



## Subject Index of Volume 498

- 7050 Al alloy  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Activation  
heat pretreatment-induced activation of gadolinium surfaces towards the initial precipitation of hydrides 26
- Afterglow  
enhancement of luminescence and afterglow in  $\text{CaTiO}_3:\text{Pr}^{3+}$  by Zr substitution for Ti 152
- $\text{AlAs}_n$  cluster  
the structure and energetic of  $\text{AlAs}_n$  ( $n = 1-15$ ) clusters: A first-principles study 121
- Annealing  
influence of annealing time on microstructure of one-dimensional  $\text{Ga}_2\text{O}_3$  nanorods 77  
effect of grain size on magnetic and nanomechanical properties of  $\text{Co}_{60}\text{Fe}_{20}\text{B}_{20}$  thin films 113
- Ball milling  
structural and magnetic properties of  $\text{BaFe}_{12-2x}\text{Ti}_x\text{Ru}_x\text{O}_{19}$  157
- Barium hexaferrite  
structural and magnetic properties of  $\text{BaFe}_{12-2x}\text{Ti}_x\text{Ru}_x\text{O}_{19}$  157
- $\text{BaTiO}_3\text{-Bi}_{0.5}\text{Li}_{0.5}\text{TiO}_3$   
positive temperature coefficient of resistivity behavior of Niobium-doped  $(1-x)\text{BaTiO}_3\text{-xBi}_{0.5}\text{Li}_{0.5}\text{TiO}_3$  ceramics L5
- $\text{Ba}_{3-x}\text{Sr}_x(\text{VO}_4)_2$   
crystal chemistry, Rietveld refinements and Raman spectroscopy studies of the new solid solution series:  $\text{Ba}_{3-x}\text{Sr}_x(\text{VO}_4)_2$  ( $0 \leq x \leq 3$ ) 42
- $\beta\text{-Ga}_2\text{O}_3$   
influence of annealing time on microstructure of one-dimensional  $\text{Ga}_2\text{O}_3$  nanorods 77
- $\text{Bi}_2\text{O}_3$   
synthesis, characterization, and activities of visible light-driven  $\text{Bi}_2\text{O}_3\text{-TiO}_2$  composite photocatalysts 179
- Bioactivity  
preparation and *in vitro* evaluation of nanostructured  $\text{TiO}_2/\text{TCP}$  composite coating by plasma electrolytic oxidation 172
- Bismuth  
microwave synthesis of bismuth nanospheres using bismuth citrate as a precursor L8
- Bismuth citrate  
microwave synthesis of bismuth nanospheres using bismuth citrate as a precursor L8
- Blu-ray disc  
development of low-to-high Blu-ray recordable (BDR) disc 207
- $\text{Ca}_3\text{Co}_2\text{O}_6$   
synthesis of fine particles of a geometrically frustrated spin-chain system  $\text{Ca}_3\text{Co}_2\text{O}_6$  through a pyrophoric route and its magnetic behavior 1
- CALPHAD technique  
thermodynamic description of the Cr–Sn–Ti system 130
- $\text{CaO-B}_2\text{O}_3\text{-SiO}_2$   
densification and microwave dielectric behaviors of  $\text{CaO-B}_2\text{O}_3\text{-SiO}_2$  glass-ceramics prepared from a binary glass composite 211
- $\text{CaTiO}_3:\text{Pr}^{3+}$   
enhancement of luminescence and afterglow in  $\text{CaTiO}_3:\text{Pr}^{3+}$  by Zr substitution for Ti 152
- Ceramics  
variations in an oleic acid and metal nitrate emulsion under calcination on the structural and morphology of  $\text{LaAlO}_3$  nanopowders L1  
kinking nonlinear elastic deformation of  $\text{Ti}_3\text{AlC}_2$ ,  $\text{Ti}_2\text{AlC}$ ,  $\text{Ti}_3\text{Al}(\text{C}_{0.5}\text{N}_{0.5})_2$  and  $\text{Ti}_2\text{Al}(\text{C}_{0.5}\text{N}_{0.5})$  62  
phase formation and properties of the LTCC composite based on the eutectic system  $\text{BaO-ZnO-SiO}_2\text{-B}_2\text{O}_3$  185
- Characterization  
synthesis of nanocrystalline  $\text{Ni}_3\text{Al}$  by mechanical alloying and its microstructural characterization 107
- Chemical synthesis  
variations in an oleic acid and metal nitrate emulsion under calcination on the structural and morphology of  $\text{LaAlO}_3$  nanopowders L1  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52  
effect of nickel on the electrical properties of nanostructured MnZn ferrite 203
