

SUBJECT INDEX

- γ Al₂O₃ powder
Microwave assisted hydrolysis of aluminium metal and preparation of high surface area γ Al₂O₃ powder 737
- γ -Fe₂O₃
Lead adsorption study on combustion derived γ -Fe₂O₃ surface 1
- β -phase
Bandgap determination of P(VDF–TrFE) copolymer film by electron energy loss spectroscopy 457
- (1,3,4-oxadiazol-yl) pyridine
Electrochemical and optical properties of a new donor–acceptor type conjugated polymer derived from 3,4-didodecyloxythiophene 677
- 5d-Metal
Computational study of 5d transition metal mononitrides and monoborides using density functional method 233
- AAO
Synthesis and characterization of layered oriented hydrogen titanate micro-tube films 427
- Abrasive wear
Effect of heat treatment on strength and abrasive wear behaviour of Al6061–SiC_p composites 49
- Absorbing characterization
Electromagnetic properties of carbonyl iron and their microwave absorbing characterization as filler in silicone rubber 633
- A.c. electrical conductivity
Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Activation energy
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65
Ethanol and LPG sensing characteristics of SnO₂ activated Cr₂O₃ thick film sensor 575
- Additives
Effect of curing conditions and ionic additives on properties of fly ash–lime compacts 185
- Adsorption
Lead adsorption study on combustion derived γ -Fe₂O₃ surface 1
- Adsorption isotherm
Effect of menthol coated craft paper on corrosion of copper in HCl environment 307
- Agglomeration
Effect of agglomeration during coprecipitation: Delayed spinellization of magnesium aluminate hydrate 451
- ALD
On adsorption of aluminium and methyl groups on silica for TMA/H₂O process in atomic layer deposition of aluminium oxide nano layers 97
- Aligned
Fabrication of ultra thin and aligned carbon nanofibres from electrospun polyacrylonitrile nanofibres 553
- Alumina
Micrometer size grains of hot isostatically pressed alumina and its characterization 445
- Aluminium metal
Microwave assisted hydrolysis of aluminium metal and preparation of high surface area γ Al₂O₃ powder 737
- Aluminum
Effect of aluminum addition on electrical properties, dielectric characteristics, and its stability of (Pr,Co,Cr,Y)-added zinc oxide-based varistors 239
- Aluminum oxide
On adsorption of aluminium and methyl groups on silica for TMA/H₂O process in atomic layer deposition of aluminium oxide nano layers 97
- Amorphous carbon
Electron field emission from *sp*²-induced insulating to metallic behaviour of amorphous carbon (*a*-C) films 215
- Ancient iron
Effect of carbon on corrosion resistance of powder-processed Fe–0.35%P alloys 501
Effect of carbon on mechanical properties of powder-processed Fe–0.35%P alloys 625
- Anechoic chamber
Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657
- Antiferroelectrics
Dielectric properties of electron irradiated PbZrO₃ thin films 191
- Antiferromagnet
Solution combustion synthesis of (La, K) FeO₃ orthoferrite ceramics: structural and magnetic property studies 611
- Artificial aging
Effect of heat treatment on strength and abrasive wear behaviour of Al6061–SiC_p composites 49
- Artificial saliva
Comparative corrosion study of Ag–Pd and Co–Cr alloys used in dental applications 491
- Asphaltenes
Pyrolysis of petroleum asphaltenes from different geological origins and use of methylnaphthalenes and methylphenanthrenes as maturity indicators for asphaltenes 509
- Auto-reconditioning performance
Dispersion effect and auto-reconditioning performance of nanometer WS₂ particles in green lubricant 529
- Bandgap
Bandgap determination of P(VDF–TrFE) copolymer film by electron energy loss spectroscopy 457
- Barium titanate
Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657

- Beneficiation
Beneficiation of Iranian magnesite ores by reverse flotation process and its effects on shaped and unshaped refractories properties 697
- Biodegradable
Microstructure and mechanical properties of Mg–HAP composites 43
- Blisters
Blistering in alloy Ti–6Al–4V from H⁺ ion implantation 179
- Boehmite particles
Microwave assisted hydrolysis of aluminium metal and preparation of high surface area γ -Al₂O₃ powder 737
- Borax solid wastes
Evaluation of borax solid wastes in production of frits suitable for fast single-fired wall tile opaque glass–ceramic glazes 135
- Brazilian tensile strength
Electrical resistivity measurement to predict uniaxial compressive and tensile strength of igneous rocks 731
- Bronze
Aromatic quinoxaline as corrosion inhibitor for bronze in aqueous chloride solution 313
- Bulk modulus
Properties of calcium fluoride up to 95 kbar: A theoretical study 413
- CaCu₃Ti₄O₁₂
Chemical solution deposition of CaCu₃Ti₄O₁₂ thin film 203
- Calcium fluoride
Properties of calcium fluoride up to 95 kbar: A theoretical study 413
- Calcium titanate phosphor
Sol–gel synthesis and photoluminescence of CaTi_{1-x}Zr_xO₃: Pr³⁺ phosphors 79
- Carbon
Fabrication of ultra thin and aligned carbon nanofibres from electrospun polyacrylonitrile nanofibres 553
- Carbon nanotubes
Dispersion and reinforcing mechanism of carbon nanotubes in epoxy nanocomposites 27
- Carbon template
Synthesis of nano-particle and highly porous conducting perovskites from simple *in situ* sol–gel derived carbon templating process 371
- Carbonyl iron
Electromagnetic properties of carbonyl iron and their microwave absorbing characterization as filler in silicone rubber 633
- Casting
Effect of Ba(Ti_(0.9)Sn_(0.1))O₃ ceramic doping on optical, thermal and dielectric properties of polycarbonate host 589
- Catalytic properties
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- CdS
Effect of solvent-induced structural modifications on optical properties of CdS nanoparticles 535
- CdSe
Rapid synthesis of CdSe nanocrystals in aqueous solution at room temperature 543
- Ceramic tiles
Utilization of steel melting electric arc furnace slag for development of vitreous ceramic tiles 293
- Ceramic–matrix composites
Effect of Ba(Ti_(0.9)Sn_(0.1))O₃ ceramic doping on optical, thermal and dielectric properties of polycarbonate host 589
- Ceramics
Impedance spectroscopy of Ba₃Sr₂DyTi₃V₇O₃₀ ceramic 129
- Chalcogenides
Preparation and crystal structure characterization of CuNiGaSe₃ and CuNiInSe₃ quaternary compounds 637
- Chemical bath deposition
Preparation and characterization of nanostructured copper bismuth diselenide thin films from a chemical route 663
- Chemical solution deposition
Chemical solution deposition of CaCu₃Ti₄O₁₂ thin film 203
- Chemical spray pyrolysis technique
Effect of indium doping on zinc oxide films prepared by chemical spray pyrolysis technique 581
- Chemical synthesis
Synthesis and characterization of ternary compound, Mn₂SnTe₄ 247
