

Subject Index of Volume 388

- Ab initio calculation
ab initio interionic potentials for CaO by multiple lattice inversion 195
- AB₅-type hydrogen storage alloy
effects of substituting Co with Fe on the microstructures and electrochemical characteristics of the as-cast and quenched Mm(NiMn-SiAl)_{4.3}Co_{0.6-x}Fe_x ($x = 0-0.6$) electrode alloys 284
- AgGaS₂
temperature-dependent absorption edge in AgGaS₂ compound semiconductor 190
- Alloys
EPMA analysis of calcium-rich compounds in near eutectic Al-Si alloys 83
effect of Zr additions on the electrode characteristics of nanocrystalline TiNi-type hydrogen storage alloys 303
- Amorphisation
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
- Amorphous
pressure dependence of hydrogen-induced transformations in C15 Laves phase DyFe₂ studied by pressure differential scanning calorimetry 49
- Amorphous materials
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
formation and magnetic properties of the RE-based compounds of type RE₆Fe_{13-x}Al_{1+x} (RE = Pr, Sm, Gd) 104
- Amorphous structure
microstructural characterisation of Fe-Cr-P-C powder mixture prepared by ball milling 41
- As-cast and rapidly quenched
effects of substituting Co with Fe on the microstructures and electrochemical characteristics of the as-cast and quenched Mm(NiMn-SiAl)_{4.3}Co_{0.6-x}Fe_x ($x = 0-0.6$) electrode alloys 284
- β -BaCu₂S₂
thermoelectric properties of β -BaCu₂S₂ 122
- Bulk metallic glass
effects of high pressure on the nucleation of Cu₆₀Zr₂₀Hf₁₀Ti₁₀ bulk metallic glass 262
- C15 Laves compound
pressure dependence of hydrogen-induced transformations in C15 Laves phase DyFe₂ studied by pressure differential scanning calorimetry 49
- CaCO₂
magnetic states of MgCO₂ and CaCO₂ with the cubic and hexagonal Laves phase structures 15
- Calcium oxide
ab initio interionic potentials for CaO by multiple lattice inversion 195
- Casting
EPMA analysis of calcium-rich compounds in near eutectic Al-Si alloys 83
- Chalcogenides
crystal structures of the compounds YCuS₂, Y₃CuSnS₇ and YCuPbS₃ 59
- crystal structures of the R₃CuSnSe₇ (R = La, Ce, Pr, Nd, Sm, Gd, Tb and Dy) compounds 274
- Chemical synthesis
pressure and temperature effect on the electrical resistivity of Nd_{0.94}Ca_{0.06}Ba₂Cu₃O_{7- δ} 221
- Co substitution
magnetostriction of $\langle 110 \rangle$ oriented crystals in Tb_{0.36}Dy_{0.64}(Fe_{1-x}Co_x)₂ ($x = 0-0.30$) alloys 34
- CoAl
preparation of CoAl intermetallic compound by combustion synthesis in self-propagating mode 241
- CoCrPtNb media
effect of Nb content on the microstructure and magnetic properties of CoCrPtNb/CrTi/C thin films 293
- Coercivity
formation and magnetic properties of the RE-based compounds of type RE₆Fe_{13-x}Al_{1+x} (RE = Pr, Sm, Gd) 104
- Copper
thermochemistry of some binary alloys of copper with the lanthanide metals by high-temperature direct synthesis calorimetry 91
- Corrosion
corrosion characteristics of zirconium alloy with a high temperature preformed oxide film 279
- Crystal growth
antiferromagnetic order in Ce₃Ni_{2+x}Si_{8-x} ($x \approx 1$) 28
magnetostriction of $\langle 110 \rangle$ oriented crystals in Tb_{0.36}Dy_{0.64}(Fe_{1-x}Co_x)₂ ($x = 0-0.30$) alloys 34
- Crystal structure
synthesis and crystal structure of a new neodymium(III) selenate-selenite: Nd₂(SeO₄)(SeO₃)₂(H₂O)₂ 23
antiferromagnetic order in Ce₃Ni_{2+x}Si_{8-x} ($x \approx 1$) 28
crystal structures of the compounds YCuS₂, Y₃CuSnS₇ and YCuPbS₃ 59
crystal structures of the R₃CuSnSe₇ (R = La, Ce, Pr, Nd, Sm, Gd, Tb and Dy) compounds 274
- Crystal structure and symmetry
electronic structure and thermoelectric power of cerium compounds at high pressure 215
hydrothermal synthesis and structures of the homoleptic iodate complexes [M(IO₃)₆]²⁻ (M = Mo, Zr) 225
- Crystal-fields and spin Hamiltonian
