties of free standing lead-free PVDF based composite films.

. Polymer vol. 121, 88-96.Elsevier Bv.

Peltier effect during spark plasma sintering (SPS) of thermoelectric materials.

. Journal of Materials Science vol. 52, (17) 10341-10352. Springer Science and Business Media Llc.

Effect of ball-milling time on mechanical and magnetic properties of carbon nanotube reinforced FeCo alloy composites.

. Materials &Amp; Design vol. 122, 296-306. Elsevier Bv.

Densification behaviour and physico-mechanical properties of porcelains prepared using spark plasma sintering.

. Advances in Applied Ceramics vol. 116, (6) 307-315. Sage Publications.

Non-congruence of high-temperature mechanical and structural behaviors of LaCoO3 based perovskites.

. Journal of The European Ceramic Society vol. 37, (4) 1563-1576. Elsevier Bv.

High temperature properties of the monolithic CVD -SiC materials joined with a pre-sintered MAX phase Ti3SiC2 interlayer via solid-state diffusion bonding.

. Journal of The European Ceramic Society vol. 37, (4) 1205-1216. Elsevier Bv.

Thermoelectric Properties of Highly-Crystallized Ge-Te-Se Glasses Doped with Cu/Bi.

. Materials vol. 10, (4) 328-328.Mdpi Ag.

Large-Scale Surfactant-Free Synthesis of p-Type SnTe Nanoparticles for Thermoelectric Applications.

. Materials vol. 10, (3) 233-233.Mdpi Ag.

Microstructural comparison of effects of hafnium and titanium additions in spark-plasma-sintered Fe-based oxide-dispersion strengthened alloys.

. Journal of Nuclear Materials vol. 487, 433-442.

Effect of Phase Transitions on Thermal Depoling in Lead-Free 0.94(Bi0.5Na0.5TiO3)0.06(BaTiO3) Based Piezoelectrics.

. The Journal of Physical Chemistry C.American Chemical Society.

Using graphene networks to build bioinspired self-monitoring ceramics.

. Nature Communications vol. 8, (1). Springer Science and Business Media Llc.

Screening for CuS based thermoelectric materials using crystal structure features.

. Journal of Materials Chemistry A vol. 5, (10) 5013-5019. Royal Society of Chemistry (Rsc).

Flash spark plasma sintering of magnesium silicide stannide with improved thermoelectric properties.

. Journal of Materials Chemistry C vol. 5, (6) 1514-1521. Royal Society of Chemistry (Rsc).

Nanoscale interfacial electroactivity in PVDF/PVDF-TrFE blended films with enhanced dielectric and ferroelectric properties.

. Journal of Materials Chemistry C vol. 5, (13) 3296-3305.

The impact of lone-pair electrons on the lattice thermal conductivity of the thermoelectric compound CuSbS2.

. Journal of Materials Chemistry A vol. 5, (7) 3249-3259. Royal Society of Chemistry (Rsc).

Spontaneous Formation of Interwoven Porous Channels in Hard-Wood-Based Hard-Carbon for High-Performance Anodes in Potassium-Ion Batteries.

. Journal of The Electrochemical Society vol. 164, (9) A2012-A2016. The Electrochemical Society.

2016

Wetting and interfacial phenomena of NiTa alloys on CVDSiC.

. International Journal of Applied Ceramic Technology vol. 14, (3) 295-304. Wiley.

Review of flash sintering: materials, mechanisms and modelling.

. Advances in Applied Ceramics vol. 116, (1) 24-60. Sage Publications.

Theory-Guided Synthesis of an Eco-Friendly and Low-Cost Copper Based Sulfide Thermoelectric Material.

. Journal of Physical Chemistry C vol. 120, (48) 27135-27140.

Joining of CVD-SiC coated and uncoated fibre reinforced ceramic matrix composites with pre-sintered Ti3SiC2 MAX phase using Spark Plasma Sintering.

. Journal of The European Ceramic Society vol. 36, (16) 3957-3967. Elsevier Bv.

Investigating the highest melting temperature materials: A laser melting study of the TaC-HfC system.

. Scientific Reports vol. 6, (1). Springer Science and Business Media Llc.

Rapid sintering of anisotropic, nanograined NdFeB by flash-spark plasma sintering.

. Journal of Magnetism and Magnetic Materials vol. 417, 279-283. Elsevier Bv.

Cyclic fatigue effect in particulate ceramic composites.

. Journal of The European Ceramic Society vol. 36, (14) 3257-3266. Elsevier Bv.

Corrigendum to Mechanical properties and residual stresses in ZrB2SiC spark plasma sintered ceramic composites [J. Eur. Ceram. Soc. 36 (June (7)) (2016) 15271537].

. Journal of The European Ceramic Society vol. 36, (14) 3545-3545. Elsevier Bv.

Mechanical and magnetic properties of spark plasma sintered soft magnetic FeCo alloy reinforced by carbon nanotubes.

. Journal of Materials Research vol. 31, (21) 3448-3458. Springer Science and Business Media Llc.

Processing and characterization of free standing highly oriented ferroelectric polymer films with remarkably low coercive field and high remnant polarization.

. Polymer vol. 100, 69-76. Elsevier Bv.

Growth of SiC platelets using contactless flash technique.

. Nippon Seramikkusu Kyokai Gakujutsu Ronbunshi/Journal of The Ceramic Society of Japan vol. 124, (9) 845-847.

Novel Preparation, Microstructure, and Properties of Polyacrylonitrile-Based Carbon NanofiberGraphene Nanoplatelet Materials.