Phase transition study in a [Cu₂HgI₄:0-xAgI] mixed composite system 419
Realizing NiO nanocrystals from a simple chemical method 653
- Chemisorption
On adsorption of aluminium and methyl groups on silica for TMA/H₂O process in atomic layer deposition of aluminium oxide nano layers 97
- Chloride solution
Aromatic quinoxaline as corrosion inhibitor for bronze in aqueous chloride solution 313
- Chromium oxide
Ethanol and LPG sensing characteristics of SnO₂ activated Cr₂O₃ thick film sensor 575
- Classical view
Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Coefficient of thermal expansion
Thermal expansion of doped lanthanum gallates 407
- Combustion flame temperature
Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- Combustion synthesis
Solution combustion synthesis of (La, K) FeO₃ orthoferrite ceramics: structural and magnetic property studies 611
- Complex nanoparticles
Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- Complex permittivity
Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- Composite
Solar photocatalytic generation of hydrogen under ultraviolet-visible light irradiation on (CdS/ZnS)/Ag₂S + (RuO₂/TiO₂) photocatalysts 85

- Composite materials
 Effects of SiO₂ and TiO₂ fillers on thermal and dielectric properties of eco-friendly bismuth glass microcomposites of plasma display panels 33
 Size variation of polyaniline nanoparticles dispersed in polyvinyl alcohol matrix 519
- Composites
 Natural fibres-based polymers: Part I—Mechanical analysis of *Pine needles* reinforced biocomposites 257
 Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- Composition
 Utilization of steel melting electric arc furnace slag for development of vitreous ceramic tiles 293
- Compressive strength
 Microstructure and mechanical properties of Mg–HAP composites 43
- Concrete composite
 Study on durability of natural fibre concrete composites using mechanical strength and microstructural properties 719
- Conjugated polymers
 Electrochemical and optical properties of a new donor–acceptor type conjugated polymer derived from 3,4-didodecyloxythiophene 677
- Copper
 Effect of menthol coated craft paper on corrosion of copper in HCl environment 307
- Copper bismuth diselenide
 Preparation and characterization of nanostructured copper bismuth diselenide thin films from a chemical route 663
- Core-shell nanoparticles
 Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations 21
- Corrosion
 PEDOT–PSSA as an alternative support for Pt electrodes in PEFCs 157
 Preferential dissolution behaviour in Ni–Cr dental cast alloy 463
 Effect of SiO₃²⁻/OH⁻ on plasma electrolytic oxidation of Ti–5Mo–4V–3Al 469
 Comparative corrosion study of Ag–Pd and Co–Cr alloys used in dental applications 491
 Effect of carbon on corrosion resistance of powder-processed Fe–0.35%P alloys 501
- Corrosion and oxidation
 Preliminary investigations of antioxidation of dihydromyricetin in polymers 273
- Cr₃C₂–NiCr
 Erosive wear of a surface coated hydroturbine steel 483
- Creep relaxation curve
 Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Creep tests
 Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep 475
- CrN thin films
 Microstructural characterizations and hardness evaluation of d.c. reactive magnetron sputtered CrN thin films on stainless steel substrate 103
- Crystal growth
 Rapid growth of nanotubes and nanorods of würtzite ZnO through microwave-irradiation of a metalorganic complex of zinc and a surfactant in solution 89
 Crystallization and spectroscopic studies of manganese malonate 433
- Crystal structure
 Synthesis and characterization of ternary compound, Mn₂SnTe₄ 247
 Preparation and crystal structure characterization of CuNiGaSe₃ and CuNiInSe₃ quaternary compounds 637
- CuO
 Synthesis of CuO nanoflower and its application as a H₂O₂ sensor 17
- Cure time
 Cure and mechanical properties of recycled NdFeB–natural rubber composites 597
- Curing
 Effect of curing conditions and ionic additives on properties of fly ash–lime compacts 185
- Cyclic polarization
 Preferential dissolution behaviour in Ni–Cr dental cast alloy 463
- Czocharlski technique
 Optical and X-ray photoelectron spectroscopy of PbGeO₃ and Pb₅Ge₂O₁₁ single crystals 395
- D.c. conductivity
 Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- Defect formation
 Effects of reaction temperature on size and optical properties of CdSe nanocrystals 547
- Density functional method
 Computational study of 5d transition metal mononitrides and monoborides using density functional method 233
- Dental alloys
 Comparative corrosion study of Ag–Pd and Co–Cr alloys used in dental applications 491
- Dental cast alloy
 Preferential dissolution behaviour in Ni–Cr dental cast alloy 463
- Deposition parameters
 Preparation and characterization of nanostructured copper bismuth diselenide thin films from a chemical route 663
- Design of experiment
 Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- D-gun sprayed coating
 Erosive wear of a surface coated hydroturbine steel 483

- Dielectric characteristics
Effect of aluminum addition on electrical properties, dielectric characteristics, and its stability of (Pr,Co,Cr,Y)-added zinc oxide-based varistors 239
- Dielectric constant
Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Dielectric loss
Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Dielectric properties
Effects of SiO₂ and TiO₂ fillers on thermal and dielectric properties of eco-friendly bismuth glass microcomposites of plasma display panels 33
Impedance spectroscopy of Ba₃Sr₂DyTi₃V₇O₃₀ ceramic 129
Chemical solution deposition of CaCu₃Ti₄O₁₂ thin film 203
Dielectric and thermal studies on gel grown strontium tartrate pentahydrate crystals 377
- Dielectric response
Dielectric and complex impedance studies of BaTi_{0.85}W_{0.15}O_{3+δ} ferroelectric ceramics 683
- Dihydromyricetin
Preliminary investigations of antioxidation of dihydromyricetin in polymers 273
- Direct bonded periclase
Microstructural and densification study of natural Indian magnesite in presence of zirconia additive 439
- Dispersants
Thermal stability of PMMA–clay hybrids 165
- Dispersion effect
Dispersion effect and auto-reconditioning performance of nanometer WS₂ particles in green lubricant 529
- Dissimilar materials joint
Microstructure and fracture behaviour of Ti₃Al/TC4 dissimilar materials joints welded by electron beam 707
- Doped lanthanum gallate
Thermal expansion of doped lanthanum gallates 407
- Doping
Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- DSC
Thermal stability of PMMA–clay hybrids 165
- Ductility
Effect of stress-induced grain growth during room temperature tensile deformation on ductility in nanocrystalline metals 561
- EAF slag