theoretical investigations of the g factors and the local structure for the trigonal Zr³⁺ center in X-ray irradiated YSZ 168
- Cu compounds
crystal structures of the compounds YCuS₂, Y₃CuSnS₇ and YCuPbS₃ 59
crystal structures of the R₃CuSnSe₇ (R = La, Ce, Pr, Nd, Sm, Gd, Tb and Dy) compounds 274
- Cu-Fe
deformation processing and strength/conductivity properties of Cu-Fe-Ag microcomposites 69
- Cyclic stability
investigation on the characteristics of La_{0.7}Mg_{0.3}Ni_{2.65}Mn_{0.1}Co_{0.75+x} ($x = 0.00-0.85$) metal hydride electrode alloys for Ni/MH batteries. Part II: Electrochemical performances 109

- Defect structure
theoretical investigations of the g factors and the local structure for the trigonal Zr^{3+} center in X-ray irradiated YSZ 168
- Deformation processing
deformation processing and strength/conductivity properties of Cu–Fe–Ag microcomposites 69
- Dehydrodring kinetics
direct hydriding of $Mg_{87}Al_7Ni_3Mn_3$ by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydrodring reaction 98
- Delafossite
electronic and structural properties of $CuMO_2$ ($M = Al, Ga, In$) 19
- Delta phase
formation and magnetic properties of the RE-based compounds of type $RE_6Fe_{13-x}Al_{1+x}$ ($RE = Pr, Sm, Gd$) 104
- Dielectric phenomena
characterisation of oxidised gadolinium film deposited on Si (1 0 0) substrate 177
- Disordered systems
electrical and magnetic properties of $NdTiO_{3+\delta}$ 153
- Dissolution
dissolution of electroless Ni metallization by lead-free solder alloys 75
- DTA
the influence of thermal treatment on the phase development in HfO_2 – Al_2O_3 and ZrO_2 – Al_2O_3 systems 126
- Elasticity
optimization of hot-press conditions of Zn_4Sb_3 for high thermoelectric performance. II. Mechanical properties 118
- Electrical conductivity
deformation processing and strength/conductivity properties of Cu–Fe–Ag microcomposites 69
- Electrical property
metal–insulator transition and large thermoelectric power of a layered palladium oxide: $PbPdO_2$ 1
- Electrical transport
thermoelectric properties of β - $BaCu_2S_2$ 122
- Electrochemical characteristics
effects of substituting Co with Fe on the microstructures and electrochemical characteristics of the as-cast and quenched $Mm(NiMn-SiAl)_{4.3}Co_{0.6-x}Fe_x$ ($x = 0-0.6$) electrode alloys 284
- Electrochemical kinetics
investigation on the characteristics of $La_{0.7}Mg_{0.3}Ni_{2.65}Mn_{0.1}Co_{0.75+x}$ ($x = 0.00-0.85$) metal hydride electrode alloys for Ni/MH batteries. Part II: Electrochemical performances 109
- Electrochemical properties
study of the high temperature characteristics of hydrogen storage alloys 138
effect of Zr additions on the electrode characteristics of nanocrystalline TiNi-type hydrogen storage alloys 303
- Electrochemical reactions
investigation on the characteristics of $La_{0.7}Mg_{0.3}Ni_{2.65}Mn_{0.1}Co_{0.75+x}$ ($x = 0.00-0.85$) metal hydride electrode alloys for Ni/MH batteries. Part II: Electrochemical performances 109
- Electroless Ni
dissolution of electroless Ni metallization by lead-free solder alloys 75
- Electron energy band gap
electronic and structural properties of $CuMO_2$ ($M = Al, Ga, In$) 19
- Electron paramagnetic resonance (EPR)
theoretical investigations of the g factors and the local structure for the trigonal Zr^{3+} center in X-ray irradiated YSZ 168
- Electronic band structure
electronic structure and thermoelectric power of cerium compounds at high pressure 215
- Electronic structure
magnetic states of $MgCo_2$ and $CaCo_2$ with the cubic and hexagonal Laves phase structures 15
- electronic and structural properties of $CuMO_2$ ($M = Al, Ga, In$) 19
- Electronic transport
electrical and magnetic properties of $NdTiO_{3+\delta}$ 153
- Enthalpy
thermochemistry of some binary alloys of copper with the lanthanide metals by high-temperature direct synthesis calorimetry 91
- EPMA
