

SUBJECT INDEX

- Abrasion
A new high temperature resistant glass–ceramic coating for gas turbine engine components 689
- Absorption spectra
Photocurrent enhancement of d.c. sputtered copper oxide thin films 483
- Acceptor
Study on electrical properties of Ni-doped SrTiO₃ ceramics using impedance spectroscopy 275
- Accreditation
Certified reference materials of trace elements in water 373
- A.c. electrical frequency
Proton induced modification in makrofol-DE 599
- Acousto-optic crystal
Growth of lead molybdate crystals by vertical Bridgman method 555
- A.C. susceptibility
X-ray and magnetic studies of Zn²⁺ substituted Ni–Pb ferrites 35
- Activation energy
Diffusion processes in **b**-Zr (Al) phase: a thermodynamic approach 267
Structural and electrical measurements of CdZnSe composite 431
Effect of temperature and **a**-irradiation on gas permeability for polymeric membrane 643
- Advanced ceramics
Multielement trace determination in high purity advanced ceramics and high purity metals 361
- AFM
Structural morphology of amorphous conducting carbon film 609
- Ageing
Influence of ageing, inclusions and voids on ductile fracture mechanism in commercial Al-alloys 75
- Al-alloy
Influence of ageing, inclusions and voids on ductile fracture mechanism in commercial Al-alloys 75
- Al–Ga–P–As system
Thermodynamic modelling of phase equilibria in Al–Ga–P–As system 179
- Alkali-C₆₀ phonon
Superconductivity and electrical resistivity in alkali metal doped fullerenes: Phonon mechanism 155
- Alkaline bath
A new condensation product for zinc plating from non-cyanide alkaline bath 495
- Alkaloids
Weak C–H...O hydrogen bonds in alkaloids: An overview 187
- Alloying
Influence of alloying and secondary annealing on anneal hardening effect at sintered copper alloys 401
- Alloys
Influence of Cl⁻, Br⁻, NO₃⁻ and SO₄²⁻ ions on the corrosion behaviour of 6061 Al alloy 253
% **a**-Al₂O₃
Significance of structure–property relationship in alumina based porcelain insulators to achieve quality 681
- Alumina
DC resistivity of alumina and zirconia sintered with TiC 227
Role of small amount of MgO and ZrO₂ on creep behaviour of high purity Al₂O₃ 281
- Alumina porcelain
Significance of structure–property relationship in alumina based porcelain insulators to achieve quality 681
- Aluminium
Diffusion processes in **b**-Zr (Al) phase: a thermodynamic approach 267
- Ammonia sensor
Indium oxide thin film based ammonia gas and ethanol vapour sensor 9
- Amorphous
Structural morphology of amorphous conducting carbon film 609
- Anionic surfactants
Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
- Anneal hardening effect
Influence of alloying and secondary annealing on anneal hardening effect at sintered copper alloys 401
- Apatite
Hydroxyapatite coating by biomimetic method on titanium alloy using concentrated SBF 617
- Barium erbium niobate
Ba₂ErNbO₆: A new perovskite ceramic substrate for Bi(2223) superconducting thick films (*T_c*(0) = 110 K) 39
- bcc* and *fcc* structures
Estimation of CE–CVM energy parameters from miscibility gap data 173
- Bentonite
Effects of polyethyleneimine adsorption on rheology of bentonite suspensions 287
- Biomaterial
Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- Biomimetic
Hydroxyapatite coating by biomimetic method on titanium alloy using concentrated SBF 617
- Biopolymer
Morphological, thermal and annealed microhardness characterization of gelatin based interpenetrating networks of polyacrylonitrile: A hard biopolymer 529
- Bi₂TeO₅ crystal
Bridgman growth of bismuth tellurite crystals 561

- Blast furnace slag
Ultra low and negative expansion glass-ceramic materials produced from pyrophyllite and blast furnace slag 437
- Bonding parameters
Optical absorption and electron spin resonance studies of Cu^{2+} in $\text{Li}_2\text{O}-\text{Na}_2\text{O}-\text{B}_2\text{O}_3-\text{As}_2\text{O}_3$ glasses 589
- Bridgman
Bridgman growth of bismuth tellurite crystals 561
- Bridgman anvil cell
Optical and electrical properties of ZrSe_3 single crystals grown by chemical vapour transport technique 405
- Bridgman method
Crystal growth and reflectivity studies of $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ crystals 411
Growth of lead molybdate crystals by vertical Bridgman method 555
- Cadmium compounds
Thermal and structural properties of spray pyrolysed CdS thin film 233
- Capacitor
Powder metallurgical processing and metal purity: A case for capacitor grade sintered tantalum 305
- Carbon
Structural morphology of amorphous conducting carbon film 609
- Cathode material
Synthesis and characterization of $\text{LiMg}_y\text{Mn}_{2-y}\text{O}_4$ cathode materials by a modified Pechini process for lithium batteries 663
- Cation distribution
X-ray and magnetic studies of Zn^{2+} substituted Ni-Pb ferrites 35
- Cationic polymer
Effects of polyethyleneimine adsorption on rheology of bentonite suspensions 287
- Cationic polymerization
Electron-beam curing of epoxy resins: effect of alcohols on cationic polymerization 603
- Ce addition
Effect of cerium addition on microstructures of carbon-alloyed iron aluminides 547
- Ceramics
Preparation of nanocrystalline ferroelectric BaNb_2O_6 by citrate gel method 121
A coprecipitation technique to prepare ZnNb_2O_6 powders 205
Preparation of ultrafine LiTaO_3 powders by citrate gel method 391
Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- Chalcogenide glasses
Study of electrical properties of glassy $\text{Se}_{100-x}\text{Te}_x$ alloys 579
- Characteristics development
Influence of *b*-cyclodextrin as an encapsule and as an inclusion complex dopant on conducting polyaniline 55
- Characterization
Growth and characterization of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ epitaxial films by isothermal vapour phase epitaxy (ISOVPE) 97
Growth of high purity semiconductor epitaxial layers by liquid phase epitaxy and their characterization 349
- Charge-transfer complex
Preparation and characterization of polymer composites based on charge-transfer complex of phenothiazine-iodine in polystyrene 423
- Chemical synthesis
Preparation of nanocrystalline ferroelectric BaNb_2O_6 by citrate gel method 121
Silver nanoparticles of variable morphology synthesized in aqueous foams as novel templates 503
A convenient thermal decomposition-co-reduction synthesis of nanocrystalline tungsten disilicide 511
- Chloride vapour phase epitaxy
Progress in III-nitrides: Process issue and purity perspective 355
- Cluster expansion method