Utilization of steel melting electric arc furnace slag for development of vitreous ceramic tiles 293
- Edge dislocation
Critical shear stress produced by interaction of edge dislocation with nanoscale inhomogeneity 123
- EDTA-citrate
Synthesis of nano-particle and highly porous conducting perovskites from simple *in situ* sol–gel derived carbon templating process 371
- EELS
Bandgap determination of P(VDF–TrFE) copolymer film by electron energy loss spectroscopy 457
- EIS
Comparative corrosion study of Ag–Pd and Co–Cr alloys used in dental applications 491
- Electrical conductivity
Dispersion and reinforcing mechanism of carbon nanotubes in epoxy nanocomposites 27
Impedance spectroscopy of Ba₃Sr₂DyTi₃V₇O₃₀ ceramic 129
Phase transition study in a [Cu₂HgI₄:0·xAgI] mixed composite system 419
Size variation of polyaniline nanoparticles dispersed in polyvinyl alcohol matrix 519
- Electrical properties
Effect of aluminum addition on electrical properties, dielectric characteristics, and its stability of (Pr,Co,Cr,Y)-added zinc oxide-based varistors 239
Effect of Ba(Ti_(0.9)Sn_(0.1))O₃ ceramic doping on optical, thermal and dielectric properties of polycarbonate host 589
- Electrical resistivity
Electrical resistivity measurement to predict uniaxial compressive and tensile strength of igneous rocks 731
- Electrochemical
Synthesis of CuO nanoflower and its application as a H₂O₂ sensor 17
- Electrochemical deposition
Fabrication of micro-Ni arrays by electroless and electrochemical depositions with etched porous aluminum template 641
- Electrochemical impedance spectroscopy
Effect of menthol coated craft paper on corrosion of copper in HCl environment 307
- Electrochemical properties
Electrochemical and optical properties of a new donor–acceptor type conjugated polymer derived from 3,4-didodecyloxythiophene 677
- Electrochemical studies
Aromatic quinoxaline as corrosion inhibitor for bronze in aqueous chloride solution 313
- Electroless deposition
Fabrication of micro-Ni arrays by electroless and electrochemical depositions with etched porous aluminum template 641
- Electromagnetic
Electromagnetic properties of carbonyl iron and their microwave absorbing characterization as filler in silicone rubber 633
- Electromagnetic interference and compatibility
Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657
- Electromechanical parameters
Temperature dependence of electromechanical properties of PLZT x/57/43 ceramics 383
- Electron beam welding
Microstructure and fracture behaviour of Ti₃Al/TC4 dissimilar materials joints welded by electron beam 707
- Electron microscopy
Function of magnesium aluminate hydrate and magnesium nitrate as MgO addition in crystal structure and grain size control of α-Al₂O₃ during sintering 55

- Rapid growth of nanotubes and nanorods of würtzite ZnO through microwave-irradiation of a metalorganic complex of zinc and a surfactant in solution 89
- Elevated temperature
Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep 475
- Entropy-loss
Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Epoxy
Dispersion and reinforcing mechanism of carbon nanotubes in epoxy nanocomposites 27
- Epoxy resin composites
Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657
- Equivalent circuit
Comparative corrosion study of Ag–Pd and Co–Cr alloys used in dental applications 491
- Erosion
Erosive wear of a surface coated hydroturbine steel 483
- Erratum 517
- Evaluation
Evaluation of borax solid wastes in production of frits suitable for fast single-fired wall tile opaque glass–ceramic glazes 135
- Exfoliation
Thermal stability of PMMA–clay hybrids 165
- Extrusion
Microstructure and mechanical properties of Mg–HAP composites 43
- Fast single-firing
Evaluation of borax solid wastes in production of frits suitable for fast single-fired wall tile opaque glass–ceramic glazes 135
- Fatigue
Effect of nanoparticles on tensile, impact and fatigue properties of fibre reinforced plastics 525
- Feldspar
Bio-beneficiation of kaolin and feldspar and its effect on fired characteristics of triaxial porcelain 333
- Fe–P alloys
Effect of carbon on mechanical properties of powder-processed Fe–0.35%P alloys 625
- Ferroelectric polymer
Bandgap determination of P(VDF–TrFE) copolymer film by electron energy loss spectroscopy 457
- Ferroelectrics
Dielectric and complex impedance studies of BaTi_{0.85}W_{0.15}O_{3+δ} ferroelectric ceramics 683
- Field emission
Electron field emission from *sp*²-induced insulating to metallic behaviour of amorphous carbon (*a*-C) films 215
- Flexural modulus
Dispersion and reinforcing mechanism of carbon nanotubes in epoxy nanocomposites 27
- Fluorescence
Electrochemical and optical properties of a new donor–acceptor type conjugated polymer derived from 3,4-didodecyloxythiophene 677
- Fly ash
Effect of curing conditions and ionic additives on properties of fly ash–lime compacts 185
- Forged
Effect of carbon on corrosion resistance of powder-processed Fe–0.35%P alloys 501
Effect of carbon on mechanical properties of powder-processed Fe–0.35%P alloys 625
- Fracture behaviour
Microstructure and fracture behaviour of Ti₃Al/TC4 dissimilar materials joints welded by electron beam 707
- Free CaO
Effect of curing conditions and ionic additives on properties of fly ash–lime compacts 185
- Frequency dependence dielectric response
Effect of paramagnetic manganese ions doping on frequency and high temperature dependence dielectric response of Na_{1.9}Li_{0.1}Ti₃O₇ ceramics 691
- FTIR
Effects of SiO₂ and TiO₂ fillers on thermal and dielectric properties of eco-friendly bismuth glass microcomposites of plasma display panels 33
- Fuel/oxidizer ratio
Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7
- Functionalization
Novel fabrication of silica nanotubes using multi-walled carbon nanotubes as template 351
- Gamma irradiation
Optical and X-ray photoelectron spectroscopy of PbGeO₃ and Pb₅Ge₂O₁₁ single crystals 395
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65
- Gas permeability
Preparation and characterization of porous Si₃N₄ ceramics prepared by compression molding and slip casting methods 619
- Gas sensor
Ethanol and LPG sensing characteristics of SnO₂ activated Cr₂O₃ thick film sensor 575
- Geology
Beneficiation of Iranian magnesite ores by reverse flotation process and its effects on shaped and unshaped refractories properties 697
- Glass transition
Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Glass transition temperature
Dispersion and reinforcing mechanism of carbon nanotubes in epoxy nanocomposites 27
- Glass–ceramic glazes
Evaluation of borax solid wastes in production of frits suitable for fast single-fired wall tile opaque glass–ceramic glazes 135
- Graft copolymerization
