



Subject Index of Volume 489

- AAO template
morphologies of $\text{GdBO}_3:\text{Eu}^{3+}$ one-dimensional nanomaterials L8
- Accumulative roll bonding
evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
- Actinide alloys and compounds
preparation and characterization of dicesium tetravalent plutonium hexanitrate 659
- Activated mechanically
effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
- Activator
preparation and characteristics of yellow ZnS:Mn,Ce phosphor 689
- AFM
effect of chamber pressure and hydrogen on the formation of C_3N_4 films deposited on quartz substrates via MPCVD 275
- Ag–Dy system
thermodynamic assessments of Ag–Dy and Ag–Er binary systems 146
- Ag–Er system
thermodynamic assessments of Ag–Dy and Ag–Er binary systems 146
- Al/SiC composite
mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium–copper alloy matrix composites produced by direct squeeze casting method 119
- Alloys
hydrogen sorption properties of a Mg–Y–Ti alloy 375
hydrothermal preparation and characterization of based-alloy Bi_2Te_3 nanostructure with different morphology 530
structural relaxation and serrated flow due to annealing treatments in Zr-based metallic glasses 558
- Alumina
texture and orientation characteristics of $\alpha\text{-Al}_2\text{O}_3$ films prepared by laser chemical vapor deposition using Nd:YAG laser 469
- Amorphous materials
new nickel-based bulk metallic glasses with extremely high nickel content 80
effect of TiO_2 on thermal, structural and third-order nonlinear optical properties of Ca–La–B–O glass system 493
liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
corrosion behavior of Zr–Cu–Ni–Al bulk metallic glasses in chloride medium 596
- Anneal hardening effect
influence of thermal cycling treatment on the anneal hardening effect of Cu–10Zn Alloy 582
- Annealing
synthesis of nanocrystalline Cd–Zn ferrite by ball milling and its stability at elevated temperatures 91
texture evolution and mechanical properties of AZ31B magnesium alloy sheets processed by repeated unidirectional bending 475
- Antiperovskite
lattice, magnetic and electronic transport behaviors of Ge-doped Mn_3XC (X = Al, Zn, Ga) 289
- Ball grid array solder joints
investigation of small Sn–3.5Ag–0.5Cu additions on the microstructure and properties of Sn–8Zn–3Bi solder on Au/Ni/Cu pads 678
- Ball milling
synthesis of nanocrystalline Cd–Zn ferrite by ball milling and its stability at elevated temperatures 91
magnetic and structural properties of $\text{BaFe}_{12-x}\text{Ga}_x\text{O}_{19}$ nanoparticles 110
effect of surfactant on the co-electrodeposition of the nano-sized ceria particle in the nickel matrix 650
- Bamboo-shaped
an approach for obtaining the structural diversity of multi-walled carbon nanotubes on Ni/Al catalyst with low Ni content 20
- Barium ferrite
magnetic and structural properties of $\text{BaFe}_{12-x}\text{Ga}_x\text{O}_{19}$ nanoparticles 110
- Barium tin manganese oxide
synthesis, structure, and magnetic property of hexagonal perovskite $\text{Ba}_2\text{Sn}_{11}\text{Mn}_{3.9}\text{O}_{15}$ 152
- Barium titanate
synthesis and dielectric properties of substituted barium titanate ceramics 59
- BaSO_4 :Mn
characterization and TSL dosimetric properties of Mn doped BaSO_4 phosphor prepared by recrystallisation method 84
- BaTiO_3 nano-crystals
influence of the Nd^{3+} ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO_3 , prepared by sol–gel technique 451
- Bimetallic nickel–lanthanide oxides
partial oxidation of methane over bimetallic nickel–lanthanide oxides 316
- Binary borides
Sn-flux syntheses, characterizations and bonding analyses of OsB and TiB_2 339
- Bioactivity
microstructure and in vitro bioactivity of laser-cladded bioceramic coating on titanium alloy in a simulated body fluid 211
- Bi_2Te_3
hydrothermal preparation and characterization of based-alloy Bi_2Te_3 nanostructure with different morphology 530
- Blue emission
thermal CVD synthesis and photoluminescence of SiC/SiO₂ core–shell structure nanoparticles 562
- CA)
efficient electrochromic nickel oxide thin films by electrodeposition 667
- CALPHAD
thermodynamic assessments of Ag–Dy and Ag–Er binary systems 146
- Casting
evaluation of effect of alloy elements in copper based CuSn10 and CuZn30 bearings on tribological and mechanical properties 262
- Catalysts
an approach for obtaining the structural diversity of multi-walled carbon nanotubes on Ni/Al catalyst with low Ni content 20

- Cavity perturbation
a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Ceramic perovskites
effect of potassium doping on physical properties of perovskites $\text{La}_{0.8}\text{Cd}_{0.2-x}\text{K}_x\text{MnO}_3$ 9
- Ceramics
thermodynamic analysis and synthesis of porous Mo_2C sponge by vapor-phase condensation and in situ carburization of MoO_3 36
synthesis and dielectric properties of substituted barium titanate ceramics 59
fabrication of zinc titanate nanofibers by electrospinning technique 167
synthesis and characterization of pure nanocrystalline magnesium aluminate spinel powder 600
synthesis, characterization, and electrical studies on Cu-doped $\text{K}_2\text{Ti}_6\text{O}_{13}$ lead-free ceramics: Role of defect associate dipoles 700
- Chalcopyrite
XRD and TEM characterizations of the mechanically alloyed $\text{CuIn}_{0.5}\text{Ga}_{0.5}\text{Se}_2$ powders 437
- Characterisation of Al/SiCp composites
mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium-copper alloy matrix composites produced by direct squeeze casting method 119
- Characterization
characterization and TSL dosimetric properties of Mn doped BaSO_4 phosphor prepared by recrystallisation method 84
- Charge density wave
observation of two separate charge density wave transitions in Gd_2Te_5 via transmission electron microscopy and high-resolution X-ray diffraction 332
- Charge transfer
correlation between microhardness and electronic charge density of hafnium hydrides 685
- Chemical synthesis
synthesis, characterization, and property studies of $(\text{La}, \text{Ag})\text{FeO}_3$ ($0.0 \leq x \leq 0.3$) perovskites 64
characteristics of nano-sized silver-glass composite powders prepared by flame spray pyrolysis 456
low-temperature synthesis and photoluminescence of ZnO nanostructures by a facile hydrothermal process 566
microwave-assisted solid-state decomposition of $\text{La}[\text{Co}(\text{CN})_6] \cdot 5\text{H}_2\text{O}$ precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO_3 nanoparticles 586
ZnO hierarchical structures synthesized via hydrothermal method and their photoluminescence properties 614
- Chemical vapor deposition
an approach for obtaining the structural diversity of multi-walled carbon nanotubes on Ni/Al catalyst with low Ni content 20
- Chitosan
a simple route to synthesize CuS framework with porosity 343
- Chromium carbide
diffusion and solubility of Cr in WC 408
- Clusters
thermoelectric properties of molybdenum oxides $\text{LnMo}_8\text{O}_{14}$ (Ln = La, Ce, Pr, Nd and Sm) 353
- CNBT films
preparation and characterization of $\text{Ca}_{0.18}\text{Na}_{0.32}\text{Bi}_{0.50}\text{TiO}_3$ ferroelectric thin films by metalorganic solution deposition 136
- Coating
texture and orientation characteristics of $\alpha\text{-Al}_2\text{O}_3$ films prepared by laser chemical vapor deposition using Nd:YAG laser 469
effect of current density on deposition process and properties of nanocrystalline Ni-Co-W alloy coatings 488
- Coating materials
microstructure and in vitro bioactivity of laser-cladded bioceramic coating on titanium alloy in a simulated body fluid 211
- Coercive field
magnetic and structural properties of $\text{BaFe}_{12-x}\text{Ga}_x\text{O}_{19}$ nanoparticles 110
- Coercivity
in situ synthesis of high density magnetic ferrite spinel (MgFe_2O_4) compacts using a mixture of conventional raw materials and waste iron oxide 269
- COHP bonding
Sn-flux syntheses, characterizations and bonding analyses of OsB and TiB_2 339
- Cold crushing strength
synthesis and characterization of pure nanocrystalline magnesium aluminate spinel powder 600
- Complex permeability
a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Complex permittivity
a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Composite materials
evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
effect of surfactant on the co-electrodeposition of the nano-sized ceria particle in the nickel matrix 650
- Compressive strength
in situ synthesis of high density magnetic ferrite spinel (MgFe_2O_4) compacts using a mixture of conventional raw materials and waste iron oxide 269
- Computer simulations
phase stability, mechanical property, and electronic structure of Mg-Li system 130
- Concentration quenching
structure, dielectric and optical properties of Nd^{3+} -doped LiTaO_3 transparent ferroelectric glass-ceramic nanocomposites 281