Estimation of CE-CVM energy parameters from miscibility gap data 173
Transformations among CE-CVM model parameters for multicomponent systems 293
- Cluster variation method
Estimation of CE-CVM energy parameters from miscibility gap data 173
Transformations among CE-CVM model parameters for multicomponent systems 293
- Coatings
A new high temperature resistant glass-ceramic coating for gas turbine engine components 689
- Coercivity
Structure and coercivity of nanocrystalline Fe-Si-B-Nb-Cu alloys 395
Synthesis and magnetic study of Co-Al substituted calcium hexaferrite 585
- Columbite precursor
Synthesis and structural characterization of some $\text{Pb}(\text{B}'_{1/3}\text{Nb}_{2/3})\text{O}_6$ type materials by two-stage solid-state route 199
- Combustion method
Synthesis of MoO_3 and its polyvinyl alcohol nanostructured film 477
- Compacts
Some studies on the reaction between fly ash and lime 131
Effect of heat treatment on properties of steam cured fly ash-lime compacts 697
- Composite
Microstructure and electrical conductivity of Al-SiC_p composites produced by spray forming process 125
DC resistivity of alumina and zirconia sintered with TiC 227
Magnetoelectric effect in metal-PZT laminates 419
Silver nanoparticles of variable morphology synthesized in aqueous foams as novel templates 503
Synthesis, characterization and conductivity studies of polypyrrole-fly ash composites 565
- II-VI Compound
High resistivity In-doped ZnTe: electrical and optical properties 647
- III-V Compounds
Growth of high purity semiconductor epitaxial layers by liquid phase epitaxy and their characterization 349
- Conductivity
Synthesis, characterization and conductivity studies of polypyrrole-fly ash composites 565

- Consolute point
 Estimation of CE–CVM energy parameters from miscibility gap data 173
- Copolymer analysis
 Overview literature on matrix assisted laser desorption ionization mass spectroscopy (MALDI MS): basics and its applications in characterizing polymeric materials 515
- Copper alloys
 Influence of alloying and secondary annealing on anneal hardening effect at sintered copper alloys 401
- Corona poling
 Characterization and microstructure of porous lead zirconate titanate ceramics 453
- Corrosion evaluation
 Corrosion of steel structures in sea-bed sediment 81
- Corrosion factor
 Corrosion of steel structures in sea-bed sediment 81
- Corrosion mechanism
 Corrosion of steel structures in sea-bed sediment 81
- Corrosion test
 Influence of Cl^- , Br^- , NO_3^- and SO_4^{2-} ions on the corrosion behaviour of 6061 Al alloy 253
- Cr
 Effect of Cr and Ni on diffusion bonding of Fe_3Al with steel 63
- Creep
 Role of small amount of MgO and ZrO_2 on creep behaviour of high purity Al_2O_3 281
- Creep and stress rupture properties
 Effect of residual elements on high performance nickel base superalloys for gas turbines and strategies for manufacture 379
- Critical etching time
 Effect of temperature and α -irradiation on gas permeability for polymeric membrane 643
- CRMs
 Certified reference materials of trace elements in water 373
- Crystal growth
 Growth of lead molybdate crystals by vertical Bridgman method 555
- Crystallization
 Structure and coercivity of nanocrystalline Fe–Si–B–Nb–Cu alloys 395
- Crystallography
 Weak C–H...O hydrogen bonds in alkaloids: An overview 187
- Crystal structure
 Hydrothermal synthesis, structure and characterization of new NASICON related potassium iron (III) pyrophosphate 1
 Weak C–H...O hydrogen bonds in alkaloids: An overview 187
- Cubic spinel materials
 Synthesis and characterization of $\text{LiMg}_y\text{Mn}_{2-y}\text{O}_4$ cathode materials by a modified Pechini process for lithium batteries 663
- Curie temperature
 Synthesis and magnetic study of Co–Al substituted calcium hexaferrite 585
- Curing
 Some studies on the reaction between fly ash and lime 131
 Effect of heat treatment on properties of steam cured fly ash–lime compacts 697
- b**-cyclodextrin
 Influence of **b**-cyclodextrin as an capsule and as an inclusion complex dopant on conducting polyaniline 55
- Debye temperature
 Debye temperature of uranium chalcogenides from their lattice dynamics 669
- Defect
 EBIC and DLTS characterization of pure SI crystals 367
- Density
 D.C. electrical conductivity measurements on ADP single crystals added with simple organic compounds 415
- Density of defect states
 Study of electrical properties of glassy $\text{Se}_{100-x}\text{Te}_x$ alloys 579
- Dielectric
 $(\text{La}_{2/5}\text{Ba}_{2/5}\text{Ca}_{1/5})(\text{Mn}_{(2/5)-x}\text{Ni}_x\text{Ti}_{3/5})\text{O}_3$: Rietveld studies, dielectric and magnetic properties of new perovskite-related oxides 571
- Diffuse reflectance spectroscopy
 Environmentally benign novel green pigments: $\text{Pr}_{1-x}\text{Ca}_x\text{PO}_4$ ($x = 0-0.4$) 299
- Diffusion
 Diffusivity of Al and Fe near the diffusion bonding interface of Fe_3Al with low carbon steel 69
- Diffusion bonding
 Effect of Cr and Ni on diffusion bonding of Fe_3Al with steel 63
 Diffusivity of Al and Fe near the diffusion bonding interface of Fe_3Al with low carbon steel 69
- Diffusion coefficient
 Diffusion processes in **b**-Zr (Al) phase: a thermodynamic approach 267
- Diffusion limitation aggregation
 Polyoxometalate based soft chemical route for preparation of Pt nanorods and self-assemblies 629
- b**-diketonate
 Oriented growth of thin films of samarium oxide by MOCVD 49
- Dilute magnetic semiconductors
 Progress in III-nitrides: Process issue and purity perspective 355
- Dioxalotodiaquochromate(III)
 Influence of **b**-cyclodextrin as an capsule and as an inclusion complex dopant on conducting polyaniline 55
- Direct methods
 Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Dislocation network
 Effect of cold work and aging on mechanical properties of a copper bearing HSLA-100 steel 259
- Dispersability
 Dispersion and rheological studies of Y–PSZ tape casting slurry 103
- Dispersion behaviour
 Role of dispersion conditions on grindability of yttria stabilized zirconia (YSZ) powders 109
- Dispersoids
 Influence of thermomechanical aging on fatigue behaviour of 2014 Al-alloy 91
- DLTS
 EBIC and DLTS characterization of pure SI crystals 367

- Dopant
Role of small amount of MgO and ZrO₂ on creep behaviour of high purity Al₂O₃ 281
- DSC
Morphological, thermal and annealed microhardness characterization of gelatin based interpenetrating networks of polyacrylonitrile: A hard biopolymer 529