- Coating  
preparation and *in vitro* evaluation of nanostructured  $\text{TiO}_2/\text{TCP}$  composite coating by plasma electrolytic oxidation 172
- Coercive field  
structural and magnetic properties of  $\text{BaFe}_{12-2x}\text{Ti}_x\text{Ru}_x\text{O}_{19}$  157
- Composite photocatalysts  
synthesis, characterization, and activities of visible light-driven  $\text{Bi}_2\text{O}_3\text{-TiO}_2$  composite photocatalysts 179
- Computer simulations  
temperature dependent elastic coefficients of  $\text{Mg}_2\text{X}$  ( $\text{X} = \text{Si, Ge, Sn, Pb}$ ) compounds from first-principles calculations 191
- Corrosion  
corrosion behaviours of high Cr–Ni cast steels in the HCl solution 143
- $\text{Cr}_3\text{Si}$   
 $\text{cr}_3\text{Si}$  doped by Co studied by muon spin relaxation and scanning electron microscopy techniques 5
- Cr–Sn–Ti system  
thermodynamic description of the Cr–Sn–Ti system 130
- Crystal growth  
optical properties of  $\text{TlGa}_x\text{In}_{1-x}\text{S}_2$  layered mixed crystals ( $0 \leq x \leq 1$ ) I. Composition- and temperature-tuned energy band gap 148
- Crystal structure  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52

- Crystallization kinetics  
composition and crystallization kinetics of  $R_2O-Al_2O_3-SiO_2$  glass-ceramics 162
- Cu-Ni alloys  
correlation between the temperature dependence of yield stress and the nature of solute distribution in Cu-Ni solid solutions 102
- Cu-Si ferrites  
the conduction mechanism of Cu-Si ferrite 19
- Deformability  
microstructure, mechanical properties, hot deformation and oxidation behavior of Ti-45Al-5.4V-3.6Nb-0.3Y alloy 95
- Density-functional theory  
the structure and energetic of  $AlA_n$  ( $n = 1-15$ ) clusters: A first-principles study 121
- Desorption  
heat pretreatment-induced activation of gadolinium surfaces towards the initial precipitation of hydrides 26
- Dielectric property  
phase formation and properties of the LTCC composite based on the eutectic system BaO-ZnO-SiO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub> 185
- Dielectric response  
effect of nickel on the electrical properties of nanostructured MnZn ferrite 203
- DSC  
composition and crystallization kinetics of  $R_2O-Al_2O_3-SiO_2$  glass-ceramics 162
- Elasticity  
kinking nonlinear elastic deformation of Ti<sub>3</sub>AlC<sub>2</sub>, Ti<sub>2</sub>AlC, Ti<sub>3</sub>Al(C<sub>0.5</sub>N<sub>0.5</sub>)<sub>2</sub> and Ti<sub>2</sub>Al(C<sub>0.5</sub>N<sub>0.5</sub>)<sub>2</sub> 62  
temperature dependent elastic coefficients of Mg<sub>2</sub>X (X = Si, Ge, Sn, Pb) compounds from first-principles calculations 191
- Electrical conductivity  
the conduction mechanism of Cu-Si ferrite 19
- Electrical properties  
preparation and characterization of silver nanoparticles within silicate glass ceramics via modification of ion exchange process 71
- Electrical property  
positive temperature coefficient of resistivity behavior of Niobium-doped (1-x)BaTiO<sub>3</sub>-xBi<sub>0.5</sub>Li<sub>0.5</sub>TiO<sub>3</sub> ceramics L5
- Electrochemical reactions  
structural and electrochemical characteristics of Mg<sub>(55-x)</sub>Ti<sub>x</sub>Ni<sub>(45-y)</sub>Pt<sub>y</sub> metal hydride electrodes 57
- Electron microscopy (TEM and SEM)  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52
- Eu<sup>3+</sup>-doped SnO<sub>2</sub>  
preparation and optical properties of Eu<sup>3+</sup>-doped tin oxide nanoparticles 81
- Ferrites  
the conduction mechanism of Cu-Si ferrite 19
- Gadolinium  
heat pretreatment-induced activation of gadolinium surfaces towards the initial precipitation of hydrides 26
- Glass ceramics  