- Copper alloy
influence of thermal cycling treatment on the anneal hardening effect of Cu-10Zn Alloy 582
- Copper mold casting
magnetic property enhancement of directly quenched Nd-Fe-B bulk magnets with Ti substitution 499
- Core-shell structures
thermal CVD synthesis and photoluminescence of SiC/SiO₂ core-shell structure nanoparticles 562
- Corrosion resistance
effect of current density on deposition process and properties of nanocrystalline Ni-Co-W alloy coatings 488
- Critical exponents
magnetic properties of the spinel systems ACr_2X_4 (A = Zn, Cd, Hg; X = S, Se) 441
- Critical temperature
magnetic properties of the spinel systems ACr_2X_4 (A = Zn, Cd, Hg; X = S, Se) 441
- CrN/AlN
oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
- Cross-coupled
characterization and dielectric behavior of V_2O_5 -doped $0.9\text{Mg}_{0.95}\text{Co}_{0.05}\text{TiO}_3$ - $0.1\text{Ca}_{0.6}\text{La}_{0.8/3}\text{TiO}_3$ ceramic system at microwave frequency 170
- Crystal growth
thermodynamic analysis and synthesis of porous Mo_2C sponge by vapor-phase condensation and in situ carburization of MoO_3 36
the effect of seed layer on morphology of ZnO nanorod arrays grown by hydrothermal method 99
structural and optical properties of epitaxial ZnO thin films on 4H-SiC (0 0 1) substrates prepared by pulsed laser deposition 179
growth and spectroscopic characteristics of $\text{Cr}^{3+}:\text{CsAl}(\text{MoO}_4)_2$ crystal 293
the role of trace element segregation in the eutectic modification of hypoeutectic Al-Si alloys 415
an experimental study about the influence of well thickness on the electroluminescence of InGaN/GaN multiple quantum wells 461
fabrication and optical properties of single-crystalline beta barium borate nanorods 504
effects of growth atmosphere and annealing on luminescence efficiency of YAP:Ce crystal 515
growth of non-polar ZnO films on $\alpha\text{-GaN}/r\text{-Al}_2\text{O}_3$ templates by radio-frequency magnetron sputtering 519

- structural, optical and electrical characterization of chemically deposited CdSe thin films 605
- Crystal structure
 effect of Cu additions over the lattice parameter and hardness of the NiAl intermetallic compound 26
 synthesis, characterization, and property studies of (La, Ag) FeO₃ (0.0 ≤ x ≤ 0.3) perovskites 64
 phase stability, mechanical property, and electronic structure of Mg–Li system 130
 synthesis, structure, and magnetic property of hexagonal perovskite Ba₅Sn_{1.1}Mn_{3.9}O₁₅ 152
 Sn-flux syntheses, characterizations and bonding analyses of OsB and TiB₂ 339
 synthesis and characterization of CaF₂ nanocrystals 592
 a ternary linear compound T₂ and its phase equilibrium relationships in Mg–Zn–Nd system at 400 °C 620
- Curie temperature
 characterization and piezoelectric thermal stability of PIN–PMN–PT ternary ceramics near the morphotropic phase boundary 115
- CuS
 a simple route to synthesize CuS framework with porosity 343
- Cutoff frequency
 development of high DC-bias Mn–Zn ferrite working at frequency higher than 3 MHz 523
- DC electric field
 high temperature deformation behavior of the TC6 titanium alloy under the uniform DC electric field 401
- DC magnetron sputtering
 fabrication and characterization of a Ni–Mn–Ga uniaxially textured freestanding film deposited by DC magnetron sputtering 509
- DC-bias magnetic field
 development of high DC-bias Mn–Zn ferrite working at frequency higher than 3 MHz 523
- Deformation
 effect of Cu additions over the lattice parameter and hardness of the NiAl intermetallic compound 26
- Delafossite
 characterization of delafossite-type CuCoO₂ prepared by ion exchange 336
- Densification
 densification behavior of nanocrystalline W–Ni–Fe composite powders prepared by sol-spray drying and hydrogen reduction process 188
- Density functional theory
 elasticity and thermodynamic properties of α-Ta₄AlC₃ under pressure 140
- Dielectric ceramics
 characterization and dielectric behavior of V₂O₅-doped 0.9Mg_{0.95}Co_{0.05}TiO₃–0.1Ca_{0.6}La_{0.8/3}TiO₃ ceramic system at microwave frequency 170
- Dielectric constant
 structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ transparent ferroelectric glass–ceramic nanocomposites 281
- Dielectric properties
 synthesis and dielectric properties of substituted barium titanate ceramics 59
 studies on magnetic, dielectric and magnetoelectric behavior of (x) NiFe_{1.9}Mn_{0.1}O₄ and (1 – x) BaZr_{0.08}Ti_{0.92}O₃ magnetoelectric composites 310
 x(Mg_{0.7}Zn_{0.3})_{0.95}Co_{0.05}TiO₃–(1–x)(La_{0.5}Na_{0.5})TiO₃ ceramic at microwave frequency with a near zero temperature coefficient of resonant frequency 541
 new dielectric material system of Nd(Mg_{1/2}Ti_{1/2})O₃–CaTiO₃ with V₂O₅ addition for microwave applications 719
- Dielectric response
 study of relaxations in epoxy polymer by thermally stimulated depolarization current (TSDC) and dielectric relaxation spectroscopy (DRS) 429
 synthesis, characterization, and electrical studies on Cu-doped K₂Ti₆O₁₃ lead-free ceramics: Role of defect associate dipoles 700
- Diffusion
 carbon diffusion behavior in molybdenum at relatively low temperatures 42
 diffusion and solubility of Cr in WC 408
- Diffusion bonding
 microstructure and mechanical properties of diffusion bonded joints between tungsten and F82H steel using a titanium interlayer 545
- Dosimetry
 characterization and TSL dosimetric properties of Mn doped BaSO₄ phosphor prepared by recrystallisation method 84
- EDAX
 synthesis, characterization and electrical properties of the system LaMn_xFe_{1–x}O₃ 233
- EDS
 high temperature oxidation characteristics of Nb–10W–XCr alloys 195
- EIS
 effect of current density on deposition process and properties of nanocrystalline Ni–Co–W alloy coatings 488
- Elastic properties
 elastic properties of silver–phospho–vanadate glasses 325
- Elasticity
 phase stability, mechanical property, and electronic structure of Mg–Li system 130
 elasticity and thermodynamic properties of α-Ta₄AlC₃ under pressure 140
- Electrical conductivity
 study of the size effects in the electrical resistivity of ultrathin (<Cu 40 nm) films in the framework of the statistical conduction models 609
- Electrical properties
 synthesis, characterization and electrical properties of the system LaMn_xFe_{1–x}O₃ 233
- Electrical transport
 effects of Ag doping on thermoelectric properties of Zn₄Sb₃ at low temperatures 228
- Electrochemical properties (CV)
 efficient electrochromic nickel oxide thin films by electrodeposition 667
- Electrochemical quartz crystal microbalance (EQCM)
 efficient electrochromic nickel oxide thin films by electrodeposition 667
- Electrochemical reactions
 optimization of Co-content in C14 Laves phase multi-component alloys for NiMH battery application 202
 pulverization mechanism of the multiphase Ti–V-based hydrogen storage electrode alloy during charge/discharge cycling 552
- Electrodeposition
 effect of current density on deposition process and properties of nanocrystalline Ni–Co–W alloy coatings 488
 efficient electrochromic nickel oxide thin films by electrodeposition 667
- Electromagnetic properties
 high-frequency properties of Si-doped Z-type hexaferrites 162
- Electron paramagnetic resonance
 synthesis, characterization, and electrical studies on Cu-doped K₂Ti₆O₁₃ lead-free ceramics: Role of defect associate dipoles 700
- Electronic structures
 thermoelectric properties of molybdenum oxides LnMo₈O₁₄ (Ln = La, Ce, Pr, Nd and Sm) 353
 correlation between microhardness and electronic charge density of hafnium hydrides 685
- Electronic transport
 lattice, magnetic and electronic transport behaviors of Ge-doped Mn₃XC (X = Al, Zn, Ga) 289
- EPR
 the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO₃ crystals 304
- Equilibrium phase
 equilibrium phase of high-entropy FeCoNiCrCu_{0.5} alloy at elevated temperature 30
- Erbium
 isothermal section of the Er–Fe–Al ternary system at 800 °C 421

- Eutectic
the novel eutectic microstructures of Si–Mn–P ternary alloy 389
- Exchange interactions
magnetic properties of the spinel systems ACr_2X_4 ($A = Zn, Cd, Hg; X = S, Se$) 441
- FeCoNiCrCu_{0.5}
equilibrium phase of high-entropy FeCoNiCrCu_{0.5} alloy at elevated temperature 30
- Fe₃O₄-carbon sphere composite
designed synthesis of wide range microwave absorption Fe₃O₄-carbon sphere composite 252
- Ferroelectric Nd³⁺:LiTaO₃ nanocrystals
structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ transparent ferroelectric glass-ceramic nanocomposites 281
- Ferroelectric thin films
preparation and characterization of Ca_{0.18}Na_{0.32}Bi_{0.50}TiO₃ ferroelectric thin films by metalorganic solution deposition 136
- Ferroelectricity
studies on magnetic, dielectric and magnetoelectric behavior of (x) NiFe_{0.9}Mn_{0.1}O₄ and ($1 - x$) BaZr_{0.08}Ti_{0.92}O₃ magnetoelectric composites 310
- Ferroelectrics