Proton induced modification in makrofol-DE 599
- Ductile fracture
Influence of ageing, inclusions and voids on ductile fracture mechanism in commercial Al-alloys 75
- Dye sensitization
Versatile preparation method for mesoporous TiO₂ electrodes suitable for solid-state dye sensitized photocells 635
- E-beam
Electron-beam curing of epoxy resins: effect of alcohols on cationic polymerization 603
- EDAX
Crystal growth and reflectivity studies of Zn_{1-x}Mn_xTe crystals 411
- Eggshell
Development of calcium phosphate based apatite from hen's eggshell 115
- Elastic constants
Pressure dependence of elastic properties of ZnX (X = Se, S and Te): Role of charge transfer 651
- Electrical conductivity
Microstructure and electrical conductivity of Al-SiC_p composites produced by spray forming process 125
DC resistivity of alumina and zirconia sintered with TiC 227
- Electrical conductivity measurements
D.C. electrical conductivity measurements on ADP single crystals added with simple organic compounds 415
- Electrical properties
Preparation and study of thickness dependent electrical characteristics of zinc sulfide thin films 43
- Electrical resistivity
Superconductivity and electrical resistivity in alkali metal doped fullerides: Phonon mechanism 155
DC resistivity of alumina and zirconia sintered with TiC 227
- Electrochemical properties
Influence of Cl⁻, Br⁻, NO₃⁻ and SO₄²⁻ ions on the corrosion behaviour of 6061 Al alloy 253
- Electrocrystallization
A new crystal structure for (BEDT-TTF)₂SbF₆ and some of its physical properties 25
- Electronic materials
Preparation of nanocrystalline ferroelectric BaNb₂O₆ by citrate gel method 121
A coprecipitation technique to prepare ZnNb₂O₆ powders 205
Preparation of ultrafine LiTaO₃ powders by citrate gel method 391
- Electron microscopy
A coprecipitation technique to prepare ZnNb₂O₆ powders 205
Preparation of ultrafine LiTaO₃ powders by citrate gel method 391
- Electroplating
A new condensation product for zinc plating from non-cyanide alkaline bath 495
- Envelope
Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Epitaxy
Growth and characterization of Hg_{1-x}Cd_xTe epitaxial films by isothermal vapour phase epitaxy (ISOVPE) 97
Growth of high purity semiconductor epitaxial layers by liquid phase epitaxy and their characterization 349
- Epoxy resin
Electron-beam curing of epoxy resins: effect of alcohols on cationic polymerization 603
- ESR
Luminescent studies of impurity doped SrS phosphors 31
Optical absorption and electron spin resonance studies of Cu²⁺ in Li₂O-Na₂O-B₂O₃-As₂O₃ glasses 589
- Ethanol vapour sensor
Indium oxide thin film based ammonia gas and ethanol vapour sensor 9
- Ethylene vinyl acetate co-polymer
Preparation of microstructured hydroxyapatite microspheres using oil in water emulsions 383
- b**-(ET)₂PF₆
A new crystal structure for (BEDT-TTF)₂SbF₆ and some of its physical properties 25
- (ET)₂SbF₆
A new crystal structure for (BEDT-TTF)₂SbF₆ and some of its physical properties 25
- Excess free energy
Thermodynamic modelling of phase equilibria in Al-Ga-P-As system 179
- Fe₃Al
Diffusivity of Al and Fe near the diffusion bonding interface of Fe₃Al with low carbon steel 69
Effect of cerium addition on microstructures of carbon-alloyed iron aluminides 547
- Fe₃Al/steel interface
Effect of Cr and Ni on diffusion bonding of Fe₃Al with steel 63
- Fe-Mn-Si-Cr-Ni
Effect of heat treatment on martensitic transformations in Fe-12.5%Mn-5.5%Si-9%Cr-3.5%Ni alloy 87
- a**-Fe₂O₃
Uses of **a**-Fe₂O₃ and fly ash as solid adsorbents 713
- Ferroelectricity
Preparation of nanocrystalline ferroelectric BaNb₂O₆ by citrate gel method 121
- Ferroelectric properties
Characterization and microstructure of porous lead zirconate titanate ceramics 453
- Fe-Si-B-Nb-Cu alloy
Structure and coercivity of nanocrystalline Fe-Si-B-Nb-Cu alloys 395
- FFT
Structural morphology of amorphous conducting carbon film 609
- Fired properties
Effect of titania on fired characteristics of triaxial porcelain 445
- Fluidity
Correlation between ionic conductivity and fluidity of polymer gel electrolytes containing NH₄CF₃SO₃ 467

- Fluorescence
Screen printed nanosized ZnO thick film 239
- Fly ash
Some studies on the reaction between fly ash and lime 131
Synthesis, characterization and conductivity studies of poly-pyrrole–fly ash composites 565
Uses of α -Fe₂O₃ and fly ash as solid adsorbents 713
- Fly ash–lime
Effect of heat treatment on properties of steam cured fly ash–lime compacts 697
- Foam
Silver nanoparticles of variable morphology synthesized in aqueous foams as novel templates 503
- Foreword 303
- Fracture toughness
Effect of phase separation on the fracture toughness of SiO₂–B₂O₃–Na₂O glass 457
- FTIR
Proton induced modification in makrofol-DE 599
- FTIR spectroscopy
Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
Correlation between ionic conductivity and fluidity of polymer gel electrolytes containing NH₄CF₃SO₃ 467
- Fullerenes
Superconductivity and electrical resistivity in alkali metal doped fullerides: Phonon mechanism 155
- Functionalized polymer
Polyvinyl alcohol–cellulose composite: a taste sensing material 703
- Furanocoumarin
Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Gallium nitride
Progress in III-nitrides: Process issue and purity perspective 355
- Gamma
Evaluation of gamma and neutron irradiation effects on the properties of mica film capacitors 719
- Gas permeability
Effect of temperature and α -irradiation on gas permeability for polymeric membrane 643
- Gas sensor
Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- Gate dielectric
Oriented growth of thin films of samarium oxide by MOCVD 49
- GD–MS
Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
- Gel permeation chromatography
Overview literature on matrix assisted laser desorption ionization mass spectroscopy (MALDI MS): basics and its applications in characterizing polymeric materials 515
- Gels
Correlation between ionic conductivity and fluidity of polymer gel electrolytes containing NH₄CF₃SO₃ 467
- Glass
Effect of phase separation on the fracture toughness of SiO₂–B₂O₃–Na₂O glass 457
- Glass–ceramic
Ultra low and negative expansion glass–ceramic materials produced from pyrophyllite and blast furnace slag 437
A new high temperature resistant glass–ceramic coating for gas turbine engine components 689
- Glass transition temperature
Optical absorption and electron spin resonance studies of Cu²⁺ in Li₂O–Na₂O–B₂O₃–As₂O₃ glasses 589
- Glycerol process