preparation and characterization of silver nanoparticles within silicate glass ceramics via modification of ion exchange process 71  
composition and crystallization kinetics of  $R_2O-Al_2O_3-SiO_2$  glass-ceramics 162  
densification and microwave dielectric behaviors of CaO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> glass-ceramics prepared from a binary glass composite 211
- Grain size effect  
effect of grain size on magnetic and nanomechanical properties of Co<sub>60</sub>Fe<sub>20</sub>B<sub>20</sub> thin films 113
- Heat treatment  
corrosion behaviours of high Cr-Ni cast steels in the HCl solution 143
- High alloy steel  
corrosion behaviours of high Cr-Ni cast steels in the HCl solution 143
- Hopkinson peak  
structural and magnetic properties of BaFe<sub>12-2x</sub>Ti<sub>x</sub>Ru<sub>x</sub>O<sub>19</sub> 157
- Hydride  
heat pretreatment-induced activation of gadolinium surfaces towards the initial precipitation of hydrides 26
- Hydrogen storage  
hydrogen adsorption in metal-doped highly ordered mesoporous carbon molecular sieve 168
- Hyperfine parameters  
structural and magnetic properties of BaFe<sub>12-2x</sub>Ti<sub>x</sub>Ru<sub>x</sub>O<sub>19</sub> 157
- Intermetallic  
synthesis of nanocrystalline Ni<sub>3</sub>Al by mechanical alloying and its microstructural characterization 107
- Ion exchange  
preparation and characterization of silver nanoparticles within silicate glass ceramics via modification of ion exchange process 71
- Jitter  
development of low-to-high Blu-ray recordable (BDR) disc 207
- Lead free  
positive temperature coefficient of resistivity behavior of Niobium-doped (1-x)BaTiO<sub>3</sub>-xBi<sub>0.5</sub>Li<sub>0.5</sub>TiO<sub>3</sub> ceramics L5
- Light absorption and reflection  
optical properties of TlGa<sub>x</sub>In<sub>1-x</sub>S<sub>2</sub> layered mixed crystals (0 ≤ x ≤ 1) I. Composition- and temperature-tuned energy band gap 148
- LTCC  
densification and microwave dielectric behaviors of CaO-B<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> glass-ceramics prepared from a binary glass composite 211
- Luminescence  
enhancement of luminescence and afterglow in CaTiO<sub>3</sub>:Pr<sup>3+</sup> by Zr substitution for Ti 152  
temperature-dependent photoluminescence studies on Y<sub>2.93-x</sub>Ln<sub>x</sub>Al<sub>5</sub>O<sub>12</sub>:Ce<sub>0.07</sub> (Ln = Gd, La) phosphors for white LEDs application 199
- Magnetic tunneling junctions (MTJs)  
effect of grain size on magnetic and nanomechanical properties of Co<sub>60</sub>Fe<sub>20</sub>B<sub>20</sub> thin films 113
- Magnetically ordered materials  
the magnetic ordering in the Ho<sub>6</sub>FeTe<sub>2</sub> compound 13
- Magnetization  
synthesis of fine particles of a geometrically frustrated spin-chain system Ca<sub>3</sub>Co<sub>2</sub>O<sub>6</sub> through a pyrophoric route and its magnetic behavior 1  
structural and magnetic properties of BaFe<sub>12-2x</sub>Ti<sub>x</sub>Ru<sub>x</sub>O<sub>19</sub> 157
- Magnetocaloric  
magnetocaloric effect in terbium diboride 118
- Magnetron sputtering  
influence of annealing time on microstructure of one-dimensional Ga<sub>2</sub>O<sub>3</sub> nanorods 77
- Mechanical alloying  
structural and electrochemical characteristics of Mg<sub>(55-x)</sub>Ti<sub>x</sub>Ni<sub>(45-y)</sub>Pt<sub>y</sub> metal hydride electrodes 57  
synthesis of nanocrystalline Ni<sub>3</sub>Al by mechanical alloying and its microstructural characterization 107
- Mechanical properties  
the effects of additive elements on the microstructure characteristics and mechanical properties of Cr-Fe-C hard-facing alloys 30
- Mesoporous carbon  
hydrogen adsorption in metal-doped highly ordered mesoporous carbon molecular sieve 168