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65

- Grain boundaries
Dielectric and complex impedance studies of BaTi_{0.85}W_{0.15}O_{3+δ} ferroelectric ceramics 683
- Grain growth
Function of magnesium aluminate hydrate and magnesium nitrate as MgO addition in crystal structure and grain size control of α -Al₂O₃ during sintering 55
Effect of stress-induced grain growth during room temperature tensile deformation on ductility in nanocrystalline metals 561
- Granular strontium chloride, SrCl₂
Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Green photoluminescence
Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations 21
- Growth mechanism
Temperature dependent growth and optical properties of SnO₂ nanowires and nanobelts 357
- H⁺ ion implantation
Blistering in alloy Ti–6Al–4V from H⁺ ion implantation 179
- H₂O₂
Synthesis of CuO nanoflower and its application as a H₂O₂ sensor 17
- H₂/O₂ fuel cell
PEDOT–PSSA as an alternative support for Pt electrodes in PEFCs 157
- HAP
Microstructure and mechanical properties of Mg–HAP composites 43
- Hardness
Microstructure and mechanical properties of Mg–HAP composites 43
- Hot corrosion
High temperature cyclic oxidation and hot corrosion behaviours of superalloys at 900°C 299
- Hot filament CVD
Effect of substrate roughness on growth of diamond by hot filament CVD 251
- Hot isostatic pressing
Micrometer size grains of hot isostatically pressed alumina and its characterization 445
- HVOF
Influence of high velocity oxy-fuel parameters on properties of nanostructured TiO₂ coatings 671
- Hybrid
Thermal stability of PMMA–clay hybrids 165
- Hydrogen
Solar photocatalytic generation of hydrogen under ultraviolet-visible light irradiation on (CdS/ZnS)/Ag₂S + (RuO₂/TiO₂) photocatalysts 85
- Hydrogen pressure
Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides 569
- Hydrogen sulfide
Solar photocatalytic generation of hydrogen under ultraviolet-visible light irradiation on (CdS/ZnS)/Ag₂S + (RuO₂/TiO₂) photocatalysts 85
- Hydrogen titanate tubes
Synthesis and characterization of layered oriented hydrogen titanate micro-tube films 427
- Hydroxyapatite
Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7
- Infrared spectroscopy
IR study of Pb–Sr titanate borosilicate glasses 145
Crystallization and spectroscopic studies of manganese malonate 433
- Inhibitors
Aromatic quinoxaline as corrosion inhibitor for bronze in aqueous chloride solution 313
- Interface stress
Critical shear stress produced by interaction of edge dislocation with nanoscale inhomogeneity 123
- Interlayer applications
Growth and characterization of MMA/SiO₂ hybrid low-*k* thin films for interlayer dielectric applications 197
- Irradiation effects
Dielectric properties of electron irradiated PbZrO₃ thin films 191
- Kaolin
Bio-beneficiation of kaolin and feldspar and its effect on fired characteristics of triaxial porcelain 333
- Kerogen
Pyrolysis of petroleum asphaltenes from different geological origins and use of methyl-naphthalenes and methylphenanthrenes as maturity indicators for asphaltenes 509
Kinetics of thermal decomposition
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65
- Layered ceramics
Effect of paramagnetic manganese ions doping on frequency and high temperature dependence dielectric response of Na_{1.9}Li_{0.1}Ti₃O₇ ceramics 691
- Layered double hydroxide
Thermal decomposition of Co–Al layered double hydroxide: Identification of precursor to oxide with spinel structure 319
Synthesis and structure refinement of layered double hydroxides of Co, Mg and Ni with Ga 325
- Lead
Lead adsorption study on combustion derived γ -Fe₂O₃ surface 1
- Lead strontium titanate borosilicate glasses
IR study of Pb–Sr titanate borosilicate glasses 145
- Leucite
Synthesis and properties of dental zirconia–leucite composites 713
- Light emitting diodes
Electrochemical and optical properties of a new donor–acceptor type conjugated polymer derived from 3,4-didodecyloxythiophene 677
- Low dielectric constant
Growth and characterization of MMA/SiO₂ hybrid low-*k* thin films for interlayer dielectric applications 197

- Low refractive index
Growth and characterization of MMA/SiO₂ hybrid low-*k* thin films for interlayer dielectric applications 197
- Lowered temperature
Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep 475
- Luminescence
Sol-gel synthesis and photoluminescence of CaTi_{1-x}Zr_xO₃: Pr³⁺ phosphors 79
Rapid synthesis of CdSe nanocrystals in aqueous solution at room temperature 543
- Luminescence quenching
Red luminescence from hydrothermally synthesized Eu-doped ZnO nanoparticles under visible excitation 227
- Magnesian zirconate
Microstructural and densification study of natural Indian magnesite in presence of zirconia additive 439
- Magnesite
Microstructural and densification study of natural Indian magnesite in presence of zirconia additive 439
Beneficiation of Iranian magnesite ores by reverse flotation process and its effects on shaped and unshaped refractories properties 697
- Magnetic polymer composites
Cure and mechanical properties of recycled NdFeB-natural rubber composites 597
- Magnetocapacitance
Charge-order driven multiferroic and magneto-dielectric properties of rare earth manganates 169
- Magnetolectric effect
Charge-order driven multiferroic and magneto-dielectric properties of rare earth manganates 169
- Magnetron sputtering
Microstructural characterizations and hardness evaluation of d.c. reactive magnetron sputtered CrN thin films on stainless steel substrate 103
Properties of Nb-doped ZnO transparent conductive thin films deposited by rf magnetron sputtering using a high quality ceramic target 119
- Malachite green
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
- Material mechanical properties
Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep 475
- Maturity
Pyrolysis of petroleum asphaltene from different geological origins and use of methylnaphthalenes and methylphenanthrenes as maturity indicators for asphaltene 509
- Mechanical
Effect of uncoated calcium carbonate and stearic acid coated calcium carbonate on mechanical, thermal and structural properties of poly(butylene terephthalate) (PBT)/calcium carbonate composites 277
Effect of nanoparticles on tensile, impact and fatigue properties of fibre reinforced plastics 525
- Mechanical properties
Natural fibres-based polymers: Part I—Mechanical analysis of *Pine needles* reinforced biocomposites 257
Effects of organic additives on microstructure and mechanical properties of porous Si₃N₄ ceramics 285
Effect of stress-induced grain growth during room temperature tensile deformation on ductility in nanocrystalline metals 561
Preparation and characterization of porous Si₃N₄ ceramics prepared by compression molding and slip casting methods 619