Preparation of silver powder through glycerol process 213
- Grain
Study on electrical properties of Ni-doped SrTiO₃ ceramics using impedance spectroscopy 275
- Grain boundary
Study on electrical properties of Ni-doped SrTiO₃ ceramics using impedance spectroscopy 275
- Grain size
Effect of heat treatment on martensitic transformations in Fe–12.5%Mn–5.5%Si–9%Cr–3.5%Ni alloy 87
Microstructure and electrical conductivity of Al–SiC_p composites produced by spray forming process 125
- Green pigment
Environmentally benign novel green pigments: Pr_{1-x}Ca_xPO₄ ($x = 0-0.4$) 299
- Grindability
Role of dispersion conditions on grindability of yttria stabilized zirconia (YSZ) powders 109
- Growth
Growth of high purity semiconductor epitaxial layers by liquid phase epitaxy and their characterization 349
- Hall parameters
Optical and electrical properties of ZrSe₃ single crystals grown by chemical vapour transport technique 405
- Heat treatment
Effect of heat treatment on properties of steam cured fly ash–lime compacts 697
- Hexadecylamine
Synthesis and characterization of HDA/NaMMT organoclay 623
- High-energy heavy ions
High-energy heavy ion testing of VLSI devices for single event upsets and latch up 473
- High pressure
Superconductivity in dense Mg_{1-x}M_xB₂ (M = Zr, Nb, Mo; $x = 0-0.5$) materials sintered under pressure 249
- High pure cadmium
Zone refining of cadmium and related characterization 209
- High purity materials
Analytical challenges in characterization of high purity materials 331
- High purity targets
High purity materials as targets for radioisotope production: Needs and challenges 325
- High purity tellurium (7N)
Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
- High resolution transmission electron microscopy
Optical and microstructural investigations of porous silicon 219
- High temperature resistance
A new high temperature resistant glass–ceramic coating for gas turbine engine components 689

- Hopping conduction
 Study of electrical properties of glassy $\text{Se}_{100-x}\text{Te}_x$ alloys 579
- Horizontal-zone melting
 High purity tellurium production using dry refining processes 309
- Hot corrosion
 A new high temperature resistant glass-ceramic coating for gas turbine engine components 689
- HR-ICP-MS
 Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
 Multielement trace determination in high purity advanced ceramics and high purity metals 361
- HTSC films
 Effect of annealing temperature on the structural-microstructural and electrical characteristics of thallium bearing HTSC films prepared by chemical spray pyrolysis technique 151
- Hull cell studies
 A new condensation product for zinc plating from non-cyanide alkaline bath 495
- Humidity sensing
 Dip-coated hydrotungstite thin films as humidity sensors 243
- Hydrogen bond
 Weak C–H...O hydrogen bonds in alkaloids: An overview 187
 Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Hydrothermal
 Hydrothermal synthesis, structure and characterization of new NASICON related potassium iron (III) pyrophosphate 1
- Hydrotungstite
 Dip-coated hydrotungstite thin films as humidity sensors 243
- Hydroxyapatite
 Development of calcium phosphate based apatite from hen's eggshell 115
 Preparation of microstructured hydroxyapatite microspheres using oil in water emulsions 383
 Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- ICP-MS
 Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
- Impedance spectroscopy
 Study on electrical properties of Ni-doped SrTiO_3 ceramics using impedance spectroscopy 275
- Impurity
 EBIC and DLTS characterization of pure SI crystals 367
- Impurity added ADP crystals
 D.C. electrical conductivity measurements on ADP single crystals added with simple organic compounds 415
- Inclusion complex
 Influence of *b*-cyclodextrin as an encapsule and as an inclusion complex dopant on conducting polyaniline 55
- Inclusions
 Influence of ageing, inclusions and voids on ductile fracture mechanism in commercial Al-alloys 75
- Indium doping
 Studies on preparation and characterization of indium doped zinc oxide films by chemical spray deposition 487
- Indium oxide
 Indium oxide thin film based ammonia gas and ethanol vapour sensor 9
- Infrared spectroscopy
 Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- Insulator
 Significance of structure-property relationship in alumina based porcelain insulators to achieve quality 681
- Intensity parameter
 Optical absorption and fluorescence properties of Er^{3+} in sodium borate glass 461
- p-p* interaction
 Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Intercalation
 Silver nanoparticles of variable morphology synthesized in aqueous foams as novel templates 503
- Interdiffusion
 Diffusion processes in *b*-Zr (Al) phase: a thermodynamic approach 267
- Interface
 Diffusivity of Al and Fe near the diffusion bonding interface of Fe_3Al with low carbon steel 69
- Intermetallic
 Diffusivity of Al and Fe near the diffusion bonding interface of Fe_3Al with low carbon steel 69
- Interpenetrating network
 Morphological, thermal and annealed microhardness characterization of gelatin based interpenetrating networks of polyacrylonitrile: A hard biopolymer 529
- Ion aggregation
 Correlation between ionic conductivity and fluidity of polymer gel electrolytes containing $\text{NH}_4\text{CF}_3\text{O}_3$ 467
- Ion chromatography
 Analytical challenges in characterization of high purity materials 331
- Ion-exchange
 Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
- Ion fragmentation
 Overview literature on matrix assisted laser desorption ionization mass spectroscopy (MALDI MS): basics and its applications in characterizing polymeric materials 515
- Ionic conductivity
 Correlation between ionic conductivity and fluidity of polymer gel electrolytes containing $\text{NH}_4\text{CF}_3\text{SO}_3$ 467
- Ionic conductors
 A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- Ionizing radiation
 Evaluation of gamma and neutron irradiation effects on the properties of mica film capacitors 719
- Iron (III) pyrophosphate
 Hydrothermal synthesis, structure and characterization of new NASICON related potassium iron (III) pyrophosphate 1
- Iron aluminide
 Effect of cerium addition on microstructures of carbon-alloyed iron aluminides 547
- Isotopic and chemical purity
 High purity materials as targets for radioisotope production: Needs and challenges 325

- Kinetics
Some studies on the reaction between fly ash and lime 131
- Knoop hardness