- Metal**  
hydrogen adsorption in metal-doped highly ordered mesoporous carbon molecular sieve 168
- Metal hydrides**  
structural and electrochemical characteristics of  $Mg_{(55-x)}Ti_xNi_{(45-y)}Pt_y$  metal hydride electrodes 57
- Metals and alloys**  
 $cr_3Si$  doped by Co studied by muon spin relaxation and scanning electron microscopy techniques 5  
the effects of additive elements on the microstructure characteristics and mechanical properties of Cr-Fe-C hard-facing alloys 30  
temperature dependent elastic coefficients of  $Mg_2X$  ( $X = Si, Ge, Sn, Pb$ ) compounds from first-principles calculations 191
- Microstructure**  
the effects of additive elements on the microstructure characteristics and mechanical properties of Cr-Fe-C hard-facing alloys 30  
variations in an oleic acid and metal nitrate emulsion under calcination on the structural and morphology of  $LaAlO_3$  nanopowders L1  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Microstructure and properties**  
microstructure, mechanical properties, hot deformation and oxidation behavior of Ti-45Al-5.4V-3.6Nb-0.3Y alloy 95
- Microwave properties**  
densification and microwave dielectric behaviors of  $CaO-B_2O_3-SiO_2$  glass-ceramics prepared from a binary glass composite 211
- Microwave synthesis**  
microwave synthesis of bismuth nanospheres using bismuth citrate as a precursor L8
- Modeling**  
kinking nonlinear elastic deformation of  $Ti_3AlC_2$ ,  $Ti_2AlC$ ,  $Ti_3Al(C_{0.5}N_{0.5})_2$  and  $Ti_2Al(C_{0.5}N_{0.5})$  62
- Muon spectroscopies**  
 $cr_3Si$  doped by Co studied by muon spin relaxation and scanning electron microscopy techniques 5
- Nanocrystalline**  
synthesis of nanocrystalline  $Ni_3Al$  by mechanical alloying and its microstructural characterization 107
- Nanofabrication**  
high-density  $NiTiO_3/TiO_2$  nanotubes synthesized through sol-gel method using well-ordered  $TiO_2$  membranes as template 37
- Nano-indentation**  
effect of grain size on magnetic and nanomechanical properties of  $Co_{60}Fe_{20}B_{20}$  thin films 113
- Nanoparticles**  
preparation and characterization of silver nanoparticles within silicate glass ceramics via modification of ion exchange process 71  
preparation and optical properties of  $Eu^{3+}$ -doped tin oxide nanoparticles 81
- Nanorods**  
influence of annealing time on microstructure of one-dimensional  $Ga_2O_3$  nanorods 77
- Nanospheres**  
microwave synthesis of bismuth nanospheres using bismuth citrate as a precursor L8
- Nanostructured**  
preparation and *in vitro* evaluation of nanostructured  $TiO_2/TCP$  composite coating by plasma electrolytic oxidation 172
- Nanostructured materials**  
structural and electrochemical characteristics of  $Mg_{(55-x)}Ti_xNi_{(45-y)}Pt_y$  metal hydride electrodes 57  
effect of nickel on the electrical properties of nanostructured MnZn ferrite 203
- Nanotube**  
high-density  $NiTiO_3/TiO_2$  nanotubes synthesized through sol-gel method using well-ordered  $TiO_2$  membranes as template 37
- Nature of solute distribution**  
correlation between the temperature dependence of yield stress and the nature of solute distribution in Cu-Ni solid solutions 102
- Neutron diffraction**  
the magnetic ordering in the  $Ho_6FeTe_2$  compound 13
- $Ni_3Al$**   
synthesis of nanocrystalline  $Ni_3Al$  by mechanical alloying and its microstructural characterization 107
- $NiTiO_3$**   
high-density  $NiTiO_3/TiO_2$  nanotubes synthesized through sol-gel method using well-ordered  $TiO_2$  membranes as template 37
- Nitride material**  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52
- Optical properties**  