EPMA analysis of calcium-rich compounds in near eutectic Al–Si alloys 83
- Exchange coupling
effect of Nb content on the microstructure and magnetic properties of $CoCrPtNb/CrTi/C$ thin films 293
- Ferromagnetic resonance
magnetic properties and interlayer coupling of sputtered Ni/V multilayers 186
- Fe–Ti–Si alloy
production of Fe–Ti–Si alloys from the ilmenite ore and their magnetic properties 258
- Free volume
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
- Gadolinium oxide
characterisation of oxidised gadolinium film deposited on Si (1 0 0) substrate 177
- Galvanic cell
thermodynamic investigations of the Mn–Ni–C–N quaternary alloys by solid-state galvanic cell technique 250
- Glass substrate
effect of Nb content on the microstructure and magnetic properties of $CoCrPtNb/CrTi/C$ thin films 293
- Glass transition
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
- Hall effect
metal–insulator transition and large thermoelectric power of a layered palladium oxide: $PbPdO_2$ 1
- Hard magnetic materials
a comparative Mössbauer spectral study of the electronic and magnetic properties of $Nd_6Fe_{13}Ag$ and $Nd_6Fe_{13}AgH_{13}$ 159
- Heat capacity
antiferromagnetic order in $Ce_3Ni_{2+x}Si_{8-x}$ ($x \approx 1$) 28
thermoelectric properties of β - $BaCu_2S_2$ 122
- HfO_2 – $AlO_{1.5}$
the influence of thermal treatment on the phase development in HfO_2 – Al_2O_3 and ZrO_2 – Al_2O_3 systems 126
- High pressure
pressure and temperature effect on the electrical resistivity of $Nd_{0.94}Ca_{0.06}Ba_2Cu_3O_{7-\delta}$ 221
effects of high pressure on the nucleation of $Cu_{60}Zr_{20}Hf_{10}Ti_{10}$ bulk metallic glass 262
- High temperature
study of the high temperature characteristics of hydrogen storage alloys 138
corrosion characteristics of zirconium alloy with a high temperature preformed oxide film 279
- High undercooling
martensitic transformation of highly undercooled Ni–Fe–Ga magnetic shape memory alloys 172
- High- T_c superconductors
pressure and temperature effect on the electrical resistivity of $Nd_{0.94}Ca_{0.06}Ba_2Cu_3O_{7-\delta}$ 221
- High-energy ball milling
investigation of room temperature ageing of powdered decagonal Al–Co–Ni 65
structure and thermal stability of ball milled Ti–Al–H powders 266

- Hydriding
 direct hydriding of $\text{Mg}_{87}\text{Al}_7\text{Ni}_3\text{Mn}_3$ by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydriding reaction 98
- Hydrogen absorption
 pressure dependence of hydrogen-induced transformations in C15 Laves phase DyFe_2 studied by pressure differential scanning calorimetry 49
- Hydrogen storage alloy
 study of the high temperature characteristics of hydrogen storage alloys 138
- Hydrogen storage alloys
 investigation on the characteristics of $\text{La}_{0.7}\text{Mg}_{0.3}\text{Ni}_{2.65}\text{Mn}_{0.1}\text{Co}_{0.75+x}$ ($x = 0.00\text{--}0.85$) metal hydride electrode alloys for Ni/MH batteries. Part II: Electrochemical performances 109
- Hydrogen storage materials
 a comparative Mössbauer spectral study of the electronic and magnetic properties of $\text{Nd}_6\text{Fe}_{13}\text{Ag}$ and $\text{Nd}_6\text{Fe}_{13}\text{AgH}_{13}$ 159
- Hydrogenation
 a magnetic and Mössbauer spectral study of $\text{SmFe}_{11}\text{Ti}$, $\text{LuFe}_{11}\text{Ti}$, and their respective hydrides 6
- Hydrogen-induced amorphization
 pressure dependence of hydrogen-induced transformations in C15 Laves phase DyFe_2 studied by pressure differential scanning calorimetry 49
- Hydrothermal synthesis
 synthesis and crystal structure of a new neodymium(III) selenate-selenite: $\text{Nd}_2(\text{SeO}_4)(\text{SeO}_3)_2(\text{H}_2\text{O})_2$ 23
- Hyperfine parameters
 a comparative Mössbauer spectral study of the electronic and magnetic properties of $\text{Nd}_6\text{Fe}_{13}\text{Ag}$ and $\text{Nd}_6\text{Fe}_{13}\text{AgH}_{13}$ 159