Effect of phase separation on the fracture toughness of $\text{SiO}_2\text{-B}_2\text{O}_3\text{-Na}_2\text{O}$ glass 457
- Laminate
Magnetolectric effect in metal-PZT laminates 419
- LDH
Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
- Lead adsorption
Uses of $\alpha\text{-Fe}_2\text{O}_3$ and fly ash as solid adsorbents 713
- Lead molybdate
Growth of lead molybdate crystals by vertical Bridgman method 555
- Lime
Some studies on the reaction between fly ash and lime 131
- Linear energy threshold
High-energy heavy ion testing of VLSI devices for single event upsets and latch up 473
- $\text{Li}_2\text{O-Al}_2\text{O}_3\text{-SiO}_2$
Ultra low and negative expansion glass-ceramic materials produced from pyrophyllite and blast furnace slag 437
- Liquid solution model
Thermodynamic modelling of phase equilibria in Al-Ga-P-As system 179
- Lithium batteries
Synthesis and characterization of $\text{LiMg}_y\text{Mn}_{2-y}\text{O}_4$ cathode materials by a modified Pechini process for lithium batteries 663
- Magnesia
Role of small amount of MgO and ZrO_2 on creep behaviour of high purity Al_2O_3 281
- Magnesium diboride
Superconductivity in dense $\text{Mg}_{1-x}\text{M}_x\text{B}_2$ ($\text{M} = \text{Zr, Nb, Mo}$; $x = 0\text{-}0.05$) materials sintered under pressure 249
- Magnetization
X-ray and magnetic studies of Zn^{2+} substituted Ni-Pb ferrites 35
- Magnetolectric effect
Magnetolectric effect in metal-PZT laminates 419
- Magnetoplumbite
Synthesis and magnetic study of Co-Al substituted calcium hexaferrite 585
- Makrofol-DE
Proton induced modification in makrofol-DE 599
- MALDI
Overview literature on matrix assisted laser desorption ionization mass spectroscopy (MALDI MS): basics and its applications in characterizing polymeric materials 515
- e** Martensite
Effect of heat treatment on martensitic transformations in Fe-12.5%Mn-5.5%Si-9%Cr-3.5% Ni alloy 87
- Martensitic transformation
Effect of heat treatment on martensitic transformations in Fe-12.5%Mn-5.5%Si-9%Cr-3.5% Ni alloy 87
- Mass spectrometry
Analytical challenges in characterization of high purity materials 331
- Overview literature on matrix assisted laser desorption ionization mass spectroscopy (MALDI MS): basics and its applications in characterizing polymeric materials 515
- MCT
Growth and characterization of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ epitaxial films by isothermal vapour phase epitaxy (ISOVPE) 97
- Melt spinning
Structure and coercivity of nanocrystalline Fe-Si-B-Nb-Cu alloys 395
- Mica film capacitors
Evaluation of gamma and neutron irradiation effects on the properties of mica film capacitors 719
- Microhardness
Morphological, thermal and annealed microhardness characterization of gelatin based interpenetrating networks of polyacrylonitrile: A hard biopolymer 529
- Micro-Raman technique
Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- Microstress
Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- Microstructure
Microstructure and electrical conductivity of Al-SiC_p composites produced by spray forming process 125
Effect of cerium addition on microstructures of carbon-alloyed iron aluminides 547
Significance of structure-property relationship in alumina based porcelain insulators to achieve quality 681
- Microstructured microspheres
Preparation of microstructured hydroxyapatite microspheres using oil in water emulsions 383
- Microvoids
Effect of cold work and aging on mechanical properties of a copper bearing HSLA-100 steel 259
- Microwave synthesis
A strategic approach for preparation of oxide nanomaterials 19
- Mineralizer
Effect of titania on fired characteristics of triaxial porcelain 445
- Miscibility gap
Estimation of CE-CVM energy parameters from miscibility gap data 173
- Mixed ferrites
X-ray and magnetic studies of Zn^{2+} substituted Ni-Pb ferrites 35
- MOCVD
Oriented growth of thin films of samarium oxide by MOCVD 49
- Modified Pechini process
Synthesis and characterization of $\text{LiMg}_y\text{Mn}_{2-y}\text{O}_4$ cathode materials by a modified Pechini process for lithium batteries 663
- Monazite
Environmentally benign novel green pigments: $\text{Pr}_{1-x}\text{Ca}_x\text{PO}_4$ ($x = 0\text{-}0.4$) 299
- Montmorillonite
Synthesis and characterization of HDA/NaMMT organoclay 623

- MoO₃
 Synthesis of MoO₃ and its polyvinyl alcohol nanostructured film 477
- Morphology
 Uses of α -Fe₂O₃ and fly ash as solid adsorbents 713
- Nanocomposite
 Synthesis of MoO₃ and its polyvinyl alcohol nanostructured film 477
- Nanocrystalline materials
 Structure and coercivity of nanocrystalline Fe–Si–B–Nb–Cu alloys 395
- Nano gallium nitride
 Progress in III-nitrides: Process issue and purity perspective 355
- Nanomaterials
 A strategic approach for preparation of oxide nanomaterials 19
- Nano-oxides
 Versatile preparation method for mesoporous TiO₂ electrodes suitable for solid-state dye sensitized photocells 635
- Nano particles
 Screen printed nanosized ZnO thick film 239
 Silver nanoparticles of variable morphology synthesized in aqueous foams as novel templates 503
- Nanostructures
 Preparation and study of thickness dependent electrical characteristics of zinc sulfide thin films 43
 A convenient thermal decomposition-co-reduction synthesis of nanocrystalline tungsten disilicide 511
- Neutron
 Evaluation of gamma and neutron irradiation effects on the properties of mica film capacitors 719
- Neutron fluences
 Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- Newton–Raphson method
 Estimation of CE–CVM energy parameters from miscibility gap data 173
- Ni
 Effect of Cr and Ni on diffusion bonding of Fe₃Al with steel 63
- Ni doped SrTiO₃
 Study on electrical properties of Ni-doped SrTiO₃ ceramics using impedance spectroscopy 275
- Non-cyanide bath
 A new condensation product for zinc plating from non-cyanide alkaline bath 495
- 7N (99.99999 at.%) tellurium
 High purity tellurium production using dry refining processes 309
- Nuclear medicine
 High purity materials as targets for radioisotope production: Needs and challenges 325
- On-ball-C₆₀ phonon
 Superconductivity and electrical resistivity in alkali metal doped fullerenes: Phonon mechanism 155
- Optical absorption
 Optical absorption and electron spin resonance studies of Cu²⁺ in Li₂O–Na₂O–B₂O₃–As₂O₃ glasses 589
- Optical band gap
 Optical and electrical properties of ZrSe₃ single crystals grown by chemical vapour transport technique 405
 Optical absorption and fluorescence properties of Er³⁺ in sodium borate glass 461