optical properties of  $TiGa_xIn_{1-x}S_2$  layered mixed crystals ( $0 \leq x \leq 1$ ) I. Composition- and temperature-tuned energy band gap 148
- Optical recording**  
development of low-to-high Blu-ray recordable (BDR) disc 207
- Orthovanadates**  
crystal chemistry, Rietveld refinements and Raman spectroscopy studies of the new solid solution series:  $Ba_{3-x}Sr_x(VO_4)_2$  ( $0 \leq x \leq 3$ ) 42
- Oxidation**  
microstructure, mechanical properties, hot deformation and oxidation behavior of Ti-45Al-5.4V-3.6Nb-0.3Y alloy 95
- Photocatalytic degradation**  
synthesis, characterization, and activities of visible light-driven  $Bi_2O_3-TiO_2$  composite photocatalysts 179
- Photoluminescence**  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52
- Plasma electrolytic oxidation**  
preparation and *in vitro* evaluation of nanostructured  $TiO_2/TCP$  composite coating by plasma electrolytic oxidation 172
- Powder metallurgy**  
the effects of additive elements on the microstructure characteristics and mechanical properties of Cr-Fe-C hard-facing alloys 30
- PTCR behavior**  
positive temperature coefficient of resistivity behavior of Niobium-doped  $(1-x)BaTiO_3-xBi_{0.5}Li_{0.5}TiO_3$  ceramics L5
- Pyrophoric route**  
synthesis of fine particles of a geometrically frustrated spin-chain system  $Ca_3Co_2O_6$  through a pyrophoric route and its magnetic behavior 1
- Raman spectroscopy**  
crystal chemistry, Rietveld refinements and Raman spectroscopy studies of the new solid solution series:  $Ba_{3-x}Sr_x(VO_4)_2$  ( $0 \leq x \leq 3$ ) 42
- Rare earth alloys and compounds**  
magnetocaloric effect in terbium diboride 118
- Rare earth intermetallics**  
the magnetic ordering in the  $Ho_6FeTe_2$  compound 13
- Recrystallization**  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Rietveld refinements**  
crystal chemistry, Rietveld refinements and Raman spectroscopy studies of the new solid solution series:  $Ba_{3-x}Sr_x(VO_4)_2$  ( $0 \leq x \leq 3$ ) 42
- $R_2O-Al_2O_3-SiO_2$**   
composition and crystallization kinetics of  $R_2O-Al_2O_3-SiO_2$  glass-ceramics 162
- Rolling**  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Room temperature photoluminescence**  
preparation and optical properties of  $Eu^{3+}$ -doped tin oxide nanoparticles 81

- SbInSn  
development of low-to-high Blu-ray recordable (BDR) disc 207
- Scanning electron microscopy  
 $\text{cr}_3\text{Si}$  doped by Co studied by muon spin relaxation and scanning electron microscopy techniques 5
- SEM  
phase formation and properties of the LTCC composite based on the eutectic system  $\text{BaO-ZnO-SiO}_2\text{-B}_2\text{O}_3$  185
- Semiconductors  
optical properties of  $\text{TlGa}_x\text{In}_{1-x}\text{S}_2$  layered mixed crystals ( $0 \leq x \leq 1$ ) I. Composition- and temperature-tuned energy band gap 148
- Silver metal  
preparation and characterization of silver nanoparticles within silicate glass ceramics via modification of ion exchange process 71
- Sintering  
phase formation and properties of the LTCC composite based on the eutectic system  $\text{BaO-ZnO-SiO}_2\text{-B}_2\text{O}_3$  185
- Sol-gel process  
high-density  $\text{NiTiO}_3/\text{TiO}_2$  nanotubes synthesized through sol-gel method using well-ordered  $\text{TiO}_2$  membranes as template 37
- Solid solution  
kinking nonlinear elastic deformation of  $\text{Ti}_3\text{AlC}_2$ ,  $\text{Ti}_2\text{AlC}$ ,  $\text{Ti}_3\text{Al}(\text{C}_{0.5}\text{N}_{0.5})_2$  and  $\text{Ti}_2\text{Al}(\text{C}_{0.5}\text{N}_{0.5})$  62
- Solution  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Stability  
the structure and energetic of  $\text{AlAs}_n$  ( $n = 1-15$ ) clusters: A first-principles study 121
- Surface modification  