- Ilmenite
 production of Fe-Ti-Si alloys from the ilmenite ore and their magnetic properties 258
- Initial sample density
 preparation of CoAl intermetallic compound by combustion synthesis in self-propagating mode 241
- Insulating films
 characterisation of oxidised gadolinium film deposited on Si (1 0 0) substrate 177
- Interatomic potentials
 atomistic investigation on site preference and lattice vibrations of $\text{Sm}(\text{Co},\text{M})_{12}$ ($\text{M} = \text{Cr}, \text{Ti}, \text{V}, \text{Nb}, \text{Fe}$) 208
- Interionic potential
 ab initio interionic potentials for CaO by multiple lattice inversion 195
- Intermetallic
 optimization of hot-press conditions of Zn_4Sb_3 for high thermoelectric performance. II. Mechanical properties 118
- Intermetallic compounds
 dissolution of electroless Ni metallization by lead-free solder alloys 75
 structure and thermal stability of ball milled Ti-Al-H powders 266
- Intermetallics
 preparation of CoAl intermetallic compound by combustion synthesis in self-propagating mode 241
- Interstitial alloys
 thermodynamic investigations of the Mn-Ni-C-N quaternary alloys by solid-state galvanic cell technique 250
- Ion conductivity
 the effects on the structures and properties in the oxide-ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by partial substituting Ba for La 145
- $\text{La}_2\text{Mo}_2\text{O}_9$
 the effects on the structures and properties in the oxide-ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by partial substituting Ba for La 145
- Lanthanide
 thermochemistry of some binary alloys of copper with the lanthanide metals by high-temperature direct synthesis calorimetry 91
- Lattice dynamics
 atomistic investigation on site preference and lattice vibrations of $\text{Sm}(\text{Co},\text{M})_{12}$ ($\text{M} = \text{Cr}, \text{Ti}, \text{V}, \text{Nb}, \text{Fe}$) 208
- Lattice inversion
 ab initio interionic potentials for CaO by multiple lattice inversion 195
- Laves phase structure
 magnetic states of MgCo_2 and CaCo_2 with the cubic and hexagonal Laves phase structures 15
- Lead-free alloys
 dissolution of electroless Ni metallization by lead-free solder alloys 75
- Liquid quenching
 glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
 characterization of the microstructure of gas-atomized Nd-Fe-B alloy particles of non-peritectic chemical compositions 235
- Luminescence
 synthesis and crystal structure of a new neodymium(III) selenate-selenite: $\text{Nd}_2(\text{SeO}_4)(\text{SeO}_3)_2(\text{H}_2\text{O})_2$ 23
- Magnesium alloy
 direct hydriding of $\text{Mg}_{87}\text{Al}_7\text{Ni}_3\text{Mn}_3$ by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydriding reaction 98
- Magnetic anisotropy
 magnetic properties and interlayer coupling of sputtered Ni/V multilayers 186
- Magnetic measurement
 formation and magnetic properties of the RE-based compounds of type $\text{RE}_6\text{Fe}_{13-x}\text{Al}_{1+x}$ ($\text{RE} = \text{Pr}, \text{Sm}, \text{Gd}$) 104
- Magnetic measurements
 a magnetic and Mössbauer spectral study of $\text{SmFe}_{11}\text{Ti}$, $\text{LuFe}_{11}\text{Ti}$, and their respective hydrides 6
 magnetostriction of $\langle 110 \rangle$ oriented crystals in $\text{Tb}_{0.36}\text{Dy}_{0.64}(\text{Fe}_{1-x}\text{Co}_x)_2$ ($x = 0\text{--}0.30$) alloys 34
 electrical and magnetic properties of $\text{NdTiO}_{3+\delta}$ 153
 preparation and properties of yttrium iron garnet microcrystal in $\text{P}_2\text{O}_5\text{--MgO}$ glass 297
- Magnetic properties of nanostructures
 microstructural characterisation of Fe-Cr-P-C powder mixture prepared by ball milling 41
- Magnetic property
 metal-insulator transition and large thermoelectric power of a layered palladium oxide: PbPdO_2 1
- Magnetic shape memory alloy
 martensitic transformation of highly undercooled Ni-Fe-Ga magnetic shape memory alloys 172