- Optical properties
 Optical, thermal and phase transition studies in Sn_{1-x}Ge_xTe 675
- Optimized annealing condition
 Effect of annealing temperature on the structural–microstructural and electrical characteristics of thallium bearing HTSC films prepared by chemical spray pyrolysis technique 151
- Organic conductors
 A new crystal structure for (BEDT–TTF)₂SbF₆ and some of its physical properties 25
- Organoclay
 Synthesis and characterization of HDA/NaMMT organoclay 623
- Over aging
 Effect of cold work and aging on mechanical properties of a copper bearing HSLA-100 steel 259
- Oxide powders
 A strategic approach for preparation of oxide nanomaterials 19
- Oxides
 Preparation of nanocrystalline ferroelectric BaNb₂O₆ by citrate gel method 121
 (La_{2/5}Ba_{2/5}Ca_{1/5})(Mn_(2/5-x)Ni_xTi_{3/5})O₃ : Rietveld studies, dielectric and magnetic properties of new perovskite-related oxides 571
- Palladium (II)
 Synthesis and purification of some main group organometallic precursors for compound semiconductors 313
- Peak aging
 Effect of cold work and aging on mechanical properties of a copper bearing HSLA-100 steel 259
- Performance
 Significance of structure–property relationship in alumina based porcelain insulators to achieve quality 681
- Permselectivity
 Effect of temperature and α -irradiation on gas permeability for polymeric membrane 643
- Perovskite
 Ba₂ErNbO₆ : A new perovskite ceramic substrate for Bi(2223) superconducting thick films ($T_c(0) = 110$ K) 39
- Perovskite phase
 Synthesis and structural characterization of some Pb(B'_{1/3}Nb_{2/3})O₃ type materials by two-stage solid-state route 199
- PET
 Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- Phase equilibria
 Transformations among CE–CVM model parameters for multicomponent systems 293
- Phase separation
 Effect of phase separation on the fracture toughness of SiO₂–B₂O₃–Na₂O glass 457
- Phase transition
 Pressure dependence of elastic properties of ZnX (X = Se, S and Te): Role of charge transfer 651

- Optical, thermal and phase transition studies in $\text{Sn}_{1-x}\text{Ge}_x\text{Te}$ 675
- Phenothiazine–iodine
Preparation and characterization of polymer composites based on charge-transfer complex of phenothiazine–iodine in polystyrene 423
- Phonon frequency
Debye temperature of uranium chalcogenides from their lattice dynamics 669
- Phosphoric acid
Development of calcium phosphate based apatite from hen's eggshell 115
- Photoconductivity decay
Application of photoconductivity decay and photocurrent generation methods for determination of minority carrier lifetime in silicon 317
- Photocurrent
Application of photoconductivity decay and photocurrent generation methods for determination of minority carrier lifetime in silicon 317
Photocurrent enhancement of d.c. sputtered copper oxide thin films 483
- Photoluminescence
Luminescent studies of impurity doped SrS phosphors 31
Optical and microstructural investigations of porous silicon 219
- Photorefractive materials
Bridgman growth of bismuth tellurite crystals 561
- Photovoltage
Photocurrent enhancement of d.c. sputtered copper oxide thin films 483
- Platinum nanorods
Polyoxometalate based soft chemical route for preparation of Pt nanorods and self-assemblies 629
- PMMA and Au
Indium oxide thin film based ammonia gas and ethanol vapour sensor 9
- Polyaniline
Influence of *b*-cyclodextrin as an encapsule and as an inclusion complex dopant on conducting polyaniline 55
- Polycrystalline
Structural and electrical measurements of CdZnSe composite 431
- Polycrystalline ferrites
Synthesis and magnetic study of Co–Al substituted calcium hexaferrite 585
- Polyethyleneimine
Effects of polyethyleneimine adsorption on rheology of bentonite suspensions 287
- Polymer composite
Preparation and characterization of polymer composites based on charge-transfer complex of phenothiazine–iodine in polystyrene 423
- Polyoxometalates
Polyoxometalate based soft chemical route for preparation of Pt nanorods and self-assemblies 629
- Polypyrrole
Synthesis, characterization and conductivity studies of polypyrrole–fly ash composites 565
- Polystyrene
Preparation and characterization of polymer composites based on charge-transfer complex of phenothiazine–iodine in polystyrene 423
- Polyvinyl alcohol
Synthesis of MoO_3 and its polyvinyl alcohol nanostructured film 477
- Porous PZT
Characterization and microstructure of porous lead zirconate titanate ceramics 453
- Porous silicon
Optical and microstructural investigations of porous silicon 219
- Precipitate-dislocation tangles
Influence of thermomechanical aging on fatigue behaviour of 2014 Al-alloy 91
- Precipitation
Development of calcium phosphate based apatite from hen's eggshell 115
- Precursor route
Effect of annealing temperature on the structural–microstructural and electrical characteristics of thallium bearing HTSC films prepared by chemical spray pyrolysis technique 151
- Pressure effect
Superconductivity and electrical resistivity in alkali metal doped fullerides: Phonon mechanism 155
- Proton conduction in derivatized metal (IV) tungstates
A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- Proton conduction in metal (IV) tungstates
A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- Proton conductors
A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- Proton transport properties
A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- PrPO
Environmentally benign novel green pigments: $\text{Pr}_{1-x}\text{Ca}_x\text{PO}_4$ ($x = 0-0.4$) 299
- Pure metals
Multielement trace determination in high purity advanced ceramics and high purity metals 361
- p*-Wave electronic superconductor
Debye temperature of uranium chalcogenides from their lattice dynamics 669
- Pyrochlore phase
Synthesis and structural characterization of some $\text{Pb}(\text{B}'_{1/3}\text{Nb}_{2/3})\text{O}_3$ type materials by two-stage solid-state route 199
- Pyrophyllite
Ultra low and negative expansion glass–ceramic materials produced from pyrophyllite and blast furnace slag 437
- PZT
Magnetoelectric effect in metal–PZT laminates 419
- Quadruple zone refining
High purity tellurium production using dry refining processes 309
- Quantum confinement
Optical and microstructural investigations of porous silicon 219

- Quaternary alloy
Thermodynamic modelling of phase equilibria in Al–Ga–P–As system 179
- Radiation damage
Evaluation of gamma and neutron irradiation effects on the properties of mica film capacitors 719