. Acs Omega vol. 1, (2) 202-211. American Chemical Society (Acs).

Perfluorinated polysiloxane hybridized with graphene oxide for corrosion inhibition of AZ31 magnesium alloy.

. Corrosion Science vol. 109, 238-245. Elsevier Bv.

Oxidation protective glassceramic coating for higher manganese silicide thermoelectrics.

. Journal of Materials Science vol. 51, (20) 9484-9489. Springer Science and Business Media Llc.

Ultrafast-Contactless Flash Sintering using Plasma Electrodes.

. Scientific Reports vol. 6, (1). Springer Science and Business Media Llc.

Sintering behaviour, solid solution formation and characterisation of TaC, HfC and TaCHfC fabricated by spark plasma sintering.

. Journal of The European Ceramic Society vol. 36, (7) 1539-1548. Elsevier Bv.

Mechanical properties and residual stresses in ZrB2SiC spark plasma sintered ceramic composites.

. Journal of The European Ceramic Society vol. 36, (7) 1527-1537. Elsevier Bv.

Graphene nanoplatelets loaded polyurethane and phenolic resin fibres by combination of pressure and gyration.

. Composites Science and Technology vol. 129, 173-182. Elsevier Bv.

Synthesis and properties of graphene and graphene/carbon nanotube-reinforced soft magnetic FeCo alloy composites by spark plasma sintering.

. Journal of Materials Science vol. 51, (16) 7624-7635. Springer Science and Business Media Llc.

Effect of lateral size of graphene nano-sheets on the mechanical properties and machinability of alumina nano-composites.

. Ceramics International vol. 42, (6) 7533-7542. Elsevier Bv.

Ultra-Rapid Crystal Growth of Textured SiC Using Flash Spark Plasma Sintering Route.

. Crystal Growth & Amp; Design vol. 16, (4) 2317-2321. American Chemical Society (Acs).

Flash Spark Plasma Sintering (FSPS) of and SiC.

. Journal of The American Ceramic Society vol. 99, (5) 1534-1543. Wiley.

Plasticity in ZrB2 micropillars induced by anomalous slip activation.

. Journal of The European Ceramic Society vol. 36, (3) 389-394. Elsevier Bv.

Efficacy of lone-pair electrons to engender ultralow thermal conductivity.

. Scripta Materialia vol. 111, 49-53.

Efficacy of lone-pair electrons to engender ultralow thermal conductivity.

. Scripta Materialia vol. 111, 49-53. Elsevier Bv.

Nanohardness and elastic anisotropy of ZrB 2 crystals.

. Journal of The European Ceramic Society vol. 36, (1) 239-242. Elsevier Bv.

Ferroelectric materials for fusion energy applications.

. Journal of Materials Chemistry A vol. 4, (27) 10394-10402.Royal Society of Chemistry (Rsc).

2015

2D Raman mapping and thermal residual stresses in SiC grains of ZrB2SiC ceramic composites.

. Ceramics International vol. 41, (10) 13630-13637. Elsevier Bv.

Limiting oxidation of ZrB2 by application of an electric field across its oxide scale.

. Journal of Alloys and Compounds vol. 653, 629-635. Elsevier Bv.

Ceramic composites from mesoporous silica coated multi-wall carbonnanotubes.

. Microporous and Mesoporous Materials vol. 217, 159-166. Elsevier Bv.

Crystallographic Structure and Ferroelectricity of (AxLa1x)2Ti2O7 (A = Sm and Eu) Solid Solutions with High Tc.

. Journal of The American Ceramic Society vol. 99, (2) 523-530. Wiley.

A High Curie Point Ferroelectric Ceramic Ca3(VO4)2.

. Ferroelectrics vol. 487, (1) 94-100.

The effect of spark plasma sintering on lithium disilicate glass-ceramics.

. Dental Materials vol. 31, (10) e226-e235.Elsevier Bv.

GlaCERCo: Glass and Ceramic Composites for High Technology Applications Marie Curie Initial Training Network.

. Advances in Applied Ceramics vol. 114, (sup1) S1-S2.Sage Publications.

Dielectric relaxation and electrical conductivity in Ca5Nb4TiO17 ceramics.

. Ceramics International vol. 41, (8) 9923-9930. Elsevier Bv.

Processing and microstructure characterisation of oxide dispersion strengthened Fe14Cr0.4Ti0.25Y2O3 ferritic steels fabricated by spark plasma sintering.

. Journal of Nuclear Materials vol. 464, 61-68. Elsevier.

Role of synthesis method on microstructure and mechanical properties of graphene/carbon nanotube toughened Al2O3 nanocomposites.

. Ceramics International vol. 41, (8) 9813-9822.

Scratch behaviour of graphene alumina nanocomposites.

. Advances in Applied Ceramics vol. 114, (sup1) S34-S41. Sage Publications.

Boron nitride nanosheets reinforced glass matrix composites.

. Advances in Applied Ceramics vol. 114, (sup1) S26-S33.Sage Publications.

Comprehensive study of tellurium based glass ceramics for thermoelectric application.

 $. \ Advances \ in \ Applied \ Ceramics \ vol. \ 114, (sup 1) \ S42-S47. Sage \ Publications.$

Highly anisotropic single crystal-like La2Ti2O7 ceramic produced by combined magnetic field alignment and templated grain growth.

. Journal of The European Ceramic Society vol. 35, (6) 1771-1776. Elsevier Bv.

45S5 BioglassMWCNT composite: processing and bioactivity.