synthesis and dielectric properties of substituted barium titanate ceramics 59
characterization and piezoelectric thermal stability of PIN-PMN-PT ternary ceramics near the morphotropic phase boundary 115
- Field-annealing effect
effect of field-annealing on magnetostriction and tunneling magnetoresistance of Co/AlO_x/Co/IrMn junctions 242
- First-order phase transition
magnetocaloric effect of La_{0.8}Ce_{0.2}Fe_{11.4-x}Mn_xSi_{1.6} compounds 1
- Floating zone technique
growth and luminescence characteristics of cerium-doped yttrium pyrosilicate single crystal 645
- Formation enthalpy
applications of an extended Miedema's model for ternary alloys 357
- Fracture
mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium-copper alloy matrix composites produced by direct squeeze casting method 119
- Freestanding Ni–Mn–Ga thick film
fabrication and characterization of a Ni–Mn–Ga uniaxially textured freestanding film deposited by DC magnetron sputtering 509
- FTIR and Nd³⁺ ions
influence of the Nd³⁺ ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO₃, prepared by sol-gel technique 451
- Gas sensing
photoluminescence in laser ablated nanostructured indium oxide thin films 215
- Gas–solid reactions
thermodynamic analysis and synthesis of porous Mo₂C sponge by vapor-phase condensation and in situ carburization of MoO₃ 36
characteristics of nano-sized silver-glass composite powders prepared by flame spray pyrolysis 456
facile route to straight ZnGa₂O₄ nanowires and their cathodoluminescence properties 663
- Ge
lattice, magnetic and electronic transport behaviors of Ge-doped Mn₃XC ($X = Al, Zn, Ga$) 289
- Glasses
elastic properties of silver-phospho-vanadate glasses 325
structural relaxation and serrated flow due to annealing treatments in Zr-based metallic glasses 558
- Glass-forming ability
multiple maxima in glass-forming ability in Al–Zr–Ni system 183
- Grain-growth inhibition
diffusion and solubility of Cr in WC 408
- Growth mechanism
preparation and DSC application of the size-tuned ZnO nanoarrays 694
g-Shift method
the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO₃ crystals 304
- H₂/CO₂ mixture gas
effect of H₂/CO₂ mixture gas treatment temperature on the activity of LaNiO₃ catalyst for hydrogen production from formaldehyde aqueous solution under visible light L13
- H/D isotope effect
absorption isotherms for H₂(D₂)–Pd_{0.8}Ag_{0.2} (198–323 K) 47
- Hafnium hydride
correlation between microhardness and electronic charge density of hafnium hydrides 685
- Half-Heusler compound
thermal expansion and melting temperature of the half-Heusler compounds: MNiSn ($M = Ti, Zr, Hf$) 328
- Hard magnetic material
magnetic property enhancement of directly quenched Nd–Fe–B bulk magnets with Ti substitution 499
- Hardmetal
diffusion and solubility of Cr in WC 408
- Hardness
effect of surfactant on the co-electrodeposition of the nano-sized ceria particle in the nickel matrix 650
- Hardness measurements
influence of thermal cycling treatment on the anneal hardening effect of Cu–10Zn Alloy 582
- Heat treatment
equilibrium phase of high-entropy FeCoNiCrCu_{0.5} alloy at elevated temperature 30
- Hexagonal ferrite
high-frequency properties of Si-doped Z-type hexaferrites 162
- Hexagonal perovskite
synthesis, structure, and magnetic property of hexagonal perovskite Ba₅Sn_{1.1}Mn_{3.9}O₁₅ 152
- High frequency
development of high DC-bias Mn–Zn ferrite working at frequency higher than 3 MHz 523
- High pressure
elasticity and thermodynamic properties of α -Ta₄AlC₃ under pressure 140
- High temperature deformation
high temperature deformation behavior of the TC6 titanium alloy under the uniform DC electric field 401
- High-entropy alloy
equilibrium phase of high-entropy FeCoNiCrCu_{0.5} alloy at elevated temperature 30
- High-temperature alloys
emissivity measurements on aeronautical alloys 482
- High-temperature oxidation
high-temperature oxidation behavior of nanocrystalline diamond films 638
- High-temperature series expansions
magnetic properties of the spinel systems ACr_2X_4 ($A = Zn, Cd, Hg; X = S, Se$) 441
- Histopathological and ultrastructure changes
oxidative injury in the mouse spleen caused by lanthanides 708
- Hollow fiber supported liquid membrane
selective removal of mercury as HgCl₄²⁻ from natural gas well produced water by TOA via HFSLM 72
- Humidity sensors
study of LiMgVO₄ electrical conductivity mechanism 714
- Hydrogen
effect of H₂/CO₂ mixture gas treatment temperature on the activity of LaNiO₃ catalyst for hydrogen production from formaldehyde aqueous solution under visible light L13
- Hydrogen absorbing materials
optimization of Co-content in C14 Laves phase multi-component alloys for NiMH battery application 202

- Hydrogen absorption isotherm
absorption isotherms for $H_2(D_2)$ -Pd_{0.8}Ag_{0.2} (198–323 K) 47
- Hydrogen storage
hydrogen sorption properties of a Mg–Y–Ti alloy 375
- Hydrothermal method
the effect of seed layer on morphology of ZnO nanorod arrays grown by hydrothermal method 99
- Hydrothermal
hydrothermal preparation and characterization of based-alloy Bi₂Te₃ nanostructure with different morphology 530
- Impedance spectroscopy
study of LiMgVO₄ electrical conductivity mechanism 714
- In situ processing
microstructure and properties of copper composite containing in situ Nb reinforcement: Effects of milling speed 369
- Infrared emissivity
emissivity measurements on aeronautical alloys 482
- Infrared spectroscopy
emissivity measurements on aeronautical alloys 482
- Inorganic materials
microwave-assisted solid-state decomposition of La[Co(CN)₆]-5H₂O precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO₃ nanoparticles 586
- Interconnect
La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O₃ protective coatings for solid oxide fuel cell interconnect deposited by screen printing 576
- Interfacial reaction
microstructural evolution of intermetallic compounds in Sn–3.5Ag–X (X = 0, 0.75Ni, 1.0Zn and 1.5In)/Cu solder joints during liquid aging 631
- Intermetallic alloys
effect of Cu additions over the lattice parameter and hardness of the NiAl intermetallic compound 26
- Intermetallic compound
microstructural evolution of intermetallic compounds in Sn–3.5Ag–X (X = 0, 0.75Ni, 1.0Zn and 1.5In)/Cu solder joints during liquid aging 631
- Intermetallics
partial oxidation of methane over bimetallic nickel–lanthanide oxides 316
observation of two separate charge density wave transitions in Gd₂Te₅ via transmission electron microscopy and high-resolution X-ray diffraction 332
hydrogen sorption properties of a Mg–Y–Ti alloy 375
isothermal section of the Er–Fe–Al ternary system at 800 °C 421
- Ion exchange synthesis
characterization of delafossite-type CuCoO₂ prepared by ion exchange 336
- Ionic conduction
study of relaxations in epoxy polymer by thermally stimulated depolarization current (TSDC) and dielectric relaxation spectroscopy (DRS) 429
- Ionic conductivity
study of LiMgVO₄ electrical conductivity mechanism 714
- (K_{0.5}Na_{0.5})NbO₃
phase transition behavior and electrical properties of [(K_{0.5}Na_{0.5})_{1-x}Ag_x](Nb_{1-x}Ta_x)O₃ lead-free ceramics 175
- Kinetics
characterization and TSL dosimetric properties of Mn doped BaSO₄ phosphor prepared by recrystallisation method 84
the effect of rare earth elements on the kinetics of the isothermal coarsening of the globular solid phase in semisolid AZ91 alloy produced via SIMA process 570
- LaCoO₃
microwave-assisted solid-state decomposition of La[Co(CN)₆]-5H₂O precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO₃ nanoparticles 586
- Lanthanides
oxidative injury in the mouse spleen caused by lanthanides 708
- Laser CVD
texture and orientation characteristics of α -Al₂O₃ films prepared by laser chemical vapor deposition using Nd:YAG laser 469
- Laser processing
microstructure and in vitro bioactivity of laser-cladded bioceramic coating on titanium alloy in a simulated body fluid 211
- Laves phase
high temperature oxidation characteristics of Nb–10W–XCr alloys 195
- Lead-free piezoelectric ceramics
phase transition behavior and electrical properties of [(K_{0.5}Na_{0.5})_{1-x}Ag_x](Nb_{1-x}Ta_x)O₃ lead-free ceramics 175
- Lead-free solder
microstructural evolution of intermetallic compounds in Sn–3.5Ag–X (X = 0, 0.75Ni, 1.0Zn and 1.5In)/Cu solder joints during liquid aging 631
- LED
luminescence properties of sol–gel derived Sr₂(Ce_{1-x}Sn_x)O₄ blue phosphors 445
- Lifetime
structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ transparent ferroelectric glass–ceramic nanocomposites 281
- LiMgVO₄
study of LiMgVO₄ electrical conductivity mechanism 714
- LiMn₂O₄ cathode
nanocrystalline LiMn₂O₄ thin film cathode material prepared by polymer spray pyrolysis method for Li-ion battery 674
- Liquid-phase sintering
densification behavior of nanocrystalline W–Ni–Fe composite powders prepared by sol–spray drying and hydrogen reduction process 188