- Magnetic state
 magnetic states of MgCo_2 and CaCo_2 with the cubic and hexagonal Laves phase structures 15
- Magnetic structure
 magnetic structure of the TbCu_2In compound L4
- Magnetically ordered materials
 antiferromagnetic order in $\text{Ce}_3\text{Ni}_{2+x}\text{Si}_{8-x}$ ($x \approx 1$) 28
- Magnetization
 magnetic properties and interlayer coupling of sputtered Ni/V multilayers 186
- Magnetostriction
 magnetostriction of $\langle 110 \rangle$ oriented crystals in $\text{Tb}_{0.36}\text{Dy}_{0.64}(\text{Fe}_{1-x}\text{Co}_x)_2$ ($x = 0\text{--}0.30$) alloys 34
- Martensitic transformation
 martensitic transformation of highly undercooled Ni-Fe-Ga magnetic shape memory alloys 172

- Metal-insulator transition
metal-insulator transition and large thermoelectric power of a layered palladium oxide: PbPdO_2 1
- Metals
electronic structure and thermoelectric power of cerium compounds at high pressure 215
characterization of the microstructure of gas-atomized Nd-Fe-B alloy particles of non-peritectic chemical compositions 235
- MgCo_2
magnetic states of MgCo_2 and CaCo_2 with the cubic and hexagonal Laves phase structures 15
- Microstructure
deformation processing and strength/conductivity properties of Cu-Fe-Ag microcomposites 69
EPMA analysis of calcium-rich compounds in near eutectic Al-Si alloys 83
effects of substituting Co with Fe on the microstructures and electrochemical characteristics of the as-cast and quenched $\text{Mm}(\text{NiMnSiAl})_{4.3}\text{Co}_{0.6-x}\text{Fe}_x$ ($x = 0-0.6$) electrode alloys 284
preparation and properties of yttrium iron garnet microcrystal in P_2O_5 -MgO glass 297
- Mössbauer spectroscopy
a magnetic and Mössbauer spectral study of $\text{SmFe}_{11}\text{Ti}$, $\text{LuFe}_{11}\text{Ti}$, and their respective hydrides 6
microstructural characterisation of Fe-Cr-P-C powder mixture prepared by ball milling 41
a comparative Mössbauer spectral study of the electronic and magnetic properties of $\text{Nd}_6\text{Fe}_{13}\text{Ag}$ and $\text{Nd}_6\text{Fe}_{13}\text{AgH}_{13}$ 159
- Nanostructures
effect of Zr additions on the electrode characteristics of nanocrystalline TiNi-type hydrogen storage alloys 303
- Neodymium selenate-selenite
synthesis and crystal structure of a new neodymium(III) selenate-selenite: $\text{Nd}_2(\text{SeO}_4)(\text{SeO}_3)_2(\text{H}_2\text{O})_2$ 23
- Neutron diffraction
magnetic structure of the TbCu_2In compound L4
- Ni/MH batteries
investigation on the characteristics of $\text{La}_{0.7}\text{Mg}_{0.3}\text{Ni}_{2.65}\text{Mn}_{0.1}\text{Co}_{0.75+x}$ ($x = 0.00-0.85$) metal hydride electrode alloys for Ni/MH batteries. Part II: Electrochemical performances 109
- Ni/V multilayers
magnetic properties and interlayer coupling of sputtered Ni/V multilayers 186
- Ni-Fe-Ga
martensitic transformation of highly undercooled Ni-Fe-Ga magnetic shape memory alloys 172
- Nucleation
effects of high pressure on the nucleation of $\text{Cu}_{60}\text{Zr}_{20}\text{Hf}_{10}\text{Ti}_{10}$ bulk metallic glass 262
- Open-framework
synthesis and crystal structure of a new neodymium(III) selenate-selenite: $\text{Nd}_2(\text{SeO}_4)(\text{SeO}_3)_2(\text{H}_2\text{O})_2$ 23
- Optical properties
temperature-dependent absorption edge in AgGaS_2 compound semiconductor 190
- Optical spectroscopy
preparation and properties of yttrium iron garnet microcrystal in P_2O_5 -MgO glass 297
- Ordered phases
high-temperature ordering of structural vacancies in the cobalt-rich portion of the binary system Co-Ge 230
- Oxide materials
preparation and properties of yttrium iron garnet microcrystal in P_2O_5 -MgO glass 297
- Oxide-ion conductors
the effects on the structures and properties in the oxide-ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by partial substituting Ba for La 145