- Radiation hardened
High-energy heavy ion testing of VLSI devices for single event upsets and latch up 473
- Radioisotopes
High purity materials as targets for radioisotope production: Needs and challenges 325
- Raman scattering
Optical and microstructural investigations of porous silicon 219
- Relaxor ferroelectrics
Synthesis and structural characterization of some $\text{Pb}(\text{B}'_{1/3}\text{Nb}_{2/3})\text{O}_3$ type materials by two-stage solid-state route 199
- Resistivity
Superconductivity in dense $\text{Mg}_{1-x}\text{M}_x\text{B}_2$ ($\text{M} = \text{Zr}, \text{Nb}, \text{Mo}; x = 0.05$) materials sintered under pressure 249
Optical and electrical properties of ZrSe_3 single crystals grown by chemical vapour transport technique 405
Structural and electrical measurements of CdZnSe composite 431
- Rheology
Dispersion and rheological studies of Y–PSZ tape casting slurry 103
Effects of polyethyleneimine adsorption on rheology of bentonite suspensions 287
- Rietveld studies
 $(\text{La}_{2/5}\text{Ba}_{2/5}\text{Ca}_{1/5})(\text{Mn}_{(2/5)-x}\text{Ni}_x\text{Ti}_{3/5})\text{O}_3$: Rietveld studies, dielectric and magnetic properties of new perovskite-related oxides 571
- Samarium oxide
Oriented growth of thin films of samarium oxide by MOCVD 49
- Saturation magnetization
Synthesis and magnetic study of Co–Al substituted calcium hexaferrite 585
- Scanning electron microscopy
Influence of Cl^- , Br^- , NO_3^- and SO_4^{2-} ions on the corrosion behaviour of 6061 Al alloy 253
- Screen print
Screen printed nanosized ZnO thick film 239
- Seabed sediment
Corrosion of steel structures in seabed sediment 81
- Secondary annealing
Influence of alloying and secondary annealing on anneal hardening effect at sintered copper alloys 401
- Sedimentation
Dispersion and rheological studies of Y–PSZ tape casting slurry 103
- Segregation of impurities
Zone refining of cadmium and related characterization 209
- SEM
Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- Semi-magnetic materials
Progress in III-nitrides: Process issue and purity perspective 355
- Si
EBIC and DLTS characterization of pure Si crystals 367
- Silicon
Application of photoconductivity decay and photocurrent generation methods for determination of minority carrier lifetime in silicon 317
- Silver powder
Preparation of silver powder through glycerol process 213
- Simulated body fluid
Hydroxyapatite coating by biomimetic method on titanium alloy using concentrated SBF 617
- Single event effect
High-energy heavy ion testing of VLSI devices for single event upsets and latch up 473
- Sintering
 $\text{Ba}_2\text{ErNbO}_6$: A new perovskite ceramic substrate for $\text{Bi}(2223)$ superconducting thick films ($T_c(0) = 110$ K) 39
Powder metallurgical processing and metal purity: A case for capacitor grade sintered tantalum 305
Preparation of microstructured hydroxyapatite microspheres using oil in water emulsions 383
- Size exclusion chromatogram
Electron-beam curing of epoxy resins: effect of alcohols on cationic polymerization 603
- $\text{Sn}_{1-x}\text{Ge}_x\text{Te}$
Optical, thermal and phase transition studies in $\text{Sn}_{1-x}\text{Ge}_x\text{Te}$ 675
- Sol–gel
Polyoxometalate based soft chemical route for preparation of Pt nanorods and self-assemblies 629
- Solid alloys
Thermodynamic modelling of phase equilibria in Al–Ga–P–As system 179
- Solid electrolyte
Hydrothermal synthesis, structure and characterization of new NASICON related potassium iron (III) pyrophosphate 1
A comparative study of proton transport properties of metal (IV) tungstates and their organic derivatives 137
- Solid–liquid equilibria
Thermodynamic modelling of phase equilibria in Al–Ga–P–As system 179
- Solids analysis
State-of-the-art in analytical characterization of high purity solid samples by different spectroscopic methods 339
- Solid-state cells
Versatile preparation method for mesoporous TiO_2 electrodes suitable for solid-state dye sensitized photocells 635
- Spectroscopic methods
State-of-the-art in analytical characterization of high purity solid samples by different spectroscopic methods 339
- Spin fluctuation
Debye temperature of uranium chalcogenides from their lattice dynamics 669
- Spray forming
Microstructure and electrical conductivity of Al– SiC_p composites produced by spray forming process 125
- Spray pyrolysis
Effect of annealing temperature on the structural–micro-

- structural and electrical characteristics of thallium bearing HTSC films prepared by chemical spray pyrolysis technique 151
- Thermal and structural properties of spray pyrolysed CdS thin film 233
- Studies on preparation and characterization of indium doped zinc oxide films by chemical spray deposition 487
- Versatile preparation method for mesoporous TiO₂ electrodes suitable for solid-state dye sensitized photocells 635
- Sputtering
- Photocurrent enhancement of d.c. sputtered copper oxide thin films 483
- SrS phosphors
- Luminescent studies of impurity doped SrS phosphors 31
- SS ET AAS
- Multielement trace determination in high purity advanced ceramics and high purity metals 361
- Stereology
- Effect of cerium addition on microstructures of carbon-alloyed iron aluminides 547
- Striations
- Influence of thermomechanical aging on fatigue behaviour of 2014 Al-alloy 91
 - Effect of cold work and aging on mechanical properties of a copper bearing HSLA-100 steel 259
- Structural phase content
- Significance of structure–property relationship in alumina based porcelain insulators to achieve quality 681
- Structure
- Uses of α -Fe₂O₃ and fly ash as solid adsorbents 713
- Substrate
- Ba₂ErNbO₆: A new perovskite ceramic substrate for Bi(2223) superconducting thick films ($T_c(0) = 110$ K) 39
- Superalloys
- Effect of residual elements on high performance nickel base superalloys for gas turbines and strategies for manufacture 379
- Superconducting film
- Ba₂ErNbO₆: A new perovskite ceramic substrate for Bi(2223) superconducting thick films ($T_c(0) = 110$ K) 39
- Superconductivity
- Superconductivity in dense Mg_{1-x}M_xB₂ (M = Zr, Nb, Mo; $x = 0.05$) materials sintered under pressure 249
- Supramolecular structure
- Supramolecular structure of S-(+)-marmesin—a linear dihydrofuranocoumarin 725
- Susceptibility
- Superconductivity in dense Mg_{1-x}M_xB₂ (M = Zr, Nb, Mo; $x = 0.05$) materials sintered under pressure 249
- Tantalum powder
- Powder metallurgical processing and metal purity: A case for capacitor grade sintered tantalum 305