Effect of carbon on mechanical properties of powder-processed Fe-0.35%P alloys 625
Synthesis and properties of dental zirconia-leucite composites 713
- Mechanical strength
Study on durability of natural fibre concrete composites using mechanical strength and microstructural properties 719
- Mechanically activated sintering
Preparation of Ti₃AlC₂ by mechanically activated sintering of 3Ti/Al/2C/0.2Sn 401
- Metal matrix composite
Effect of heat treatment on strength and abrasive wear behaviour of Al6061-SiC_p composites 49
- Metal-ceramic bond
Synthesis and properties of dental zirconia-leucite composites 713
- Methylnaphthalenes
Pyrolysis of petroleum asphaltene from different geological origins and use of methylnaphthalenes and methylphenanthrenes as maturity indicators for asphaltene 509
- Mg
Microstructure and mechanical properties of Mg-HAP composites 43
- Microhardness
Effect of heat treatment on strength and abrasive wear behaviour of Al6061-SiC_p composites 49
Microstructural characterizations and hardness evaluation of d.c. reactive magnetron sputtered CrN thin films on stainless steel substrate 103
- Microstructural characterization
Microstructural characterizations and hardness evaluation of d.c. reactive magnetron sputtered CrN thin films on stainless steel substrate 103
- Microstructure
Effects of organic additives on microstructure and mechanical properties of porous Si₃N₄ ceramics 285
Micrometer size grains of hot isostatically pressed alumina and its characterization 445
Preferential dissolution behaviour in Ni-Cr dental cast alloy 463
Preparation and characterization of porous Si₃N₄ ceramics prepared by compression molding and slip casting methods 619
Microstructure and fracture behaviour of Ti₃Al/TC4 dissimilar materials joints welded by electron beam 707
- Microwave absorbers
Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657

- Microwave conductivity
 Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- Microwave-assisted
 Lead adsorption study on combustion derived γ -Fe₂O₃ surface 1
- MMA incorporation
 Growth and characterization of MMA/SiO₂ hybrid low-*k* thin films for interlayer dielectric applications 197
- Modified solution combustion
 Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7
- Molten salt synthesis
 Low temperature synthesis of Ba_{1-x}Sr_xSnO₃ (*x* = 0–1) from molten alkali hydroxide flux 75
- Monoborides
 Computational study of 5*d* transition metal mononitrides and monoborides using density functional method 233
- Mononitrides
 Computational study of 5*d* transition metal mononitrides and monoborides using density functional method 233
- Morphology
 Effect of substrate roughness on growth of diamond by hot filament CVD 251
- Moulding
 Effect of nanoparticles on tensile, impact and fatigue properties of fibre reinforced plastics 525
- MPB
 Temperature dependence of electromechanical properties of PLZT *x*/57/43 ceramics 383
- Multiferroics
 Charge-order driven multiferroic and magneto-dielectric properties of rare earth manganates 169
- MWCNTs
 Novel fabrication of silica nanotubes using multi-walled carbon nanotubes as template 351
- Nafion content
 PEDOT–PSSA as an alternative support for Pt electrodes in PEFCs 157
- Nanoclay
 Thermal stability of PMMA–clay hybrids 165
- Nanocrystalline
 Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7
 Effect of stress-induced grain growth during room temperature tensile deformation on ductility in nanocrystalline metals 561
- Nanofibres
 Fabrication of ultra thin and aligned carbon nanofibres from electrospun polyacrylonitrile nanofibres 553
- Nanoflowers
 Synthesis of CuO nanoflower and its application as a H₂O₂ sensor 17
 Self-assembled flower-like nanostructures of InN and GaN grown by plasma-assisted molecular beam epitaxy 221
- Nanomaterials
 Rapid synthesis of CdSe nanocrystals in aqueous solution at room temperature 543
 Effects of reaction temperature on size and optical properties of CdSe nanocrystals 547
- Nanometer WS₂ particles
 Dispersion effect and auto-reconditioning performance of nanometer WS₂ particles in green lubricant 529
- Nanoparticles
 Effect of solvent-induced structural modifications on optical properties of CdS nanoparticles 535
- Nanoscale inhomogeneity
 Critical shear stress produced by interaction of edge dislocation with nanoscale inhomogeneity 123
- Nanostructure coating
 Influence of high velocity oxy-fuel parameters on properties of nanostructured TiO₂ coatings 671
- Nanostructures
 Rapid growth of nanotubes and nanorods of wurtzite ZnO through microwave-irradiation of a metalorganic complex of zinc and a surfactant in solution 89
 Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
 Temperature dependent growth and optical properties of SnO₂ nanowires and nanobelts 357
 Size variation of polyaniline nanoparticles dispersed in polyvinyl alcohol matrix 519
 Realizing NiO nanocrystals from a simple chemical method 653
- Nanotechnology
 Fabrication of ultra thin and aligned carbon nanofibres from electrospun polyacrylonitrile nanofibres 553
- Natural antioxidant
 Preliminary investigations of antioxidation of dihydro-myricetin in polymers 273
- Natural fibres
 Study on durability of natural fibre concrete composites using mechanical strength and microstructural properties 719
- Natural light
 Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- Natural rubber
 Cure and mechanical properties of recycled NdFeB–natural rubber composites 597
- Nb-doped
 Properties of Nb-doped ZnO transparent conductive thin films deposited by rf magnetron sputtering using a high quality ceramic target 119
- Neodymium iron boron
 Cure and mechanical properties of recycled NdFeB–natural rubber composites 597
- Nickel
 Fabrication of micro-Ni arrays by electroless and electrochemical depositions with etched porous aluminum template 641
- Ni–Co
 Effect of stress-induced grain growth during room temperature tensile deformation on ductility in nanocrystalline metals 561
- Ni–Cr–Mo
 Preferential dissolution behaviour in Ni–Cr dental cast alloy 463

- Nitrides
Self-assembled flower-like nanostructures of InN and GaN grown by plasma-assisted molecular beam epitaxy 221
- Optical absorption
Optical and X-ray photoelectron spectroscopy of PbGeO₃ and Pb₅Ge₂O₁₁ single crystals 395
- Optical and electrical properties
Properties of Nb-doped ZnO transparent conductive thin films deposited by rf magnetron sputtering using a high quality ceramic target 119
- Optical bandgap
Investigation of annealing-treatment on structural and optical properties of sol-gel-derived zinc oxide thin films 209
Optical properties of lead-tellurite glasses doped with samarium trioxide 391