. Journal of Materials Science: Materials in Medicine vol. 26, (6). Springer Science and Business Media Llc.

Thermal Diffusivity of SPS Pressed Silicon Powders and the Potential for Using BottomUp Silicon Quantum Dots as a Starting Material.

. Journal of Electronic Materials vol. 44, (6) 1931-1935.

Observation of Curie transition during spark plasma sintering of ferromagnetic materials.

. Journal of Magnetism and Magnetic Materials vol. 382, 202-205. Elsevier Bv.

Plasma formation during electric discharge (50 V) through conductive powder compacts.

. Journal of The European Ceramic Society vol. 35, (3) 871-877. Elsevier Bv.

Nanoindentation and fracture toughness of nanostructured zirconia/multi-walled carbon nanotube composites.

. Ceramics International vol. 41, (2) 2453-2461. Elsevier Bv.

Spark plasma sintered bismuth telluride-based thermoelectric materials incorporating dispersed boron carbide.

. Journal of Alloys and Compounds vol. 626, 368-374. Elsevier Bv.

Study on properties of tantalum-doped La2Ti2O7 ferroelectric ceramics.

. Journal of Advanced Dielectrics vol. 5, (01). World Scientific Publishing.

Reduced thermal conductivity by nanoscale intergrowths in perovskite like layered structure La2Ti2O7.

. Journal of Applied Physics vol. 117, (7). Aip Publishing.

Thermal Diffusivity of SPS Pressed Silicon Powders \nand the Potential for Using BottomUp Silicon Quantum \nDots as a Starting Material.

. Journal of Electronic Materials vol. 44, (6) 1931-1935. Springer Science and Business Media Llc.

Microwave and terahertz dielectric properties of MgTiO3-CaTiO3 ceramics.

. Materials Letters vol. 138, 225-227.

Ultra-high temperature spark plasma sintering of -SiC.

. Ceramics International vol. 41, (1) 225-230. Elsevier Bv.

Ferroelectricity in DionJacobson ABiNb 2 O 7 (A = Rb, Cs) compounds.

. Journal of Materials Chemistry C vol. 3, (1) 19-22. Royal Society of Chemistry (Rsc).

Microwave and terahertz dielectric properties of MgTiO3-CaTiO3 ceramics.

. Materials Letters vol. 138, 225-227.

Improved Lithium-Storage Capability and Cyclability of Tin Dioxide Confined in Highly Crosslinked Graphene Framework.

. Journal of The Electrochemical Society vol. 162, (9) A1702-A1707. The Electrochemical Society.

Enhanced thermoelectric performance of porous magnesium tin silicide prepared using pressure-less spark plasma sintering.

. Journal of Materials Chemistry A vol. 3, (33) 17426-17432. Royal Society of Chemistry (Rsc).

2014

Ferroelectric and dielectric properties of Nd2xCexTi2O7 ceramics.

. Advances in Applied Ceramics vol. 114, (4) 191-197. Sage Publications.

Boron nitride nanotubes as a reinforcement for brittle matrices.

. Journal of The European Ceramic Society vol. 34, (14) 3339-3349. Elsevier Bv.

In situ reduction of graphene oxide nanoplatelet during spark plasma sintering of a silica matrix composite.

. Journal of The European Ceramic Society vol. 34, (14) 3357-3364. Elsevier Bv.

Polymer-derived SiC ceramics from polycarbosilane/boron mixtures densified by SPS.

. Ceramics International vol. 40, (9) 14493-14500. Elsevier Bv.

Effect of Spark Plasma Sintering on the Structure and Properties of Ti1xZrxNiSn Half-Heusler Alloys.

. Materials vol. 7, (10) 7093-7104.Mdpi Ag.

Improvement of interfacial bonding in carbon nanotube reinforced Fe50Co composites by NiP coating: Effect on magnetic and mechanical properties.

. Materials Science and Engineering: B vol. 188, 94-101. Elsevier Bv.

Short range polar state transitions and deviation from Rayleigh-type behaviour in Bi0.5Na0.5TiO3-based perovskites.

. Applied Physics Letters vol. 105, (10).

Three Layer PerovskiteLike Structured Pr3Ti2TaO11 Ferroelectrics with SuperHigh Curie Point.

. Journal of The American Ceramic Society vol. 97, (11) 3624-3630. Wiley.

Tribological properties of silicagraphene nano-platelet composites.

. Ceramics International vol. 40, (8) 12067-12074. Elsevier Bv.

Flash Spark Plasma Sintering (FSPS) of Pure ZrB2.

. Journal of The American Ceramic Society vol. 97, (8) 2405-2408. Wiley.

Enhancement of thermoelectric properties by atomic-scale percolation in digenite CuxS.

. Journal of Materials Chemistry A vol. 2, (25) 9486-9489.

Fabrication of carbon nanotube reinforced iron based magnetic alloy composites by spark plasma sintering.

. Journal of Alloys and Compounds vol. 601, 146-153. Elsevier Bv.

Joining of -SiC by spark plasma sintering.

. Journal of The European Ceramic Society vol. 34, (7) 1681-1686. Elsevier Bv.

Toughening effect of multi-walled boron nitride nanotubes and their influence on the sintering behaviour of 3Y-TZP zirconia ceramics.

. Journal of The European Ceramic Society vol. 34, (7) 1829-1843.

In-situ neutron diffraction of LaCoO3 perovskite under uniaxial compression. I. Crystal structure analysis and texture development.

. Journal of Applied Physics vol. 116, (1). Aip Publishing.

In-situ neutron diffraction of LaCoO3 perovskite under uniaxial compression. II. Elastic properties.