- Pb compounds
crystal structures of the compounds YCuS_2 , Y_3CuSnS_7 and YCuPbS_3 59
- $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$
microstructural characterization of sol-gel derived $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$ ferroelectrics 308
- Powder metallurgy
optimization of hot-press conditions of Zn_4Sb_3 for high thermoelectric performance. II. Mechanical properties 118
thermodynamic investigations of the Mn-Ni-C-N quaternary alloys by solid-state galvanic cell technique 250
- Precipitation
EPMA analysis of calcium-rich compounds in near eutectic Al-Si alloys 83
- Pre-formed oxide
corrosion characteristics of zirconium alloy with a high temperature pre-formed oxide film 279
- Quasicrystals
investigation of room temperature ageing of powdered decagonal Al-Co-Ni 65
- Raman spectroscopy
the influence of thermal treatment on the phase development in HfO_2 - Al_2O_3 and ZrO_2 - Al_2O_3 systems 126
- Rare earth compounds
magnetic structure of the TbCu_2In compound L4
crystal structures of the $\text{R}_3\text{CuSnSe}_7$ ($\text{R} = \text{La, Ce, Pr, Nd, Sm, Gd, Tb and Dy}$) compounds 274
- Rare-earth intermetallic compounds
a magnetic and Mössbauer spectral study of $\text{SmFe}_{11}\text{Ti}$, $\text{LuFe}_{11}\text{Ti}$, and their respective hydrides 6
- Reactive mechanical milling
direct hydriding of $\text{Mg}_{87}\text{Al}_7\text{Ni}_3\text{Mn}_3$ by reactive mechanical milling in hydrogen atmosphere and influence of particle size on the dehydriding reaction 98
- Resistivity
antiferromagnetic order in $\text{Ce}_3\text{Ni}_{2+x}\text{Si}_{8-x}$ ($x \approx 1$) 28
- S compounds
crystal structures of the compounds YCuS_2 , Y_3CuSnS_7 and YCuPbS_3 59
- Scanning electron microscopy
characterization of the microstructure of gas-atomized Nd-Fe-B alloy particles of non-peritectic chemical compositions 235
thermodynamic investigations of the Mn-Ni-C-N quaternary alloys by solid-state galvanic cell technique 250
- SCLC mechanism
characterisation of oxidised gadolinium film deposited on Si (1 0 0) substrate 177
- Se compounds
crystal structures of the $\text{R}_3\text{CuSnSe}_7$ ($\text{R} = \text{La, Ce, Pr, Nd, Sm, Gd, Tb and Dy}$) compounds 274
- SEM
microstructural characterization of sol-gel derived $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$ ferroelectrics 308
- SEM/EDX
the influence of thermal treatment on the phase development in HfO_2 - Al_2O_3 and ZrO_2 - Al_2O_3 systems 126
- Semiconductor
optimization of hot-press conditions of Zn_4Sb_3 for high thermoelectric performance. II. Mechanical properties 118
- Semiconductors
temperature-dependent absorption edge in AgGaS_2 compound semiconductor 190

- SHS
preparation of CoAl intermetallic compound by combustion synthesis in self-propagating mode 241
- Site preference
atomistic investigation on site preference and lattice vibrations of $\text{Sm}(\text{Co},\text{M})_{12}$ ($\text{M} = \text{Cr}, \text{Ti}, \text{V}, \text{Nb}, \text{Fe}$) 208
- Slag materials
production of Fe–Ti–Si alloys from the ilmenite ore and their magnetic properties 258
- Sn compounds
crystal structures of the compounds YCuS_2 , Y_3CuSnS_7 and YCuPbS_3 59
crystal structures of the $\text{R}_3\text{CuSnSe}_7$ ($\text{R} = \text{La}, \text{Ce}, \text{Pr}, \text{Nd}, \text{Sm}, \text{Gd}, \text{Tb}$ and Dy) compounds 274
- Spin-waves
magnetic properties and interlayer coupling of sputtered Ni/V multilayers 186
- Strain
optimization of hot-press conditions of Zn_4Sb_3 for high thermoelectric performance. II. Mechanical properties 118
pressure and temperature effect on the electrical resistivity of $\text{Nd}_{0.94}\text{Ca}_{0.06}\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ 221
- Strength
deformation processing and strength/conductivity properties of Cu–Fe–Ag microcomposites 69
- Structural phase stability