- Liquid–solid reactions
wetting behavior of Al alloys on a TiH₂ substrate L1
morphologies of GdBO₃:Eu³⁺ one-dimensional nanomaterials L8
- Lithium niobate
the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO₃ crystals 304
- Low loss
development of high DC-bias Mn–Zn ferrite working at frequency higher than 3 MHz 523
- Luminescence
morphologies of GdBO₃:Eu³⁺ one-dimensional nanomaterials L8
thermoluminescence investigations in X-ray irradiated CaS phosphor 4
structural and optical properties of epitaxial ZnO thin films on 4H–SiC (0 0 1) substrates prepared by pulsed laser deposition 179
luminescence properties of sol–gel derived Sr₂(Ce_{1-x}Sn_x)O₄ blue phosphors 445
effects of growth atmosphere and annealing on luminescence efficiency of YAP:Ce crystal 515
synthesis and characterization of CaF₂ nanocrystals 592
- Luminescent materials
the z value dependence of photoluminescence in Eu²⁺-doped β -SiAlON (Si_{6-z}Al₂O_zN_{8-z}) with 1 ≤ z ≤ 4 157
- Luminescent property
growth and luminescence characteristics of cerium-doped yttrium pyrosilicate single crystal 645
- Magnesium
the effect of rare earth elements on the kinetics of the isothermal coarsening of the globular solid phase in semisolid AZ91 alloy produced via SIMA process 570
- Magnesium alloy
texture evolution and mechanical properties of AZ31B magnesium alloy sheets processed by repeated unidirectional bending 475
- Magnesium ferrite
in situ synthesis of high density magnetic ferrite spinel (MgFe₂O₄) compacts using a mixture of conventional raw materials and waste iron oxide 269
- Magnetic entropy
effect of potassium doping on physical properties of perovskites La_{0.8}Cd_{0.2-x}K_xMnO₃ 9
- Magnetic films and multilayers
effect of field-annealing on magnetostriction and tunneling magnetoresistance of Co/AlO_x/Co/IrMn junctions 242
- Magnetic measurements
synthesis, characterization, and property studies of (La, Ag)FeO₃ (0.0 ≤ x ≤ 0.3) perovskites 64

- quantitative relationships between magnetic properties, microstructure and composition of WC-Co alloys 465
- Magnetic phase transition**
lattice, magnetic and electronic transport behaviors of Ge-doped Mn_3XC (X = Al, Zn, Ga) 289
- Magnetic properties**
effect of potassium doping on physical properties of perovskites $\text{La}_{0.8}\text{Cd}_{0.2-x}\text{K}_x\text{MnO}_3$ 9
synthesis, structure, and magnetic property of hexagonal perovskite $\text{Ba}_2\text{Sn}_{1.1}\text{Mn}_{3.9}\text{O}_{15}$ 152
in situ synthesis of high density magnetic ferrite spinel (MgFe_2O_4) compacts using a mixture of conventional raw materials and waste iron oxide 269
studies on magnetic, dielectric and magnetoelectric behavior of (x) $\text{NiFe}_{1.9}\text{Mn}_{0.1}\text{O}_4$ and (1 - x) $\text{BaZr}_{0.08}\text{Ti}_{0.92}\text{O}_3$ magnetoelectric composites 310
magnetic property enhancement of directly quenched Nd-Fe-B bulk magnets with Ti substitution 499
- Magnetically ordered materials**
magnetocaloric effect of $\text{La}_{0.8}\text{Ce}_{0.2}\text{Fe}_{11.4-x}\text{Mn}_x\text{Si}_{1.6}$ compounds 1
- Magnetization**
magnetic and structural properties of $\text{BaFe}_{12-x}\text{Ga}_x\text{O}_{19}$ nanoparticles 110
- Magnetocaloric**
magnetic properties and magnetocaloric effect of $\text{Nd}(\text{Mn}_{1-x}\text{Fe}_x)_2\text{Ge}_2$ compounds 13
- Magnetocaloric effect**
magnetocaloric effect of $\text{La}_{0.8}\text{Ce}_{0.2}\text{Fe}_{11.4-x}\text{Mn}_x\text{Si}_{1.6}$ compounds 1
- Magneto-resistance**
effect of field-annealing on magnetostriction and tunneling magnetoresistance of $\text{Co}/\text{AlO}_x/\text{Co}/\text{IrMn}$ junctions 242
- Magnetostriction (λ_s)**
effect of field-annealing on magnetostriction and tunneling magnetoresistance of $\text{Co}/\text{AlO}_x/\text{Co}/\text{IrMn}$ junctions 242
- Magnetron sputtering**
the effect of seed layer on morphology of ZnO nanorod arrays grown by hydrothermal method 99
- Manganites**
effect of potassium doping on physical properties of perovskites $\text{La}_{0.8}\text{Cd}_{0.2-x}\text{K}_x\text{MnO}_3$ 9
- Mapping**
the correlation of the results of capacitance mapping and of sheet resistance mapping in semi-insulating 6H-SiC 56
- Martensitic transformation**
fabrication and characterization of a Ni-Mn-Ga uniaxially textured freestanding film deposited by DC magnetron sputtering 509
- ME composites**
studies on magnetic, dielectric and magnetoelectric behavior of (x) $\text{NiFe}_{1.9}\text{Mn}_{0.1}\text{O}_4$ and (1 - x) $\text{BaZr}_{0.08}\text{Ti}_{0.92}\text{O}_3$ magnetoelectric composites 310
- Mechanical activation**
synthesis and characterization of pure nanocrystalline magnesium aluminate spinel powder 600
- Mechanical alloying**
characterization and formation mechanism of nanocrystalline W-Al alloy prepared by mechanical alloying 224
microstructure and properties of copper composite containing in situ NbC reinforcement: Effects of milling speed 369
synthesis of $(\text{Mo}_{1-x}\text{-Cr}_x)\text{Si}_2$ nanostructured powders via mechanical alloying and following heat treatment 379
investigation of planetary milling for nano-silicon carbide reinforced aluminium metal matrix composites 394
- Mechanical milling**
mechanical and microstructural characterization of dispersion strengthened Al-C system nanocomposites 626
- Mechanical properties**
properties and rapid consolidation of ultra-hard tungsten carbide L4
evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium-copper alloy matrix composites produced by direct squeeze casting method 119
investigation of planetary milling for nano-silicon carbide reinforced aluminium metal matrix composites 394
microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
texture evolution and mechanical properties of AZ31B magnesium alloy sheets processed by repeated unidirectional bending 475
- Mechanochemical processing**
optical and photocatalytic properties of nanoparticulate $(\text{TiO}_2)_x(\text{ZnO})_{1-x}$ powders L17
- Melting temperature**
thermal expansion and melting temperature of the half-Heusler compounds: MnNiSn (M = Ti, Zr, Hf) 328
- Mercury**
selective removal of mercury as HgCl_4^{2-} from natural gas well produced water by TOA via HFSLM 72
- Metal alloys**
the phase relationships in the Gd-Ti-Sn ternary system at 473 K and the new compound GdSn_4Ti_6 384
- Metal hydride**
optimization of Co-content in C14 Laves phase multi-component alloys for NiMH battery application 202
pulverization mechanism of the multiphase Ti-V-based hydrogen storage electrode alloy during charge/discharge cycling 552
- Metal hydrides**
wetting behavior of Al alloys on a TiH_2 substrate L1
- Metal matrix composites**
investigation of planetary milling for nano-silicon carbide reinforced aluminium metal matrix composites 394
mechanical and microstructural characterization of dispersion strengthened Al-C system nanocomposites 626
- Metallic glasses**
multiple maxima in glass-forming ability in Al-Zr-Ni system 183
liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
- Metalorganic solution deposition**
preparation and characterization of $\text{Ca}_{0.18}\text{Na}_{0.32}\text{Bi}_{0.50}\text{TiO}_3$ ferroelectric thin films by metalorganic solution deposition 136
- Metals**
evaluation of effect of alloy elements in copper based CuSn10 and CuZn30 bearings on tribological and mechanical properties 262
- Metals and alloys**
wetting behavior of Al alloys on a TiH_2 substrate L1
magnetic properties and magnetocaloric effect of $\text{Nd}(\text{Mn}_{1-x}\text{Fe}_x)_2\text{Ge}_2$ compounds 13
carbon diffusion behavior in molybdenum at relatively low temperatures 42
evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
phase stability, mechanical property, and electronic structure of Mg-Li system 130
effects of Ag doping on thermoelectric properties of Zn_4Sb_3 at low temperatures 228
the role of trace element segregation in the eutectic modification of hypoeutectic Al-Si alloys 415
quantitative relationships between magnetic properties, microstructure and composition of WC-Co alloys 465
- Metathesis reaction**
characterization of delafossite-type CuCoO_2 prepared by ion exchange 336
- Methane**
partial oxidation of methane over bimetallic nickel-lanthanide oxides 316
- Mg-Zn-Nd system**
a ternary linear compound T_2 and its phase equilibrium relationships in Mg-Zn-Nd system at 400 °C 620
- Mice**
oxidative injury in the mouse spleen caused by lanthanides 708
- Microhardness**
effect of Cu additions over the lattice parameter and hardness of the NiAl intermetallic compound 26

- Microstructure
 effect of Cu additions over the lattice parameter and hardness of the NiAl intermetallic compound 26
 evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
 effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
 high-frequency properties of Si-doped Z-type hexaferrites 162