. Journal of Applied Physics vol. 116, (1). Aip Publishing.

Large ZT enhancement in hot forged nanostructured p-type Bi 0.5Sb1.5Te3 bulk alloys.

. Journal of Materials Chemistry A vol. 2, (16) 5785-5790.

Joining of C/SiC composites by spark plasma sintering technique.

. Journal of The European Ceramic Society vol. 34, (4) 903-913. Elsevier Bv.

Temperature and Frequency Dependence of Electric FieldInduced Phase Transitions in PMN0.32PT.

. Journal of The American Ceramic Society vol. 97, (7) 2111-2115. Wiley.

Effect of dysprosium substitution on crystal structure and physical properties of multiferroic BiFeO3 ceramics.

. Journal of The European Ceramic Society vol. 34, (3) 641-651.

Processing and bioactivity of 45S5 Bioglass-graphene nanoplatelets composites.

. Journal of Materials Science: Materials in Medicine vol. 25, (6) 1403-1413. Springer Science and Business Media Llc.

Utilizing the phonon glass electron crystal concept to improve the thermoelectric properties of combined Yb-stuffed and Te-substituted CoSb3.

. Scripta Materialia vol. 72-73, 63-66. Elsevier Bv.

Utilizing the phonon glass electron crystal concept to improve the thermoelectric properties of combined Yb-stuffed and Te-substituted CoSb 3.

. Scripta Materialia vol. 72-73, 63-66.

High field ZnO varistors prepared by spark plasma sintering.

. Advances in Applied Ceramics vol. 113, (2) 94-97.

Role of internal field and exhaustion in ferroelectric switching.

. Journal of Applied Physics vol. 115, (3). Aip Publishing.

Effects of dispersion surfactants on the properties of ceramiccarbon nanotube (CNT) nanocomposites.

. Ceramics International vol. 40, (1) 511-516. Elsevier Bv.

Mechanical and magnetic characterisation of SiC whisker reinforced FeCo alloy composites.

. Materials Science and Engineering: A vol. 592, 19-27. Elsevier Bv.

Effects of dispersion surfactants on the properties of ceramic-carbon nanotube (CNT) nanocomposites.

. Ceramics International vol. 40, (1 PART A) 511-516.

Joining of C/SiC composites by spark plasma sintering technique.

. Journal of The European Ceramic Society vol. 34, (4) 903-913.

Joining of -SiC by spark plasma sintering.

. Journal of The European Ceramic Society vol. 34, (7) 1681-1686.

Processing and bioactivity of 45S5 BioglassA-graphene nanoplatelets composites.

. Journal of Materials Science-Materials in Medicine vol. 25, (6) 1403-1413.

Reply to the Comment on The Effect of Barium Substitution on the Ferroelectric Properties of Sr2Nb2O7 Ceramics [J. Am. Ceram. Soc., 96 [4] 1163-1170 (2013)].

. Journal of The American Ceramic Society vol. 97, (2) 662-663.

Investigation of the Microstructural and Thermoelectric Properties of the (GeTe)0.95(Bi2Te3)0.05 Composition for Thermoelectric Power Generation Applications.

. Journal of Nanomaterials vol. 2014, (1). Wiley.

Tough and dense boron carbide obtained by high-pressure (300 MPa) and low-temperature (1600C) spark plasma sintering.

. Journal of The Ceramic Society of Japan vol. 122, (1424) 271-275. Ceramic Society of Japan.

Temperature and frequency dependence of electric field-induced phase transitions in PMN-0.32PT.

. Journal of The American Ceramic Society vol. 97, (7) 2111-2115.

Tribological properties of silica-graphene nano-platelet composites.

. Ceramics International vol. 40, (8 PART A) 12067-12074.

Boron nitride nanotubes as a reinforcement for brittle matrices.

. Journal of The European Ceramic Society vol. 34, (14) 3339-3349.

In situ reduction of graphene oxide nanoplatelet during spark plasma sintering of a silica matrix composite.

. Journal of The European Ceramic Society vol. 34, (14) 3357-3364.

Polymer-derived SiC ceramics from polycarbosilane/boron mixtures densified by SPS.

. Ceramics International vol. 40, (9 PART A) 14493-14500.

Indentation Stiffness Analysis of Ferroelectric Thin Films.

. Springer Series in Measurement Science and Technology 221-231. Springer Netherlands.

2013

Influence of coated SiC particulates on the mechanical and magnetic behaviour of FeCo alloy composites.

. Journal of Materials Science vol. 49, (6) 2578-2587. Springer Science and Business Media Llc.

Physical, Mechanical, and Structural Properties of Highly Efficient Nanostructured n- and p-Silicides for Practical Thermoelectric Applications.

. Journal of Electronic Materials vol. 43, (6) 1703-1711. Springer Science and Business Media Llc.

Graphene reinforced alumina nano-composites.

. Carbon vol. 64, 359-369. Elsevier Bv.

Review of grapheneceramic matrix composites.

. Advances in Applied Ceramics vol. 112, (8) 443-454. Sage Publications.

Effect of grain size on domain structures, dielectric and thermal depoling of Nd-substituted bismuth titanate ceramics.

. Applied Physics Letters vol. 103, (18).

E-MRS 2012 Fall Meeting, September 1721, Warsaw University of Technology.

. Journal of The European Ceramic Society vol. 33, (12) 2215-2215. Elsevier Bv.

Effects of zinc substitution on the dielectric properties of Ca5Nb4TiO17 microwave ceramics.