hydrogen adsorption in metal-doped highly ordered mesoporous carbon molecular sieve 168
- Surfactant-mediated method  
preparation and optical properties of  $\text{Eu}^{3+}$ -doped tin oxide nanoparticles 81
- Temperature dependence  
correlation between the temperature dependence of yield stress and the nature of solute distribution in Cu-Ni solid solutions 102
- Texture  
evolution of microstructures and textures of 7050 Al alloy hot-rolled plate during staged solution heat-treatments 88
- Thermal expansion  
phase formation and properties of the LTCC composite based on the eutectic system  $\text{BaO-ZnO-SiO}_2\text{-B}_2\text{O}_3$  185
- Thermal quenching  
temperature-dependent photoluminescence studies on  $\text{Y}_{2.93-x}\text{Ln}_x\text{Al}_5\text{O}_{12}:\text{Ce}_{0.07}$  ( $\text{Ln} = \text{Gd, La}$ ) phosphors for white LEDs application 199
- Thermodynamic modeling  
thermodynamic description of the Cr-Sn-Ti system 130
- Thermodynamic properties  
thermodynamic description of the Cr-Sn-Ti system 130
- TiAl alloy  
microstructure, mechanical properties, hot deformation and oxidation behavior of Ti-45Al-5.4V-3.6Nb-0.3Y alloy 95
- $\text{TiO}_2$   
high-density  $\text{NiTiO}_3/\text{TiO}_2$  nanotubes synthesized through sol-gel method using well-ordered  $\text{TiO}_2$  membranes as template 37  
synthesis, characterization, and activities of visible light-driven  $\text{Bi}_2\text{O}_3\text{-TiO}_2$  composite photocatalysts 179
- $\text{TiO}_2/\text{TCP}$   
preparation and *in vitro* evaluation of nanostructured  $\text{TiO}_2/\text{TCP}$  composite coating by plasma electrolytic oxidation 172
- Transmission electron microscopy  
variations in an oleic acid and metal nitrate emulsion under calcination on the structural and morphology of  $\text{LaAlO}_3$  nanopowders L1
- Urea  
microwave synthesis of bismuth nanospheres using bismuth citrate as a precursor L8
- White LEDs  
a new single-host white-light-emitting  $\text{BaSrMg}(\text{PO}_4)_2$ :  $\text{Eu}^{2+}$  phosphor for white-light-emitting diodes 139  
temperature-dependent photoluminescence studies on  $\text{Y}_{2.93-x}\text{Ln}_x\text{Al}_5\text{O}_{12}:\text{Ce}_{0.07}$  ( $\text{Ln} = \text{Gd, La}$ ) phosphors for white LEDs application 199
- White-light-emitting phosphor  
a new single-host white-light-emitting  $\text{BaSrMg}(\text{PO}_4)_2$ :  $\text{Eu}^{2+}$  phosphor for white-light-emitting diodes 139
- Write strategy  
development of low-to-high Blu-ray recordable (BDR) disc 207
- X-ray diffraction  
variations in an oleic acid and metal nitrate emulsion under calcination on the structural and morphology of  $\text{LaAlO}_3$  nanopowders L1  
 $\text{cr}_3\text{Si}$  doped by Co studied by muon spin relaxation and scanning electron microscopy techniques 5  
crystal chemistry, Rietveld refinements and Raman spectroscopy studies of the new solid solution series:  $\text{Ba}_{3-x}\text{Sr}_x(\text{VO}_4)_2$  ( $0 \leq x \leq 3$ ) 42  
phase formation and properties of the LTCC composite based on the eutectic system  $\text{BaO-ZnO-SiO}_2\text{-B}_2\text{O}_3$  185  
effect of nickel on the electrical properties of nanostructured MnZn ferrite 203
- X-ray diffraction (XRD)  
synthesis and characterization of nanocrystalline gallium nitride by nitridation of Ga-EDTA complex 52
- YAG: $\text{Ce}^{3+}$  phosphor  
temperature-dependent photoluminescence studies on  $\text{Y}_{2.93-x}\text{Ln}_x\text{Al}_5\text{O}_{12}:\text{Ce}_{0.07}$  ( $\text{Ln} = \text{Gd, La}$ ) phosphors for white LEDs application 199
- Yield stress  
correlation between the temperature dependence of yield stress and the nature of solute distribution in Cu-Ni solid solutions 102