 high temperature oxidation characteristics of Nb-10W-XCr alloys 195
 effect of chamber pressure and hydrogen on the formation of C₃N₄ films deposited on quartz substrates via MPCVD 275
 the role of trace element segregation in the eutectic modification of hypoeutectic Al-Si alloys 415
 microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
 quantitative relationships between magnetic properties, microstructure and composition of WC-Co alloys 465
 texture and orientation characteristics of α -Al₂O₃ films prepared by laser chemical vapor deposition using Nd:YAG laser 469
 liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
 microstructure and mechanical properties of diffusion bonded joints between tungsten and F82H steel using a titanium interlayer 545
 pulverization mechanism of the multiphase Ti-V-based hydrogen storage electrode alloy during charge/discharge cycling 552
 structural relaxation and serrated flow due to annealing treatments in Zr-based metallic glasses 558
 the effect of rare earth elements on the kinetics of the isothermal coarsening of the globular solid phase in semisolid AZ91 alloy produced via SIMA process 570
 microstructural evolution of intermetallic compounds in Sn-3.5Ag-X (X = 0, 0.75Ni, 1.0Zn and 1.5In)/Cu solder joints during liquid aging 631
 investigation of small Sn-3.5Ag-0.5Cu additions on the microstructure and properties of Sn-8Zn-3Bi solder on Au/Ni/Cu pads 678
- Microstructure characterization
 synthesis of nanocrystalline Cd-Zn ferrite by ball milling and its stability at elevated temperatures 91
- Microwave
 characterization and dielectric behavior of V₂O₅-doped 0.9Mg_{0.95}Co_{0.05}TiO₃-0.1Ca_{0.6}La_{0.8/3}TiO₃ ceramic system at microwave frequency 170
- Microwave absorber
 a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Microwave dielectric
 $x(\text{Mg}_{0.7}\text{Zn}_{0.3})_{0.95}\text{Co}_{0.05}\text{TiO}_3-(1-x)(\text{La}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ ceramic at microwave frequency with a near zero temperature coefficient of resonant frequency 541
- Microwave dielectric properties
 new dielectric material system of Nd(Mg_{1/2}Ti_{1/2})O₃-CaTiO₃ with V₂O₅ addition for microwave applications 719
- Microwave irradiation
 microwave-assisted solid-state decomposition of La[Co(CN)₆]-5H₂O precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO₃ nanoparticles 586
- Miedema's semi-empirical model
 applications of an extended Miedema's model for ternary alloys 357
- Milling speed
 microstructure and properties of copper composite containing in situ NbC reinforcement: Effects of milling speed 369
- MNiSn
 thermal expansion and melting temperature of the half-Heusler compounds: MNiSn (M = Ti, Zr, Hf) 328
- Mn-Ni-Zn
 experimental investigation on the phase equilibria of the Mn-Ni-Zn system at 400 °C 362
- Mn-Zn ferrite
 development of high DC-bias Mn-Zn ferrite working at frequency higher than 3 MHz 523
- Molybdenum oxides
 thermoelectric properties of molybdenum oxides LnMo₈O₁₄ (Ln = La, Ce, Pr, Nd and Sm) 353
- Morphotropic phase boundary
 characterization and piezoelectric thermal stability of PIN-PMN-PT ternary ceramics near the morphotropic phase boundary 115
- Multicomponent alloy
 the novel eutectic microstructures of Si-Mn-P ternary alloy 389
- Multilayer coating
 oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
- Multiple reflows
 investigation of small Sn-3.5Ag-0.5Cu additions on the microstructure and properties of Sn-8Zn-3Bi solder on Au/Ni/Cu pads 678
- Nanocomposites
 a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Nanocrystalline
 oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
 effect of current density on deposition process and properties of nanocrystalline Ni-Co-W alloy coatings 488
- Nanocrystalline composite powders
 densification behavior of nanocrystalline W-Ni-Fe composite powders prepared by sol-spray drying and hydrogen reduction process 188
- Nanocrystalline diamond films
 high-temperature oxidation behavior of nanocrystalline diamond films 638
- Nanocrystalline indium oxide films
 photoluminescence in laser ablated nanostructured indium oxide thin films 215
- Nanocrystalline (Zn,Cd)Fe₂O₄
 synthesis of nanocrystalline Cd-Zn ferrite by ball milling and its stability at elevated temperatures 91
- Nanomaterials
 an approach for obtaining the structural diversity of multi-walled carbon nanotubes on Ni/Al catalyst with low Ni content 20
 fabrication of zinc titanate nanofibers by electrospinning technique 167
- Nanoparticles
 microwave-assisted solid-state decomposition of La[Co(CN)₆]-5H₂O precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO₃ nanoparticles 586
- Nanoparticles dispersion
 mechanical and microstructural characterization of dispersion strengthened Al-C system nanocomposites 626
- Nanoparticle
 XRD and TEM characterizations of the mechanically alloyed CuIn_{0.5}Ga_{0.5}Se₂ powders 437
- Nanostructure
 fabrication and optical properties of single-crystalline beta barium borate nanorods 504
- Nanostructured
 synthesis of (Mo_{1-x}-Cr_x)Si₂ nanostructured powders via mechanical alloying and following heat treatment 379
- Nanostructured materials
 properties and rapid consolidation of ultra-hard tungsten carbide L4
 morphologies of GdBO₃:Eu³⁺ one-dimensional nanomaterials L8
 optical and photocatalytic properties of nanoparticulate (TiO₂)_x(ZnO)_{1-x} powders L17
 characterization and formation mechanism of nanocrystalline W-Al alloy prepared by mechanical alloying 224
 thin nanocrystalline TiO₂-SnO₂ sprayed films: Influence of the dopant concentration, substrate and thermal treatment on the phase composition and crystallites sizes 257
 low-temperature synthesis and photoluminescence of ZnO nanostructures by a facile hydrothermal process 566
 investigation of planetary milling for nano-silicon carbide reinforced aluminium metal matrix composites 394
 synthesis and characterization of pure nanocrystalline magnesium aluminate spinel powder 600

- facile route to straight ZnGa_2O_4 nanowires and their cathodoluminescence properties 663
- nanocrystalline LiMn_2O_4 thin film cathode material prepared by polymer spray pyrolysis method for Li-ion battery 674
- Nano-structured mullite
- effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
- Nanostructures
- oriented growth of ZnO nanostructures on different substrates via a hydrothermal method 51
- Natural gas well
- selective removal of mercury as HgCl_4^{2-} from natural gas well produced water by TOA via HFSLM 72
- NbC phase
- microstructure and properties of copper composite containing in situ NbC reinforcement: Effects of milling speed 369
- NBT films
- preparation and characterization of $\text{Ca}_{0.18}\text{Na}_{0.32}\text{Bi}_{0.50}\text{TiO}_3$ ferroelectric thin films by metalorganic solution deposition 136
- Nb–W–Cr
- high temperature oxidation characteristics of Nb–10W–XCr alloys 195
- Ni/ $\text{LaNiO}_{3-\delta}$ – $\text{La}_2\text{O}_2\text{CO}_3$
- effect of H_2/CO_2 mixture gas treatment temperature on the activity of LaNiO_3 catalyst for hydrogen production from formaldehyde aqueous solution under visible light L13
- Nickel ferrite
- a flexible microwave absorber based on nickel ferrite nanocomposite 297
- Nickel oxide thin films
- efficient electrochromic nickel oxide thin films by electrodeposition 667
- Ni–Co–W alloy
- effect of current density on deposition process and properties of nanocrystalline Ni–Co–W alloy coatings 488
- Nitride materials
- effect of chamber pressure and hydrogen on the formation of C_3N_4 films deposited on quartz substrates via MPCVD 275
 - an experimental study about the influence of well thickness on the electroluminescence of InGaN/GaN multiple quantum wells 461
- Optical materials
- optical and photocatalytic properties of nanoparticulate $(\text{TiO}_2)_x(\text{ZnO})_{1-x}$ powders L17
 - effect of TiO_2 on thermal, structural and third-order nonlinear optical properties of Ca–La–B–O glass system 493
 - effects of growth atmosphere and annealing on luminescence efficiency of YAP:Ce crystal 515
- Optical properties
- optical and photocatalytic properties of nanoparticulate $(\text{TiO}_2)_x(\text{ZnO})_{1-x}$ powders L17
 - oriented growth of ZnO nanostructures on different substrates via a hydrothermal method 51
 - the z value dependence of photoluminescence in Eu^{2+} -doped β -SiAlON ($\text{Si}_{6-z}\text{Al}_z\text{O}_2\text{N}_{8-z}$) with $1 \leq z \leq 4$ 157
 - fabrication and optical properties of single-crystalline beta barium borate nanorods 504
 - efficient electrochromic nickel oxide thin films by electrodeposition 667
 - low-temperature synthesis and photoluminescence of ZnO nanostructures by a facile hydrothermal process 566
 - facile route to straight ZnGa_2O_4 nanowires and their cathodoluminescence properties 663