. Journal of Advanced Dielectrics vol. 3, (04). World Scientific Publishing.

Effect of donor dopants cerium and tungsten on the dielectric and electrical properties of high Curie point ferroelectric strontium niobate.

. *Ceramics International vol. 39*, (7) 7669-7675.

Dielectric relaxation, lattice dynamics and polarization mechanisms in Bi0.5Na0.5TiO3-based lead-free ceramics.

. Journal of Applied Physics vol. 114, (1).

Wear resistance of Al2O3CNT ceramic nanocomposites at room and high temperatures.

. Ceramics International vol. 39, (5) 5821-5826. Elsevier Bv.

Wear resistance of Al2O3-CNT ceramic nanocomposites at room and high temperatures.

. Ceramics International vol. 39, (5) 5821-5826.

Low-temperature spark plasma sintering of pure nano WC powder.

. Journal of The American Ceramic Society vol. 96, (6) 1702-1705.

Microwave dielectric properties of CaO-La2O3-Nb 2O5-TiO2 ceramics.

. Journal of Materials Science Materials in Electronics vol. 24, (6) 1947-1954.

LowTemperature Spark Plasma Sintering of Pure Nano WC Powder.

. Journal of The American Ceramic Society vol. 96, (6) 1702-1705. Wiley.

Piezoelectric and dielectric properties of Ce substituted La2Ti2O7 ceramics.

. Journal of The European Ceramic Society vol. 33, (5) 1001-1008.

Highly transparent -alumina obtained by low cost high pressure SPS.

. Ceramics International vol. 39, (3) 3243-3248.

The effect of barium substitution on the ferroelectric properties of Sr2 Nb2 O7 Ceramics.

. Journal of The American Ceramic Society vol. 96, (4) 1163-1170.

Toughened and machinable glass matrix composites reinforced with graphene and graphene-oxide nano platelets.

. Science and Technology of Advanced Materials vol. 14, (5) 055007-055007.Informa Uk Limited.

Metal matrix composite fuel for space radioisotope energy sources.

. Journal of Nuclear Materials vol. 433, (1-3) 116-123. Elsevier Bv.

Low temperature spark plasma sintering of 45S5 Bioglass.

. Journal of Non-Crystalline Solids vol. 362, 25-29. Elsevier Bv.

Microstructure and high-temperature oxidation behavior of Ti3AlC 2/W composites.

. Journal of The American Ceramic Society vol. 96, (2) 584-591.

Reverse boundary layer capacitor model in glass/ceramic composites for energy storage applications.

. Journal of Applied Physics vol. 113, (2).

Ultra low thermal conductivity of disordered layered p-type bismuth telluride.

. Journal of Materials Chemistry C vol. 1, (12) 2362-2362. Royal Society of Chemistry (Rsc).

Ferroelectricity of Pr2Ti2O7 ceramics with super high Curie point.

. Advances in Applied Ceramics vol. 112, (2) 69-74.

Graphene reinforced alumina nano-composites.

. Carbon vol. 64, 359-369.

Active ferroelectricity in nanostructured multiferroic BiFeO3 bulk ceramics.

. Journal of Materials Chemistry C vol. 1, (36) 5628-5631.

Contribution of piezoelectric effect, electrostriction and ferroelectric/ferroelastic switching to strain-electric field response of dielectrics.

. Journal of Advanced Dielectrics vol. 3, (01). World Scientific Publishing.

2012

The Effect of Barium Substitution on the Ferroelectric Properties of Sr2Nb2O7 Ceramics.

. Journal of The American Ceramic Society vol. 96, (4) 1163-1170. Wiley.

The effect of carbon nanotubes on the sintering behaviour of zirconia.

. Journal of The European Ceramic Society vol. 32, (16) 4149-4156. Elsevier Bv.

Microwave dielectric properties of La 3Ti 2TaO 11 ceramics with perovskite-like layered structure.

. Journal of The European Ceramic Society vol. 32, (16) 4015-4020.

Toughening of zirconia/alumina composites by the addition of graphene platelets.

. Journal of The European Ceramic Society vol. 32, (16) 4185-4193.

Ferroelectric ceramics with enhanced remnant polarization by ordered coalescence of nano-crystals.

. Journal of Materials Chemistry vol. 22, (44) 23547-23552.

Microstructure and Hightemperature Oxidation Behavior of Ti3AlC2/W Composites.

. Journal of The American Ceramic Society vol. 96, (2) 584-591. Wiley.

Structural, dielectric, magnetic, and nuclear magnetic resonance studies of multiferroic Y-type hexaferrites.

. Journal of Applied Physics vol. 112, (7). Aip Publishing.

Reversibility in electric field-induced transitions and energy storage properties of bismuth-based perovskite ceramics.

. Journal of Physics D Applied Physics vol. 45, (35).

Processing and characterization of high-density zirconiacarbon nanotube composites.

. Materials Science and Engineering: A vol. 549, 50-59. Elsevier Bv.

Cobalt-based orthopaedic alloys: Relationship between forming route, microstructure and tribological performance.

. Materials Science and Engineering: C vol. 32, (5) 1222-1229. Elsevier Bv.

Microstructural evolution during high-temperature oxidation of spark plasma sintered Ti2AlN ceramics.

. Acta Materialia vol. 60, (3) 1079-1092. Elsevier Bv.

From the Editor.

. Advances in Applied Ceramics vol. 111, (1-2) 1-1. Sage Publications.

Dynamics of ferroelectric switching of [H3CNH3]5[Bi2Br11].