- Optical constants
Investigation of annealing-treatment on structural and optical properties of sol-gel-derived zinc oxide thin films 209
- Optical interconnects
Growth and characterization of MMA/SiO₂ hybrid low-*k* thin films for interlayer dielectric applications 197
- Optical properties
Temperature dependent growth and optical properties of SnO₂ nanowires and nanobelts 357
Effects of reaction temperature on size and optical properties of CdSe nanocrystals 547
Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides 569
- Optimization
Natural fibres-based polymers: Part I—Mechanical analysis of *Pine needles* reinforced biocomposites 257
- Organic additives
Effects of organic additives on microstructure and mechanical properties of porous Si₃N₄ ceramics 285
- Oxidation
High temperature cyclic oxidation and hot corrosion behaviours of superalloys at 900°C 299
Fabrication of ultra thin and aligned carbon nanofibres from electrospun polyacrylonitrile nanofibres 553
XPS study of palladium sensitized nano porous silicon thin films 647
- P(VDF-TrFE) film
Bandgap determination of P(VDF-TrFE) copolymer film by electron energy loss spectroscopy 457
- Palladium
XPS study of palladium sensitized nano porous silicon thin films 647
- Passivation
XPS study of palladium sensitized nano porous silicon thin films 647
- PbGeO₃ and Pb₅Ge₂O₁₁ single crystals
Optical and X-ray photoelectron spectroscopy of PbGeO₃ and Pb₅Ge₂O₁₁ single crystals 395
- PbZrO₃
Dielectric properties of electron irradiated PbZrO₃ thin films 191
- Permittivity
Dielectric and thermal studies on gel grown strontium tartrate pentahydrate crystals 377
- Perovskite
Low temperature synthesis of Ba_{1-x}Sr_xSnO₃ (*x* = 0–1) from molten alkali hydroxide flux 75
Sol-gel synthesis and photoluminescence of CaTi_{1-x}Zr_xO₃: Pr³⁺ phosphors 79
Synthesis of nano-particle and highly porous conducting perovskites from simple *in situ* sol-gel derived carbon templating process 371
Thermal expansion of doped lanthanum gallates 407
- Perovskite oxides
Solution combustion synthesis of (La, K) FeO₃ orthoferrite ceramics: structural and magnetic property studies 611
- Phase transformation
Influence of high velocity oxy-fuel parameters on properties of nanostructured TiO₂ coatings 671
- Phase transition
Phase transition study in a [Cu₂HgI₄:0-*x*AgI] mixed composite system 419
- Phosphoric iron
Effect of carbon on corrosion resistance of powder-processed Fe-0.35%P alloys 501
- Photocatalysis
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
- Photocatalysts
Solar photocatalytic generation of hydrogen under ultraviolet-visible light irradiation on (CdS/ZnS)/Ag₂S + (RuO₂/TiO₂) photocatalysts 85
- Photocatalytic properties
Photoinduced properties of nanocrystalline TiO₂ sol-gel derived thin films 365
- Photoluminescence
Self-assembled flower-like nanostructures of InN and GaN grown by plasma-assisted molecular beam epitaxy 221
Red luminescence from hydrothermally synthesized Eu-doped ZnO nanoparticles under visible excitation 227
Effect of solvent-induced structural modifications on optical properties of CdS nanoparticles 535
- Plasma electrolyte oxidation
Effect of SiO₃²⁻/OH⁻ on plasma electrolytic oxidation of Ti-5Mo-4V-3Al 469
- PLZT
Temperature dependence of electromechanical properties of PLZT *x*/57/43 ceramics 383
- Polarization effects
Dielectric and thermal studies on gel grown strontium tartrate pentahydrate crystals 377
- Poly (methyl methacrylate)
Thermal stability of PMMA-clay hybrids 165
- Poly (styrene sulphonic acid)
PEDOT-PSSA as an alternative support for Pt electrodes in PEFCs 157
- Poly 3,4(ethylenedioxythiophene)
PEDOT-PSSA as an alternative support for Pt electrodes in PEFCs 157

- Poly(*p*-phenylenediazomethine)
 Complex permittivity and conductivity of poly(*p*-phenylenediazomethine) and its blends at microwave frequencies 265
- Polycrystalline diamond coating
 Effect of substrate roughness on growth of diamond by hot filament CVD 251
- Polymer–matrix composites
 Effect of uncoated calcium carbonate and stearic acid coated calcium carbonate on mechanical, thermal and structural properties of poly(butylene terephthalate) (PBT)/calcium carbonate composites 277
- Polymers
 Preliminary investigations of antioxidation of dihydro-myricetin in polymers 273
 Size variation of polyaniline nanoparticles dispersed in polyvinyl alcohol matrix 519
- Polyvinyl-alcohol
 Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Porosity
 Erosive wear of a surface coated hydroturbine steel 483
- Porous ceramics
 Synthesis of nano-particle and highly porous conducting perovskites from simple *in situ* sol–gel derived carbon templating process 371
- Porous Si₃N₄ ceramics
 Effects of organic additives on microstructure and mechanical properties of porous Si₃N₄ ceramics 285
 Preparation and characterization of porous Si₃N₄ ceramics prepared by compression molding and slip casting methods 619
- Porous silicon
 XPS study of palladium sensitized nano porous silicon thin films 647
- Powder metallurgy
 Effect of carbon on corrosion resistance of powder-processed Fe–0.35%P alloys 501
 Effect of carbon on mechanical properties of powder-processed Fe–0.35%P alloys 625
- Preparation
 Preparation and characterization of porous Si₃N₄ ceramics prepared by compression molding and slip casting methods 619
 Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- Processing
 Effects of organic additives on microstructure and mechanical properties of porous Si₃N₄ ceramics 285
- PS
 Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- Pulsed laser ablation in aqueous media
 Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations 21
- Pyrolysate
 Pyrolysis of petroleum asphaltenes from different geological origins and use of methylnaphthalenes and methylphenanthrenes as maturity indicators for asphaltenes 509
- Quality
 Effect of substrate roughness on growth of diamond by hot filament CVD 251
- Quinoxalin compounds
 Aromatic quinoxaline as corrosion inhibitor for bronze in aqueous chloride solution 313
- Radio frequency absorbers
 Synthesis of nanosized barium titanate/epoxy resin composites and measurement of microwave absorption 657
- Raman
 Effect of solvent-induced structural modifications on optical properties of CdS nanoparticles 535
- Raman scattering
 Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations 21
- Raman spectroscopy
 Crystallization and spectroscopic studies of manganese malonate 433
- Rare earth manganates
 Charge-order driven multiferroic and magneto-dielectric properties of rare earth manganates 169
- Reaction kinetics
 Effect of curing conditions and ionic additives on properties of fly ash–lime compacts 185
- Red shift