 - preparation and DSC application of the size-tuned ZnO nanoarrays 694
- Optical spectroscopy
- structural, optical and electrical characterization of chemically deposited CdSe thin films 605
- Orientation
- texture and orientation characteristics of α - Al_2O_3 films prepared by laser chemical vapor deposition using Nd:YAG laser 469
- Oxidation
- high temperature oxidation characteristics of Nb–10W–XCr alloys 195
 - effect of field-annealing on magnetostriction and tunneling magnetoresistance of $\text{Co}/\text{AlO}_x/\text{Co}/\text{IrMn}$ junctions 242
- Oxidation behavior
- oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
- Oxidative stress
- oxidative injury in the mouse spleen caused by lanthanides 708
- Oxide materials
- optical and photocatalytic properties of nanoparticulate $(\text{TiO}_2)_x(\text{ZnO})_{1-x}$ powders L17
 - synthesis, characterization, and property studies of $(\text{La}, \text{Ag})\text{FeO}_3$ ($0.0 \leq x \leq 0.3$) perovskites 64
- Oxides
- characterization of delafossite-type CuCoO_2 prepared by ion exchange 336
 - $x(\text{Mg}_{0.7}\text{Zn}_{0.3})_{0.95}\text{Co}_{0.05}\text{TiO}_3-(1-x)(\text{La}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ ceramic at microwave frequency with a near zero temperature coefficient of resonant frequency 541
- Padé approximants
- magnetic properties of the spinel systems ACr_2X_4 ($\text{A} = \text{Zn}, \text{Cd}, \text{Hg}; \text{X} = \text{S}, \text{Se}$) 441
- Palladium–silver alloy
- absorption isotherms for $\text{H}_2(\text{D}_2)$ – $\text{Pd}_{0.8}\text{Ag}_{0.2}$ (198–323 K) 47
- Partial oxidation
- partial oxidation of methane over bimetallic nickel–lanthanide oxides 316
- Pb-free
- investigation of small Sn–3.5Ag–0.5Cu additions on the microstructure and properties of Sn–8Zn–3Bi solder on Au/Ni/Cu pads 678
- Perovskite
- synthesis, characterization and electrical properties of the system $\text{LaMn}_x\text{Fe}_{1-x}\text{O}_3$ 233
- Perovskite structure
- synthesis and dielectric properties of substituted barium titanate ceramics 59
- Perovskite-type oxide
- microwave-assisted solid-state decomposition of $\text{La}[\text{Co}(\text{CN})_6] \cdot 5\text{H}_2\text{O}$ precursor: A simple and fast route for the synthesis of single-phase perovskite-type LaCoO_3 nanoparticles 586
- Phase diagrams
- the phase relationships in the Gd–Ti–Sn ternary system at 473 K and the new compound GdSn_4Ti_6 384
 - isothermal section of the Er–Fe–Al ternary system at 800 °C 421
 - magnetic properties of the spinel systems ACr_2X_4 ($\text{A} = \text{Zn}, \text{Cd}, \text{Hg}; \text{X} = \text{S}, \text{Se}$) 441
- Phase equilibria
- experimental investigation on the phase equilibria of the Mn–Ni–Zn system at 400 °C 362
- Phase equilibrium
- a ternary linear compound T_2 and its phase equilibrium relationships in Mg–Zn–Nd system at 400 °C 620
- Phase stability
- synthesis of nanocrystalline Cd–Zn ferrite by ball milling and its stability at elevated temperatures 91
- Phase transformation
- hydrogen sorption properties of a Mg–Y–Ti alloy 375
- Phase transition behavior
- phase transition behavior and electrical properties of $[(\text{K}_{0.50}\text{Na}_{0.50})_{1-x}\text{Ag}_x](\text{Nb}_{1-x}\text{Ta}_x)\text{O}_3$ lead-free ceramics 175
- Phase transitions
- effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
 - phase stability, mechanical property, and electronic structure of Mg–Li system 130
 - liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
 - synthesis, characterization, and electrical studies on Cu-doped $\text{K}_2\text{Ti}_6\text{O}_{13}$ lead-free ceramics: Role of defect associate dipoles 700
- Phosphate
- elastic properties of silver–phospho–vanadate glasses 325

- Phosphors
thermoluminescence investigations in X-ray irradiated CaS phosphor 4
preparation and characteristics of yellow ZnS:Mn,Ce phosphor 689
- Photocatalyst
effect of H₂/CO₂ mixture gas treatment temperature on the activity of LaNiO₃ catalyst for hydrogen production from formaldehyde aqueous solution under visible light L13
- Photoelectron spectroscopic
growth and spectroscopic characteristics of Cr³⁺:CsAl(MoO₄)₂ crystal 293
- Photoluminescence
photoluminescence in laser ablated nanostructured indium oxide thin films 215
structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ transparent ferroelectric glass-ceramic nanocomposites 281
ZnO hierarchical structures synthesized via hydrothermal method and their photoluminescence properties 614
preparation and characteristics of yellow ZnS:Mn,Ce phosphor 689
- Piezoelectric ceramics
characterization and piezoelectric thermal stability of PIN-PMN-PT ternary ceramics near the morphotropic phase boundary 115
- Piezoelectric properties
phase transition behavior and electrical properties of [(K_{0.50}Na_{0.50})_{1-x}Ag_x](Nb_{1-x}Ta_x)O₃ lead-free ceramics 175
- Pitting corrosion
corrosion behavior of Zr-Cu-Ni-Al bulk metallic glasses in chloride medium 596
- Point defects
synthesis and characterization of CaF₂ nanocrystals 592
- Polymer
study of relaxations in epoxy polymer by thermally stimulated depolarization current (TSDC) and dielectric relaxation spectroscopy (DRS) 429
- Polymer spray pyrolysis
nanocrystalline LiMn₂O₄ thin film cathode material prepared by polymer spray pyrolysis method for Li-ion battery 674
- Porous structure
a simple route to synthesize CuS framework with porosity 343
- Post-annealing
effect of annealing and O₂ pressure on structural and optical properties of pulsed laser deposited TiO₂ thin films 246
- Potentiodynamic polarization
corrosion behavior of Zr-Cu-Ni-Al bulk metallic glasses in chloride medium 596
- Powder metallurgy
properties and rapid consolidation of ultra-hard tungsten carbide L4
effects of Ag doping on thermoelectric properties of Zn₄Sb₃ at low temperatures 228
microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
investigation of planetary milling for nano-silicon carbide reinforced aluminum metal matrix composites 394
- Powder processing
the z value dependence of photoluminescence in Eu²⁺-doped β-SiAlON (Si_{6-z}Al_zO_zN_{8-z}) with 1 ≤ z ≤ 4 157
- Powder-metallurgy
carbon diffusion behavior in molybdenum at relatively low temperatures 42
- Powders
influence of the Nd³⁺ ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO₃, prepared by sol-gel technique 451
- Power ferrite
development of high DC-bias Mn-Zn ferrite working at frequency higher than 3 MHz 523
- Precipitate
equilibrium phase of high-entropy FeCoNiCrCu_{0.5} alloy at elevated temperature 30
- Precipitation
synthesis and characterization of CaF₂ nanocrystals 592
preparation and characterization of cesium tetravalent plutonium hexanitrate 659
- Produced water
selective removal of mercury as HgCl₄²⁻ from natural gas well produced water by TOA via HFSLM 72
- Pulse co-electrodeposition
effect of surfactant on the co-electrodeposition of the nano-sized ceria particle in the nickel matrix 650
- Pulsed laser ablation
photoluminescence in laser ablated nanostructured indium oxide thin films 215
- Pulsed laser deposition
effect of annealing and O₂ pressure on structural and optical properties of pulsed laser deposited TiO₂ thin films 246
- Pulverization
pulverization mechanism of the multiphase Ti-V-based hydrogen storage electrode alloy during charge/discharge cycling 552
- Quantum confinement
photoluminescence in laser ablated nanostructured indium oxide thin films 215
- Quenching
new nickel-based bulk metallic glasses with extremely high nickel content 80
effect of TiO₂ on thermal, structural and third-order nonlinear optical properties of Ca-La-B-O glass system 493
effects of growth atmosphere and annealing on luminescence efficiency of YAP:Ce crystal 515
influence of thermal cycling treatment on the anneal hardening effect of Cu-10Zn Alloy 582
- Radiation effects
thermoluminescence investigations in X-ray irradiated CaS phosphor 4
- Raman analysis
high-temperature oxidation behavior of nanocrystalline diamond films 638
- Rapid solidification
liquid phase separation and microstructure characterization in a designed Al-based amorphous matrix composite with spherical crystalline particles 535
- Rapid-solidification
new nickel-based bulk metallic glasses with extremely high nickel content 80
multiple maxima in glass-forming ability in Al-Zr-Ni system 183
- Rare earth
isothermal section of the Er-Fe-Al ternary system at 800 °C 421
- Rare earth alloys and compounds
morphologies of GdBO₃:Eu³⁺ one-dimensional nanomaterials L8
- Rare earth elements
the effect of rare earth elements on the kinetics of the isothermal coarsening of the globular solid phase in semisolid AZ91 alloy produced via SIMA process 570
- Rare-earth ions
the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO₃ crystals 304
- RF sputtering
oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
- Saturation magnetization