. Journal of Applied Physics vol. 111, (2). Aip Publishing.

Spherical instrumented indentation of porous nanocrystalline zirconia.

. Journal of The European Ceramic Society vol. 32, (1) 123-132.

Phase stability and rapid consolidation of hydroxyapatite-zirconia nano-coprecipitates made using continuous hydrothermal flow synthesis.

. Journal of Biomaterials Applications vol. 27, (1) 79-90.

Kinetics of Densification and Grain Growth of Pure Tungsten During Spark Plasma Sintering.

. Metallurgical and Materials Transactions B-Process Metallurgy and Materials Processing Science vol. 43, (6) 1608-1614.

Structural and magnetic characterization of spark plasma sintered Fe-50Co alloys.

. Mrs Proceedings vol. 1516, 201-207. Springer Science and Business Media Llc.

2011

The production of advanced fine-grained alumina by carbon nanotube addition.

. J Eur Ceram Soc vol. 31, (15) 2853-2859.

Ferroelectric domain structures and electrical properties of fine-grained lead-free sodium potassium niobate ceramics.

. Journal of The American Ceramic Society vol. 94, (10) 3391-3396.

Shortened carbon nanotubes and their influence on the electrical properties of polymer nanocomposites.

. Journal of Composite Materials vol. 46, (11) 1313-1322. Sage Publications.

Magneto-electric properties of multiferroic Pb(Zr0.52Ti 0.48)O3-NiFe2O4 nanoceramic composites.

. Journal of The American Ceramic Society vol. 94, (8) 2311-2314.

Carbon nanotubes: do they toughen brittle matrices?.

. J Mater Sci vol. 46, (14) 4770-4779.

Mechanism of Chromium Oxide Formation in Cobalt-Chromium-Molybdenum (F75) Alloys Prepared Using Spark Plasma Sintering.

. Adv Eng Mater vol. 13, (5) 411-417.

High-strength nanograined and translucent hydroxyapatite monoliths via continuous hydrothermal synthesis and optimized spark plasma sintering.

. Acta Biomater vol. 7, (2) 791-799.

THE CONTRIBUTION OF ELECTRICAL CONDUCTIVITY, DIELECTRIC PERMITTIVITY AND DOMAIN SWITCHING IN FERROELECTRIC HYSTERESIS LOOPS.

. J. Adv Dielectrics vol. 1, 107-118.

The Elastic Properties of Ferroelectric Thin Films Measured Using Nanoindentation.

. Springer Netherlands.

2010

A novel route for processing cobalt-chromium-molybdenum orthopaedic alloys.

. J R Soc Interface vol. 7, (52) 1641-1645.

Effect of point defects on thermal depoling behavior of bismuth layer-structured ferroelectric ceramics.

. J Appl Phys vol. 108, (9).

Polarization dynamics and non-equilibrium processes in ferroelectric switching.

. 2010 IEEE International Symposium On The Applications of Ferroelectrics (Isaf) 1-4.IEEE.

Microstructure and electrical properties of Aurivillius phase (CaBi2Nb2O9)(1-x)(BaBi2Nb2O9)(x) solid solution.

. J Appl Phys vol. 108, (1).

Physics with the KLOE-2 experiment at the upgraded DANE.

. The European Physical Journal C vol. 68, (3-4) 619-681. Springer Science and Business Media Llc.

Highly conductive low nickel content nano-composite dense cermets from nano-powders made via a continuous hydrothermal synthesis route.

. Solid State Ionics vol. 181, (17-18) 827-834.

The sintering and grain growth behaviour of ceramic-carbon nanotube nanocomposites.

. Compos Sci Technol vol. 70, (6) 947-952.

High temperature lead-free relaxor ferroelectric: Intergrowth Aurivillius phase BaBi2Nb2O9-Bi4Ti 3O12 ceramics.

. Journal of Applied Physics vol. 107, (10).

Piezoelectric Strontium Niobate and Calcium Niobate Ceramics with Super-High Curie Points.

. J Am Ceram Soc vol. 93, (5) 1409-1413.

Structural and chemical stability of multiwall carbon nanotubes in sintered ceramic nanocomposite.

. Adv Appl Ceram vol. 109, (4) 240-245.

Textured high Curie point piezoelectric ceramics prepared by spark plasma sintering.

. Adv Appl Ceram vol. 109, (3) 139-142.

Low temperature consolidated lead-free ferroelectric niobate ceramics with improved electrical properties.

. J Mater Res vol. 25, (2) 240-247.

Stability of Nanocrystalline Spark Plasma Sintered 3Y-TZP.

. Materials vol. 3, (2) 800-814.

Electrically conductive alumina-carbon nanocomposites prepared by Spark Plasma Sintering.

. Journal of The European Ceramic Society vol. 30, (2) 153-157.

Laser Melting of Spark Plasma-Sintered Zirconium Carbide: Thermophysical Properties of a Generation IV Very High-Temperature Reactor Material.

. Int J Appl Ceram Tec vol. 7, (3) 316-326.

2009

Hot pressed and spark plasma sintered zirconia/carbon nanofiber composites.

. J Eur Ceram Soc vol. 29, (15) 3177-3184.

Degradation resistance of 3Y-TZP ceramics sintered using spark plasma sintering.

. IOP Conference Series Materials Science and Engineering vol. 5,.

Piezoelectric and Ferroelectric Properties of Bismuth Tungstate Ceramics Fabricated by Spark Plasma Sintering.

. J Am Ceram Soc vol. 92, (12) 3108-3110.