 Effect of solvent-induced structural modifications on optical properties of CdS nanoparticles 535
- Refractive index
 Optical properties of lead–tellurite glasses doped with samarium trioxide 391
- Refractories
 Beneficiation of Iranian magnesite ores by reverse flotation process and its effects on shaped and unshaped refractories properties 697
- Regression analysis
 Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- Reinforcements
 Natural fibres-based polymers: Part I—Mechanical analysis of *Pine needles* reinforced biocomposites 257
- Residual entropy
 Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Response surface methodology
 Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- Reverse flotation
 Beneficiation of Iranian magnesite ores by reverse flotation process and its effects on shaped and unshaped refractories properties 697
- RF–MBE
 Self-assembled flower-like nanostructures of InN and GaN grown by plasma-assisted molecular beam epitaxy 221
- Rietveld refinement
 Synthesis and characterization of ternary compound, Mn₂SnTe₄ 247

- Synthesis and structure refinement of layered double hydroxides of Co, Mg and Ni with Ga 325
- Roughness
Effect of substrate roughness on growth of diamond by hot filament CVD 251
- S 355JO steel
Behaviour of S 355JO steel subjected to uniaxial stress at lowered and elevated temperatures and creep 475
- Scanning electron microscope
Low temperature synthesis of $Ba_{1-x}Sr_xSnO_3$ ($x = 0-1$) from molten alkali hydroxide flux 75
Effect of $Ba(Ti_{(0.9)}Sn_{0.1})O_3$ ceramic doping on optical, thermal and dielectric properties of polycarbonate host 589
- SE spectra
Investigation of annealing-treatment on structural and optical properties of sol-gel-derived zinc oxide thin films 209
- SEM
Thermal stability of PMMA-clay hybrids 165
Realizing NiO nanocrystals from a simple chemical method 653
- SEM analysis
Study on durability of natural fibre concrete composites using mechanical strength and microstructural properties 719
- SEM/FESEM
Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7
- II-VI Semiconductor
Zn/ZnO core/shell nanoparticles synthesized by laser ablation in aqueous environment: Optical and structural characterizations 21
- Semiconductors
Synthesis and characterization of ternary compound, Mn_2SnTe_4 247
Rapid synthesis of CdSe nanocrystals in aqueous solution at room temperature 543
Effects of reaction temperature on size and optical properties of CdSe nanocrystals 547
- Silica nanotubes
Novel fabrication of silica nanotubes using multi-walled carbon nanotubes as template 351
- Sintering
Function of magnesium aluminate hydrate and magnesium nitrate as MgO addition in crystal structure and grain size control of $\alpha-Al_2O_3$ during sintering 55
Microstructural and densification study of natural Indian magnesite in presence of zirconia additive 439
- Sn
Preparation of Ti_3AlC_2 by mechanically activated sintering of $3Ti/Al/2C/0.2Sn$ 401
- SnO_2
Temperature dependent growth and optical properties of SnO_2 nanowires and nanobelts 357
- Solar photocatalysis
Solar photocatalytic generation of hydrogen under ultraviolet-visible light irradiation on $(CdS/ZnS)/Ag_2S + (RuO_2/TiO_2)$ photocatalysts 85
- Sol-gel
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
- Photoinduced properties of nanocrystalline TiO_2 sol-gel derived thin films 365
- Synthesis of nano-particle and highly porous conducting perovskites from simple *in situ* sol-gel derived carbon templating process 371
- Sol-gel synthesis
Sol-gel synthesis and photoluminescence of $CaTi_{1-x}Zr_xO_3: Pr^{3+}$ phosphors 79
- Solid oxide fuel cells
Thermal expansion of doped lanthanum gallates 407
- Solid solubility
Function of magnesium aluminate hydrate and magnesium nitrate as MgO addition in crystal structure and grain size control of $\alpha-Al_2O_3$ during sintering 55
- Solid solution
Effect of agglomeration during coprecipitation: Delayed spinellization of magnesium aluminate hydrate 451
- Solid state reaction
Effect of paramagnetic manganese ions doping on frequency and high temperature dependence dielectric response of $Na_{1.9}Li_{0.1}Ti_3O_7$ ceramics 691
- Solution combustion
Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- Solutionizing
Effect of heat treatment on strength and abrasive wear behaviour of $Al6061-SiC_p$ composites 49
- Spectroscopic analysis
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65
- Spinellization
Effect of agglomeration during coprecipitation: Delayed spinellization of magnesium aluminate hydrate 451
- Sputtering
Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides 569
- Stability
Effect of aluminum addition on electrical properties, dielectric characteristics, and its stability of (Pr,Co,Cr,Y)-added zinc oxide-based varistors 239
- Stannates
Low temperature synthesis of $Ba_{1-x}Sr_xSnO_3$ ($x = 0-1$) from molten alkali hydroxide flux 75
- Stellite-6
Erosive wear of a surface coated hydroturbine steel 483
- Stoichiometry
Effect of agglomeration during coprecipitation: Delayed spinellization of magnesium aluminate hydrate 451
- Strontium tartrate
Dielectric and thermal studies on gel grown strontium tartrate pentahydrate crystals 377
- Structure
Lead adsorption study on combustion derived $\gamma-Fe_2O_3$ surface 1
- Superalloys
High temperature cyclic oxidation and hot corrosion behaviours of superalloys at $900^\circ C$ 299
- Super-hydrophilicity
Photoinduced properties of nanocrystalline TiO_2 sol-gel derived thin films 365

- Surface modification
Blistering in alloy Ti–6Al–4V from H⁺ ion implantation 179
- Synthesis
Rapid synthesis of CdSe nanocrystals in aqueous solution at room temperature 543
Preparation and crystal structure characterization of CuNiGaSe₃ and CuNiInSe₃ quaternary compounds 637
- Tafel polarization
Effect of menthol coated craft paper on corrosion of copper in HCl environment 307
- Taguchi's technique
Modelling of flame temperature of solution combustion synthesis of nanocrystalline calcium hydroxyapatite material and its parametric optimization 339
- Tellurite glasses
Optical properties of lead–tellurite glasses doped with samarium trioxide 391
- Template
Novel fabrication of silica nanotubes using multi-walled carbon nanotubes as template 351
Synthesis and characterization of layered oriented hydrogen titanate micro-tube films 427
Fabrication of micro-Ni arrays by electroless and electrochemical depositions with etched porous aluminum template 641
- Tensile strength
Effect of heat treatment on strength and abrasive wear behaviour of Al6061–SiC_p composites 49
- Tensile test
Cure and mechanical properties of recycled NdFeB–natural rubber composites 597
- Thermal analysis