in situ synthesis of high density magnetic ferrite spinel (MgFe₂O₄) compacts using a mixture of conventional raw materials and waste iron oxide 269
- Scan electron microscope
experimental investigation on the phase equilibria of the Mn-Ni-Zn system at 400 °C 362
- Scanning and transmission microscopy
evaluation of effect of alloy elements in copper based CuSn10 and CuZn30 bearings on tribological and mechanical properties 262
- Scanning electron microscopy
carbon diffusion behavior in molybdenum at relatively low temperatures 42
evaluation of mechanical properties and structure of multilayered Al/Ni composites produced by accumulative roll bonding (ARB) process 103
fabrication and optical properties of single-crystalline beta barium borate nanorods 504

- synthesis and characterization of CaF_2 nanocrystals 592
- corrosion behavior of Zr–Cu–Ni–Al bulk metallic glasses in chloride medium 596
- structural, optical and electrical characterization of chemically deposited CdSe thin films 605
- efficient electrochromic nickel oxide thin films by electrodeposition 667
- Screen printing
- $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ protective coatings for solid oxide fuel cell interconnect deposited by screen printing 576
- Seed crystal layer
- preparation and DSC application of the size-tuned ZnO nanoarrays 694
- SEM
- carbon diffusion behavior in molybdenum at relatively low temperatures 42
- synthesis, characterization and electrical properties of the system $\text{LaMn}_x\text{Fe}_{1-x}\text{O}_3$ 233
- Semiconductors
- thermoelectric properties of molybdenum oxides $\text{LnMo}_8\text{O}_{14}$ (Ln = La, Ce, Pr, Nd and Sm) 353
- XRD and TEM characterizations of the mechanically alloyed $\text{CuIn}_{0.5}\text{Ga}_{0.5}\text{Se}_2$ powders 437
- growth of non-polar ZnO films on $\alpha\text{-GaN}/r\text{-Al}_2\text{O}_3$ templates by radio-frequency magnetron sputtering 519
- low-temperature synthesis and photoluminescence of ZnO nanostructures by a facile hydrothermal process 566
- facile route to straight ZnGa_2O_4 nanowires and their cathodoluminescence properties 663
- Semi-insulating (SI) SiC
- the correlation of the results of capacitance mapping and of sheet resistance mapping in semi-insulating 6H–SiC 56
- Semisolid
- the effect of rare earth elements on the kinetics of the isothermal coarsening of the globular solid phase in semisolid AZ91 alloy produced via SIMA process 570
- Shape memory effect
- fabrication and characterization of a Ni–Mn–Ga uniaxially textured freestanding film deposited by DC magnetron sputtering 509
- Shearing strength
- investigation of small Sn–3.5Ag–0.5Cu additions on the microstructure and properties of Sn–8Zn–3Bi solder on Au/Ni/Cu pads 678
- Sheet resistance
- the correlation of the results of capacitance mapping and of sheet resistance mapping in semi-insulating 6H–SiC 56
- SiAlON
- the z value dependence of photoluminescence in Eu^{2+} -doped $\beta\text{-SiAlON}$ ($\text{Si}_{6-z}\text{Al}_z\text{O}_z\text{N}_{8-z}$) with $1 \leq z \leq 4$ 157
- Silicon carbide
- thermal CVD synthesis and photoluminescence of SiC/SiO₂ core-shell structure nanoparticles 562
- Silver
- elastic properties of silver–phospho–vanadate glasses 325
- Si–Mn–P master alloy
- the novel eutectic microstructures of Si–Mn–P ternary alloy 389
- Simulated body fluid
- microstructure and in vitro bioactivity of laser-cladded bioceramic coating on titanium alloy in a simulated body fluid 211
- Single crystal
- growth and luminescence characteristics of cerium-doped yttrium pyrosilicate single crystal 645
- Sintering
- properties and rapid consolidation of ultra-hard tungsten carbide L4
- effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
- high-frequency properties of Si-doped Z-type hexaferrites 162
- preparation and characteristics of yellow ZnS:Mn,Ce phosphor 689
- Sintering aid
- characterization and dielectric behavior of V_2O_5 -doped $0.9\text{Mg}_{0.95}\text{Co}_{0.05}\text{TiO}_3\text{-}0.1\text{Ca}_{0.6}\text{La}_{0.8/3}\text{TiO}_3$ ceramic system at microwave frequency 170
- Size effects
- study of the size effects in the electrical resistivity of ultrathin (<Cu 40 nm) films in the framework of the statistical conduction models 609
- Sn^{4+} ion
- luminescence properties of sol–gel derived $\text{Sr}_2(\text{Ce}_{1-x}\text{Sn}_x)\text{O}_4$ blue phosphors 445
- Sol–gel
- luminescence properties of sol–gel derived $\text{Sr}_2(\text{Ce}_{1-x}\text{Sn}_x)\text{O}_4$ blue phosphors 445
- influence of the Nd^{3+} ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO_3 , prepared by sol–gel technique 451
- Sol–gel processes
- microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
- Solid oxide fuel cell (SOFC)
- $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ protective coatings for solid oxide fuel cell interconnect deposited by screen printing 576
- Solidification behavior
- the novel eutectic microstructures of Si–Mn–P ternary alloy 389
- Solid-state reaction
- thermoluminescence investigations in X-ray irradiated CaS phosphor 4
- synthesis, structure, and magnetic property of hexagonal perovskite $\text{Ba}_3\text{Sn}_{1.1}\text{Mn}_{3.9}\text{O}_{15}$ 152
- Solubility
- diffusion and solubility of Cr in WC 408
- Spherical diffusion
- diffusion and solubility of Cr in WC 408
- Spinel
- magnetic properties of the spinel systems ACr_2X_4 (A = Zn, Cd, Hg; X = S, Se) 441
- synthesis and characterization of pure nanocrystalline magnesium aluminate spinel powder 600
- Spleen
- oxidative injury in the mouse spleen caused by lanthanides 708
- Squeeze casting
- mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium–copper alloy matrix composites produced by direct squeeze casting method 119
- Sr_2CeO_4
- luminescence properties of sol–gel derived $\text{Sr}_2(\text{Ce}_{1-x}\text{Sn}_x)\text{O}_4$ blue phosphors 445
- Statistical conduction models
- study of the size effects in the electrical resistivity of ultrathin (<Cu 40 nm) films in the framework of the statistical conduction models 609
- Steel
- microstructure and mechanical properties of diffusion bonded joints between tungsten and F82H steel using a titanium interlayer 545
- Structural properties
- the influence of Sm doping in the electron-doped manganites $\text{La}_{0.9}\text{Te}_{0.1}\text{MnO}_3$ 348
- Superposition model (SPM)
- the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO_3 crystals 304
- Surface capacitance
- the correlation of the results of capacitance mapping and of sheet resistance mapping in semi-insulating 6H–SiC 56
- Surfaces and interfaces
- wetting behavior of Al alloys on a TiH_2 substrate L1
- Surfactant
- effect of surfactant on the co-electrodeposition of the nano-sized ceria particle in the nickel matrix 650
- Synchrotron radiation
- the role of trace element segregation in the eutectic modification of hypoeutectic Al–Si alloys 415
- Synthesis
- effect of mechanical activation and microwave heating on synthesis and sintering of nano-structured mullite 125
- T_2 phase
- a ternary linear compound T_2 and its phase equilibrium relationships in Mg–Zn–Nd system at 400 °C 620

- Ta₄AlC₃
 elasticity and thermodynamic properties of α -Ta₄AlC₃ under pressure 140
- TC6 titanium alloy
 high temperature deformation behavior of the TC6 titanium alloy under the uniform DC electric field 401
- TEM
 oxidation behavior, microstructure evolution and thermal stability in nanostructured CrN/AlN multilayer hard coatings 237
- Ternary alloys
 applications of an extended Miedema's model for ternary alloys 357
- Ternary linear compound
 a ternary linear compound T₂ and its phase equilibrium relationships in Mg–Zn–Nd system at 400 °C 620
- Texture
 texture evolution and mechanical properties of AZ31B magnesium alloy sheets processed by repeated unidirectional bending 475
- Thermal analysis
 synthesis, characterization and electrical properties of the system LaMn_xFe_{1-x}O₃ 233
 effect of TiO₂ on thermal, structural and third-order nonlinear optical properties of Ca–La–B–O glass system 493
 high-temperature oxidation behavior of nanocrystalline diamond films 638
 preparation and characterization of dicesium tetravalent plutonium hexanitrate 659
- Thermal chemical vapor deposition
 thermal CVD synthesis and photoluminescence of SiC/SiO₂ core-shell structure nanoparticles 562
- Thermal cycling treatment
 influence of thermal cycling treatment on the anneal hardening effect of Cu–10Zn Alloy 582
- Thermal expansion
 thermal expansion and melting temperature of the half-Heusler compounds: MNiSn (M = Ti, Zr, Hf) 328
- Thermal lag
 magnetocaloric effect of La_{0.8}Ce_{0.2}Fe_{11.4-x}Mn_xSi_{1.6} compounds 1
- Thermal transpiration effect
 absorption isotherms for H₂(D₂)–Pd_{0.8}Ag_{0.2} (198–323 K) 47
- Thermodynamic calculation
 thermodynamic assessments of Ag–Dy and Ag–Er binary systems 146