Effect of composition on rate dependence of ferroelastic/ferroelectric switching in perovskite ceramics.

. Materials Science and Technology vol. 25, (11) 1312-1315. Sage Publications.

Piezoelectric Ceramics with Super-High Curie Points.

. J Am Ceram Soc vol. 92, (10) 2270-2275.

The grain size effect on the properties of Aurivillius phase Bi3.15Nd0.85Ti3O12 ferroelectric ceramics.

. Nanotechnology vol. 20, (38).

The grain size effect on the properties of Aurivillius phase Bi 3.15Nd0.85Ti3O12 ferroelectric ceramics.

. Nanotechnology vol. 20, (38).

Fabrication and properties of dense ex situ magnesium diboride bulk material synthesized using spark plasma sintering.

. Supercond Sci Tech vol. 22, (9).

The effect of Nd substitution on the electrical properties of Bi3NbTiO9 Aurivillius phase ceramics. . J Appl Phys vol. 106, (4).

High-temperature ferroelectric phase transition observed in multiferroic Bi0.91La0.05Tb0.04FeO3. *Applied Physics Letters vol. 95, (1).*

Dual ferroelasticity of lanthanum chromium-based multicomponent solid solution perovskite. . *Scripta Mater vol.* 60, (9) 783-786.

2008

Effect of a site substitution on the properties of CaBi2Nb 2O9 ferroelectric ceramics.

. Journal of The American Ceramic Society vol. 91, (9) 2928-2932.

Room-temperature creep of LaCoO3-based perovskites: Equilibrium strain under compression. *Phys Rev B vol.* 78, (2).

Dimethylformamide: an effective dispersant for making ceramic-carbon nanotube composites. *Nanotechnology vol. 19, (19).*

Luminescence of Sr2SiO4-xN2x/3: Eu2+ phosphors prepared by spark plasma sintering. . J Electrochem Soc vol. 155, (2) J58-J61.

Thermal activation of ferroelectric switching.

. J Appl Phys vol. 103, (1).

2007

Dielectric, piezoelectric, and ferroelectric properties of grain-orientated Bi3.25La0.75Ti3O12 ceramics. . J Appl Phys vol. 102, (10).

The influence of the grain boundary phase on the mechanical properties of Si3N4-MOSi2 composites. *Acta Mater vol. 55, (8) 2875-2884.*

Enhanced ferroelectric loop asymmetry of lead zirconate titanate thin films under nanoindentation. . J Appl Phys vol. 101, (2).

The effect of different sintering additives on the electrical and oxidation properties of Si3N4-MOSi2 composites. . J Eur Ceram Soc vol. 27, (5) 2153-2161.

Microstructure and electrical properties of Si3N4-TiN composites sintered by hot pressing and spark plasma sintering.

. Ceram Int vol. 33, (7) 1223-1229.

2006

Effect of texture on dielectric properties and thermal depoling of Bi4Ti3O12 ferroelectric ceramics. . J Appl Phys vol. 100, (7).

B-site donor and acceptor doped Aurivillius phase Bi3NbTiO9 ceramics.

. J Eur Ceram Soc vol. 26, (13) 2785-2792.

Orientation dependence of dielectric and relaxor behaviour in Aurivillius phase BaBi2Nb2O9 ceramics prepared by spark plasma sintering.

. J Mater Sci-Mater El vol. 17, (9) 657-661.

Inelastic deformation behavior of La0.6Sr0.4FeO3 perovskite.

. J Appl Phys vol. 100, (2).

Fractographic montage for a Si3N4-SiC nanocomposite.

. J Am Ceram Soc vol. 89, (5) 1752-1755.

Experimental, analytical, and finite element analyses of nanoindentation of multilayer PZT/Pt/SiO2 thin film systems on silicon wafers.

. J Mater Res vol. 21, (2) 409-419.

Printing gold nanoparticles with an electrohydrodynamic direct-write device.

. Gold Bull vol. 39, (2) 48-53.

2005

Thermal depoling of high Curie point Aurivillius phase ferroelectric ceramics.

. Appl Phys Lett vol. 87, (8).

A LeadFree HighCuriePoint Ferroelectric Ceramic, CaBi2Nb2O9.

. Cheminform vol. 36, (28) no-no. Wiley.

Enhanced creep resistant silicon-nitride-based nanocomposite.

. J Am Ceram Soc vol. 88, (6) 1500-1503.

A lead-free high-Curie-point ferroelectric ceramic, CaBi2Nb2O9.

. Adv Mater vol. 17, (10) 1261-+.

Ferroelectric/ferroelastic behavior and piezoelectric response of lead zirconate titanate thin films under nanoindentation.

. J Appl Phys vol. 97, (7).

2004

Ferroelectric hysteresis loops of (Pb,Ca)TiO3 thin films under spherical indentation.

. Appl Phys Lett vol. 85, (11) 2023-2025.

Creep behavior of a carbon-derived Si3N4/SiC nanocomposite.

. Journal of The European Ceramic Society vol. 24, (12) 3307-3315. Elsevier Bv.

Nanoindentation of multilayer PZT/Pt/SiO2 thin film systems on silicon wafers for MEMS applications.

. Mrs Proceedings vol. 841,. Springer Science and Business Media Llc.

2003

Crack extension force and rate of mechanical work of fracture in linear dielectrics and piezoelectrics.

. Philos Mag vol. 83, (7) 873-888.

2002

Anelastic deformation of Pb(Zr,Ti)O-3 thin films by non-180 degrees ferroelectric domain wall movements during nanoindentation.

. Appl Phys Lett vol. 81, (3) 421-423.