- Tape casting
- Dispersion and rheological studies of Y–PSZ tape casting slurry 103
- Taste sensor
- Polyvinyl alcohol–cellulose composite: a taste sensing material 703
- Taste substances
- Polyvinyl alcohol–cellulose composite: a taste sensing material 703
- Tertiary arsines
- Synthesis and purification of some main group organometallic precursors for compound semiconductors 313
- TGA
- Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
 - Synthesis and purification of some main group organometallic precursors for compound semiconductors 313
 - Proton induced modification in makrofol-DE 599
- Thermal analysis
- A convenient thermal decomposition-co-reduction synthesis of nanocrystalline tungsten disilicide 511
- Thermal conductivity
- Thermal and structural properties of spray pyrolysed CdS thin film 233
- Thermal diffusivity
- Thermal and structural properties of spray pyrolysed CdS thin film 233
- Thermal properties
- Optical, thermal and phase transition studies in Sn_{1-x}Ge_xTe 675
- Thermodynamical properties
- Pressure dependence of elastic properties of ZnX (X = Se, S and Te): Role of charge transfer 651
- Thermodynamics of materials
- Transformations among CE–CVM model parameters for multicomponent systems 293
- Thermoluminescence
- Luminescent studies of impurity doped SrS phosphors 31
- Thermomechanical aging
- Influence of thermomechanical aging on fatigue behaviour of 2014 Al-alloy 91
- Thin films
- Oriented growth of thin films of samarium oxide by MOCVD 49
 - Thermal and structural properties of spray pyrolysed CdS thin film 233
- Titania
- Effect of titania on fired characteristics of triaxial porcelain 445
- Titanium carbide
- DC resistivity of alumina and zirconia sintered with TiC 227
- Titanium dioxide
- Versatile preparation method for mesoporous TiO₂ electrodes suitable for solid-state dye sensitized photocells 635
- Tl
- Effect of annealing temperature on the structural–microstructural and electrical characteristics of thallium bearing HTSC films prepared by chemical spray pyrolysis technique 151
- Trace analysis
- High purity tellurium production using dry refining processes 309
- Trace metal impurities
- Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
- Traceability
- Certified reference materials of trace elements in water 373
- Track etched membrane
- Effect of temperature and α -irradiation on gas permeability for polymeric membrane 643

- Tramp elements
Effect of residual elements on high performance nickel base superalloys for gas turbines and strategies for manufacture 379
- Transition probability
Optical absorption and fluorescence properties of Er^{3+} in sodium borate glass 461
- Transparent conductors
Studies on preparation and characterization of indium doped zinc oxide films by chemical spray deposition 487
- Triaxial porcelain
Effect of titania on fired characteristics of triaxial porcelain 445
- Triorganoantimony
Synthesis and purification of some main group organometallic precursors for compound semiconductors 313
- Tungsten disilicide
A convenient thermal decomposition-co-reduction synthesis of nanocrystalline tungsten disilicide 511
- Tungsten oxide
Dip-coated hydrotungstite thin films as humidity sensors 243
- Ultrapure materials
Recent developments in analytical techniques for characterization of ultra pure materials—An overview 345
- Ultra-purification
High purity tellurium production using dry refining processes 309
- Upset and latch up
High-energy heavy ion testing of VLSI devices for single event upsets and latch up 473
- Uranium chalcogenides
Debye temperature of uranium chalcogenides from their lattice dynamics 669
- Vacuum induction melting
Effect of residual elements on high performance nickel base superalloys for gas turbines and strategies for manufacture 379
- Vapour phase
Growth and characterization of $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ epitaxial films by isothermal vapour phase epitaxy (ISOVPE) 97
- Vitreous enameling
A new high temperature resistant glass-ceramic coating for gas turbine engine components 689
- Voids
Influence of ageing, inclusions and voids on ductile fracture mechanism in commercial Al-alloys 75
- Water
Certified reference materials of trace elements in water 373
- X-ray diffraction
A coprecipitation technique to prepare ZnNb_2O_6 powders 205
Preparation of ultrafine LiTaO_3 powders by citrate gel method 391
- Structural and electrical measurements of CdZnSe composite 431
A convenient thermal decomposition-co-reduction synthesis of nanocrystalline tungsten disilicide 511
Structural morphology of amorphous conducting carbon film 609
- X-ray photoelectron spectroscopy
Synthesis, characterization and gas sensing property of hydroxyapatite ceramic 535
- XRD
Adsorption and intercalation of anionic surfactants onto layered double hydroxides—XRD study 145
Analysis of microstress in neutron irradiated polyester fibre by X-ray diffraction technique 593
- XRD pattern
Synthesis and structural characterization of some $\text{Pb}(\text{B}'_{1/3}\text{Nb}_{2/3})\text{O}_3$ type materials by two-stage solid-state route 199
Photocurrent enhancement of d.c. sputtered copper oxide thin films 483
- YSZ powder
Role of dispersion conditions on grindability of yttria stabilized zirconia (YSZ) powders 109
- Zeta potential
Effects of polyethyleneimine adsorption on rheology of bentonite suspensions 287
- Zinc oxide
Studies on preparation and characterization of indium doped zinc oxide films by chemical spray deposition 487
- Zinc plating
A new condensation product for zinc plating from non-cyanide alkaline bath 495
- Zinc sulfide
Preparation and study of thickness dependent electrical characteristics of zinc sulfide thin films 43
- Zirconia
DC resistivity of alumina and zirconia sintered with TiC 227
Role of small amount of MgO and ZrO_2 on creep behaviour of high purity Al_2O_3 281
- Zirconium
Diffusion processes in *b*-Zr (Al) phase: a thermodynamic approach 267
- $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ single crystals
Crystal growth and reflectivity studies of $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ crystals 411
- ZnO
Screen printed nanosized ZnO thick film 239
- ZnTe
High resistivity In-doped ZnTe: electrical and optical properties 647
- Zone refining
Zone refining of cadmium and related characterization 209
- ZrSe₃ single crystal
Optical and electrical properties of ZrSe₃ single crystals grown by chemical vapour transport technique 405