- Thermodynamic modeling
 thermodynamic analysis and synthesis of porous Mo₂C sponge by vapor-phase condensation and in situ carburization of MoO₃ 36
- Thermodynamic properties
 emissivity measurements on aeronautical alloys 482
- Thermodynamics
 applications of an extended Miedema's model for ternary alloys 357
- Thermoelectrics
 thermal expansion and melting temperature of the half-Heusler compounds: MNiSn (M = Ti, Zr, Hf) 328
 thermoelectric properties of molybdenum oxides LnMo₈O₁₄ (Ln = La, Ce, Pr, Nd and Sm) 353
 structural, optical and electrical characterization of chemically deposited CdSe thin films 605
- Thermoelectric materials
 characterization of delafossite-type CuCoO₂ prepared by ion exchange 336
- Thermoluminescence
 characterization and TSL dosimetric properties of Mn doped BaSO₄ phosphor prepared by recrystallisation method 84
- Thin films
 structural and optical properties of epitaxial ZnO thin films on 4H–SiC (0 0 1) substrates prepared by pulsed laser deposition 179
 effect of annealing and O₂ pressure on structural and optical properties of pulsed laser deposited TiO₂ thin films 246
 thin nanocrystalline TiO₂–SnO₂ sprayed films: Influence of the dopant concentration, substrate and thermal treatment on the phase composition and crystallites sizes 257
 growth of non-polar ZnO films on α -GaN/r-Al₂O₃ templates by radio-frequency magnetron sputtering 519
 structural, optical and electrical characterization of chemically deposited CdSe thin films 605
 nanocrystalline LiMn₂O₄ thin film cathode material prepared by polymer spray pyrolysis method for Li-ion battery 674
- Tin flux synthesis
 Sn-flux syntheses, characterizations and bonding analyses of OsB and TiB₂ 339
- Titanium
 microstructure and mechanical properties of diffusion bonded joints between tungsten and F82H steel using a titanium interlayer 545
- Titanium oxide
 effect of annealing and O₂ pressure on structural and optical properties of pulsed laser deposited TiO₂ thin films 246
- TOA
 selective removal of mercury as HgCl₄²⁻ from natural gas well produced water by TOA via HFSLM 72
- Transition metal alloys and compounds
 optimization of Co-content in C14 Laves phase multi-component alloys for NiMH battery application 202
- Transitions metal ions
 the relationship between the g-shift and the local structure for the axial impurity centers in the doped LiNbO₃ crystals 304
- Transmission electron microscopy
 observation of two separate charge density wave transitions in Gd₂Te₅ via transmission electron microscopy and high-resolution X-ray diffraction 332
 microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
 XRD and TEM characterizations of the mechanically alloyed CuIn_{0.5}Ga_{0.5}Se₂ powders 437
 fabrication and optical properties of single-crystalline beta barium borate nanorods 504
- Transparent conducting oxides
 photoluminescence in laser ablated nanostructured indium oxide thin films 215
- Transparent glass–ceramic
 structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ transparent ferroelectric glass–ceramic nanocomposites 281
- Transport mechanism
 the influence of Sm doping in the electron-doped manganites La_{0.9}Te_{0.1}MnO₃ 348
- Tungsten
 microstructure and mechanical properties of diffusion bonded joints between tungsten and F82H steel using a titanium interlayer 545
- Tungsten carbide
 diffusion and solubility of Cr in WC 408
- Ultrathin Cu films
 study of the size effects in the electrical resistivity of ultrathin (<Cu 40 nm) films in the framework of the statistical conduction models 609
- Unidirectional bending
 texture evolution and mechanical properties of AZ31B magnesium alloy sheets processed by repeated unidirectional bending 475
- Up-conversion
 influence of the Nd³⁺ ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO₃, prepared by sol–gel technique 451
- Vanadate
 elastic properties of silver–phospho–vanadate glasses 325
- Vanadium
 the correlation of the results of capacitance mapping and of sheet resistance mapping in semi-insulating 6H–SiC 56
- Vapor deposition
 thermodynamic analysis and synthesis of porous Mo₂C sponge by vapor-phase condensation and in situ carburization of MoO₃ 36
 effect of chamber pressure and hydrogen on the formation of C₃N₄ films deposited on quartz substrates via MPCVD 275

- Vickers microhardness
correlation between microhardness and electronic charge density of hafnium hydrides 685
- Visible light
effect of H₂/CO₂ mixture gas treatment temperature on the activity of LaNiO₃ catalyst for hydrogen production from formaldehyde aqueous solution under visible light L13
- 93W–4.9Ni–2.1Fe
densification behavior of nanocrystalline W–Ni–Fe composite powders prepared by sol-spray drying and hydrogen reduction process 188
- W–Al alloys
characterization and formation mechanism of nanocrystalline W–Al alloy prepared by mechanical alloying 224
- Wear
mechanical and dry sliding wear properties of silicon carbide particulate reinforced aluminium–copper alloy matrix composites produced by direct squeeze casting method 119
- Wetting
wetting behavior of Al alloys on a TiH₂ substrate L1
- Wide range microwave absorption
designed synthesis of wide range microwave absorption Fe₃O₄–carbon sphere composite 252
- X-ray
new dielectric material system of Nd(Mg_{1/2}Ti_{1/2})O₃–CaTiO₃ with V₂O₅ addition for microwave applications 719
- X-ray diffraction
thermoluminescence investigations in X-ray irradiated CaS phosphor 4
magnetic properties and magnetocaloric effect of Nd(Mn_{1–x}Fe_x)₂Ge₂ compounds 13
synthesis, characterization, and property studies of (La, Ag) FeO₃ (0.0 ≤ x ≤ 0.3) perovskites 64
the z value dependence of photoluminescence in Eu²⁺-doped β-SiAlON (Si_{6–z}Al_zO_zN_{8–z}) with 1 ≤ z ≤ 4 157
structural and optical properties of epitaxial ZnO thin films on 4H–SiC (0 0 1) substrates prepared by pulsed laser deposition 179
effects of Ag doping on thermoelectric properties of Zn₄Sb₃ at low temperatures 228
synthesis, characterization and electrical properties of the system LaMn_xFe_{1–x}O₃ 233
thin nanocrystalline TiO₂–SnO₂ sprayed films: Influence of the dopant concentration, substrate and thermal treatment on the phase composition and crystallites sizes 257
effect of chamber pressure and hydrogen on the formation of C₃N₄ films deposited on quartz substrates via MPCVD 275
studies on magnetic, dielectric and magnetoelectric behavior of (x) NiFe_{1.9}Mn_{0.1}O₄ and (1 – x) BaZr_{0.08}Ti_{0.92}O₃ magnetoelectric composites 310
observation of two separate charge density wave transitions in Gd₂Te₅ via transmission electron microscopy and high-resolution X-ray diffraction 332
experimental investigation on the phase equilibria of the Mn–Ni–Zn system at 400 °C 362
the phase relationships in the Gd–Ti–Sn ternary system at 473 K and the new compound GdSn₄Ti₆ 384
microstructure and mechanical properties of ultrafine-grained *fcc/hcp* cobalt processed by a bottom-up approach 424
an experimental study about the influence of well thickness on the electroluminescence of InGaN/GaN multiple quantum wells 461
growth of non-polar ZnO films on *a*-GaN/*r*-Al₂O₃ templates by radio-frequency magnetron sputtering 519
x(Mg_{0.7}Zn_{0.3})_{0.95}Co_{0.05}TiO₃–(1–x)(La_{0.5}Na_{0.5})TiO₃ ceramic at microwave frequency with a near zero temperature coefficient of resonant frequency 541
synthesis and characterization of CaF₂ nanocrystals 592
corrosion behavior of Zr–Cu–Ni–Al bulk metallic glasses in chloride medium 596
structural, optical and electrical characterization of chemically deposited CdSe thin films 605
preparation and characterization of dicesium tetravalent plutonium hexanitrate 659
synthesis, characterization, and electrical studies on Cu-doped K₂Ti₆O₁₃ lead-free ceramics: Role of defect associate dipoles 700
- X-ray diffraction microscopy
oriented growth of ZnO nanostructures on different substrates via a hydrothermal method 51
- XRD
high temperature oxidation characteristics of Nb–10W–XCr alloys 195
influence of the Nd³⁺ ions content on the FTIR and the visible up-conversion luminescence properties of nano-structure BaTiO₃, prepared by sol-gel technique 451
efficient electrochromic nickel oxide thin films by electrodeposition 667
- Y₂Si₂O₇:Ce
growth and luminescence characteristics of cerium-doped yttrium pyrosilicate single crystal 645
- Yttrium
densification behavior of nanocrystalline W–Ni–Fe composite powders prepared by sol-spray drying and hydrogen reduction process 188
- Zinc oxide
ZnO hierarchical structures synthesized via hydrothermal method and their photoluminescence properties 614
- Zinc titanate
fabrication of zinc titanate nanofibers by electrospinning technique 167
- ZnO
the effect of seed layer on morphology of ZnO nanorod arrays grown by hydrothermal method 99
- ZnO nanoarray
preparation and DSC application of the size-tuned ZnO nanoarrays 694