Ferroelasticity and hysteresis in LaCoO3 based perovskites.

. Acta Mater vol. 50, (4) 715-723.

Toughening produced by crack-tip-stress-induced domain reorientation in ferroelectric and/or ferroelastic materials.

. Philos Mag A vol. 82, (1) 29-38.

2001

Stress-induced depolarization of (Pb,La)TiO3 ferroelectric thin films by nanoindentation.

. Applied Physics Letters vol. 79, (23) 3830-3832. Aip Publishing.

Direct measurement of mechanical properties of (Pb,La)TiO3 ferroelectric thin films using nanoindentation techniques.

. J Mater Res vol. 16, (4) 993-1002.

Mechanical and electromechanical properties of PZT sol-gel thin films measured by nanoindentation.

. Integrated Ferroelectrics vol. 41, (1-4) 53-62. Informa Uk Limited.

Fatigue behaviour of mullite studied by the indentation flexure method.

. J Eur Ceram Soc vol. 21, (1) 53-61.

2000

Influence of grain size on the indentation-fatigue behavior of alumina.

. J Am Ceram Soc vol. 83, (4) 967-970.

Fracture of PZT piezoelectric ceramics under compression-compression loading.

. Scripta Materialia vol. 42, (4) 353-357. Elsevier Bv.

1999

Crecimiento de grieta en piezocerámicas comerciales durante en polarizado.

. BoletÃ-N De La Sociedad EspañOla De CeráMica Y Vidrio vol. 38, (6) 593-597.Elsevier Bv.

Caracterización de láminas delgadas ferroeléctricas por nanoidentación.

. BoletÃ-N De La Sociedad EspañOla De CeráMica Y Vidrio vol. 38, (5) 446-450.Elsevier Bv.

1998

Cyclic fatigue crack growth behaviour in beta-(Si-Al-O-N) at ambient and elevated temperatures.

. J Mater Sci vol. 33, (15) 3867-3874.

Electrokinetic Behavior and Stability of Silicon Carbide Nanoparticulate Dispersions.

. Journal of The American Ceramic Society vol. 81, (2) 389-394. Wiley.

Subcritical crack propagation under cyclic and static loading in mullite and mullite-zirconia.

. J Eur Ceram Soc vol. 18, (3) 221-227.

1997

Effect of Porosity and Grain Size on the Microwave Dielectric Properties of Sintered Alumina.

. Journal of The American Ceramic Society vol. 80, (7) 1885-1888. Wiley.

Anisotropic Deformation and Fracture of Indented PZT.

. Key Engineering Materials vol. 132-136, 551-554. Trans Tech Publications, Ltd.

Growth of indentation cracks in poled and unpoled PZT.

. J Eur Ceram Soc vol. 17, (4) 505-512.

1996

Si3N4Al2O3/Si3N4Y2O3 couple diffusion system.

. Acta Materialia vol. 44, (3) 1001-1010.Elsevier Bv.

High-temperature fatigue of a gas-pressure-sintered silicon nitride.

. J Eur Ceram Soc vol. 16, (9) 1009-1020.

Structural development and properties of SiC-Si3N4 nano/microcomposites.

. Journal of Materials Science Letters vol. 15, (1) 72-76. Springer Science and Business Media Llc.

Microstructures and dielectric properties of ferroelectric glass-ceramics.

. J Am Ceram Soc vol. 79, (1) 17-26.

1994

Determination of Stress Distribution in Fibre Bridged Cracks in Ceramic Matrix Composites.

. Advanced Composites Letters vol. 3, (4). Sage Publications.

1992

Role of CrackBridging Ligaments in the Cyclic Fatigue Behavior of Alumina.

. Journal of The American Ceramic Society vol. 75, (11) 2976-2984. Wiley.

Preparation of hard particle powders for examination in the transmission electron microscope.

. Journal of Microscopy vol. 167, (1) 123-126. Wiley.

PHASE-TRANSFORMATION AROUND INDENTATIONS IN ZIRCONIA.

. J Mater Sci Lett vol. 11, (9) 575-577.

1991

Analysis of Si3N4+-Si3N4 whisker ceramics.

. Journal of Materials Science vol. 26, (24) 6782-6788. Springer Science and Business Media Llc.

Electron microscope study of non-stoichiometric titania.

. Journal of Materials Science vol. 26, (20) 5566-5574. Springer Science and Business Media Llc.

CYCLIC FATIGUE OF CERAMICS.

. J Mater Sci vol. 26, (12) 3275-3286.

Indentation Fatigue of HighPurity Alumina in Fluid Environments.

. Journal of The American Ceramic Society vol. 74, (1) 148-154. Wiley.

1990

Repeated Indentation Method for Studying Cyclic Fatigue in Ceramics.

. Journal of The American Ceramic Society vol. 73, (4) 1004-1013. Wiley.

1989

CYCLIC FATIGUE CRACK-PROPAGATION IN ALUMINA UNDER DIRECT TENSION COMPRESSION LOADING.

. J Am Ceram Soc vol. 72, (2) 348-352.

1988

Observations of the influence of ion-bombardment on the microstructure of synthetic and natural ferrite crystals.

. Journal of Materials Science Letters vol. 7, (6) 649-653. Springer Science and Business Media Llc.

1987

Electron microscopy of second phases in manganese-zinc ferrite crystals.

. Journal of Materials Science vol. 22, (7) 2447-2456. Springer Science and Business Media Llc.

1984

Slip Systems in Manganese Zinc Ferrite Crystals.

. Springer Us.