Effect of uncoated calcium carbonate and stearic acid coated calcium carbonate on mechanical, thermal and structural properties of poly(butylene terephthalate) (PBT)/calcium carbonate composites 277
Phase transition study in a [Cu₂HgI₄:0:xAgI] mixed composite system 419
- Thermal decomposition
Thermal decomposition of Co–Al layered double hydroxide: Identification of precursor to oxide with spinel structure 319
- Thermal expansion
Properties of calcium fluoride up to 95 kbar: A theoretical study 413
- Thermal properties
Effects of SiO₂ and TiO₂ fillers on thermal and dielectric properties of eco-friendly bismuth glass microcomposites of plasma display panels 33
Dielectric and thermal studies on gel grown strontium tartrate pentahydrate crystals 377
Effect of Ba(Ti_(0.9)Sn_(0.1))O₃ ceramic doping on optical, thermal and dielectric properties of polycarbonate host 589
- Thermal stability
Thermal stability of PMMA–clay hybrids 165
- Thermal study
Natural fibres-based polymers: Part I—Mechanical analysis of *Pine needles* reinforced biocomposites 257
- Thermodynamic properties
Properties of calcium fluoride up to 95 kbar: A theoretical study 413
- Thermodynamics
Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Thin film
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
Chemical solution deposition of CaCu₃Ti₄O₁₂ thin film 203
Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides 569
Preparation and characterization of nanostructured copper bismuth diselenide thin films from a chemical route 663
- Ti₃AlC₂
Preparation of Ti₃AlC₂ by mechanically activated sintering of 3Ti/Al/2C/0.2Sn 401
- Ti–6Al–4V alloy
Blistering in alloy Ti–6Al–4V from H⁺ ion implantation 179
- TiF₄
Synthesis and characterization of layered oriented hydrogen titanate micro-tube films 427
- TiO₂
Photoinduced properties of nanocrystalline TiO₂ sol–gel derived thin films 365
Influence of high velocity oxy-fuel parameters on properties of nanostructured TiO₂ coatings 671
Catalytic property of TiO₂/PS complex nanoparticles prepared via a novel TSM 741
- Titanium
Effect of SiO₃²⁻/OH⁻ on plasma electrolytic oxidation of Ti–5Mo–4V–3Al 469
- Topochemical relationship
Thermal decomposition of Co–Al layered double hydroxide: Identification of precursor to oxide with spinel structure 319
- Transmission and absorption
Optical properties of d.c. magneto sputtered tantalum and titanium nanostructure thin film metal hydrides 569
- Transmission electron microscopy
Red luminescence from hydrothermally synthesized Eu-doped ZnO nanoparticles under visible excitation 227
- Transport
Electron field emission from *sp*²-induced insulating to metallic behaviour of amorphous carbon (*a*-C) films 215
- Triaxial porcelain
Bio-beneficiation of kaolin and feldspar and its effect on fired characteristics of triaxial porcelain 333
- Uniaxial compressive strength
Electrical resistivity measurement to predict uniaxial compressive and tensile strength of igneous rocks 731
- Unified model
Resolution of conflicting views on thermodynamics of glass transition: A unified model 603
- Urea hydrolysis
Synthesis and structure refinement of layered double hydroxides of Co, Mg and Ni with Ga 325
- Urea/glycine/glucose
Effect of fuel characteristics on synthesis of calcium hydroxyapatite by solution combustion route 7

- Varistors
Effect of aluminum addition on electrical properties, dielectric characteristics, and its stability of (Pr,Co,Cr,Y)-added zinc oxide-based varistors 239
- Vector impedance spectroscopy
Temperature dependence of electromechanical properties of PLZT $x/57/43$ ceramics 383
- Vitrification
Utilization of steel melting electric arc furnace slag for development of vitreous ceramic tiles 293
- Volatile corrosion inhibitor
Effect of menthol coated craft paper on corrosion of copper in HCl environment 307
- Wall tiles
Evaluation of borax solid wastes in production of frits suitable for fast single-fired wall tile opaque glass-ceramic glazes 135
- Weibull distribution
Effects of organic additives on microstructure and mechanical properties of porous Si_3N_4 ceramics 285
- XPS
Optical and X-ray photoelectron spectroscopy of PbGeO_3 and $\text{Pb}_5\text{Ge}_2\text{O}_{11}$ single crystals 395
XPS study of palladium sensitized nano porous silicon thin films 647
- X-ray diffraction
Low temperature synthesis of $\text{Ba}_{1-x}\text{Sr}_x\text{SnO}_3$ ($x = 0-1$) from molten alkali hydroxide flux 75
Impedance spectroscopy of $\text{Ba}_3\text{Sr}_2\text{DyTi}_3\text{V}_7\text{O}_{30}$ ceramic 129
Red luminescence from hydrothermally synthesized Eu-doped ZnO nanoparticles under visible excitation 227
Phase transition study in a $[\text{Cu}_2\text{HgI}_4:0.x\text{AgI}]$ mixed composite system 419
Crystallization and spectroscopic studies of manganese malonate 433
Solution combustion synthesis of (La, K) FeO_3 orthoferrite ceramics: structural and magnetic property studies 611
Realizing NiO nanocrystals from a simple chemical method 653
Dielectric and complex impedance studies of $\text{BaTi}_{0.85}\text{W}_{0.15}\text{O}_{3+\delta}$ ferroelectric ceramics 683
- X-ray methods
Function of magnesium aluminate hydrate and magnesium nitrate as MgO addition in crystal structure and grain size control of $\alpha\text{-Al}_2\text{O}_3$ during sintering 55
- X-ray powder diffraction
Synthesis and characterization of ternary compound, Mn_2SnTe_4 247
Preparation and crystal structure characterization of CuNiGaSe_3 and CuNiInSe_3 quaternary compounds 637
- XRD
Structure, optical and thermal decomposition characters of LDPE graft copolymers synthesized by gamma irradiation 65
Thermal stability of PMMA-clay hybrids 165
- Young's modulus
Influence of granular strontium chloride as additives on some electrical and mechanical properties for pure polyvinyl alcohol 149
- Zinc oxide
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
Red luminescence from hydrothermally synthesized Eu-doped ZnO nanoparticles under visible excitation 227
- Zirconia
Microstructural and densification study of natural Indian magnesite in presence of zirconia additive 439
Synthesis and properties of dental zirconia-leucite composites 713
- ZnO
Manufacturing of patterned ZnO films with application for photoinitiated decolorization of malachite green in aqueous solutions 111
Effect of indium doping on zinc oxide films prepared by chemical spray pyrolysis technique 581
- ZnO films
Properties of Nb-doped ZnO transparent conductive thin films deposited by rf magnetron sputtering using a high quality ceramic target 119
Investigation of annealing-treatment on structural and optical properties of sol-gel-derived zinc oxide thin films 209
- ZnO : In
Effect of indium doping on zinc oxide films prepared by chemical spray pyrolysis technique 581