electronic and structural properties of CuMO_2 ($\text{M} = \text{Al}, \text{Ga}, \text{In}$) 19
- Structural phase transition
the effects on the structures and properties in the oxide-ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by partial substituting Ba for La 145
- Structural vacancies
high-temperature ordering of structural vacancies in the cobalt-rich portion of the binary system Co–Ge 230
- Substituting Co with Fe
effects of substituting Co with Fe on the microstructures and electrochemical characteristics of the as-cast and quenched $\text{Mm}(\text{NiMnSiAl})_{4.3}\text{Co}_{0.6-x}\text{Fe}_x$ ($x = 0-0.6$) electrode alloys 284
- Substitution
the effects on the structures and properties in the oxide-ion conductor $\text{La}_2\text{Mo}_2\text{O}_9$ by partial substituting Ba for La 145
- Susceptibility
antiferromagnetic order in $\text{Ce}_3\text{Ni}_{2+x}\text{Si}_{8-x}$ ($x \approx 1$) 28
- Synchrotron radiation
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
- Thermal analysis
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
pressure dependence of hydrogen-induced transformations in C15 Laves phase DyFe_2 studied by pressure differential scanning calorimetry 49
structure and thermal stability of ball milled Ti–Al–H powders 266
- Thermal conductivity
thermoelectric properties of $\beta\text{-BaCu}_2\text{S}_2$ 122
- Thermal expansion
glass transition T_g , thermal expansion, and quenched-in free volume ΔV_f in pyrex glass measured by time-resolved X-ray diffraction L1
- Thermodynamics
thermochemistry of some binary alloys of copper with the lanthanide metals by high-temperature direct synthesis calorimetry 91
thermodynamic investigations of the Mn–Ni–C–N quaternary alloys by solid-state galvanic cell technique 250
- Thermoelectric
thermoelectric properties of $\beta\text{-BaCu}_2\text{S}_2$ 122
- Thermoelectric power
metal–insulator transition and large thermoelectric power of a layered palladium oxide: PbPdO_2 1
- Ti–Al alloys
structure and thermal stability of ball milled Ti–Al–H powders 266
- Transition metal compounds
high-temperature ordering of structural vacancies in the cobalt-rich portion of the binary system Co–Ge 230
- Transparent conducting oxides
electronic and structural properties of CuMO_2 ($\text{M} = \text{Al}, \text{Ga}, \text{In}$) 19
- Valence fluctuations
microstructural characterization of sol–gel derived $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$ ferroelectrics 308
- XPS
microstructural characterization of sol–gel derived $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$ ferroelectrics 308
- X-ray diffraction
magnetostriction of $\langle 110 \rangle$ oriented crystals in $\text{Tb}_{0.36}\text{Dy}_{0.64}(\text{Fe}_{1-x}\text{Co}_x)_2$ ($x = 0-0.30$) alloys 34
investigation of room temperature ageing of powdered decagonal Al–Co–Ni 65
formation and magnetic properties of the RE-based compounds of type $\text{RE}_6\text{Fe}_{13-x}\text{Al}_{1+x}$ ($\text{RE} = \text{Pr}, \text{Sm}, \text{Gd}$) 104
electrical and magnetic properties of $\text{NdTiO}_{3+\delta}$ 153
hydrothermal synthesis and structures of the homoleptic iodate complexes $[\text{M}(\text{IO}_3)_6]^{2-}$ ($\text{M} = \text{Mo}, \text{Zr}$) 225
high-temperature ordering of structural vacancies in the cobalt-rich portion of the binary system Co–Ge 230
preparation of CoAl intermetallic compound by combustion synthesis in self-propagating mode 241
structure and thermal stability of ball milled Ti–Al–H powders 266
- X-ray diffraction analysis
characterization of the microstructure of gas-atomized Nd–Fe–B alloy particles of non-peritectic chemical compositions 235
- X-ray powder diffraction
crystal structures of the compounds YCuS_2 , Y_3CuSnS_7 and YCuPbS_3 59
crystal structures of the $\text{R}_3\text{CuSnSe}_7$ ($\text{R} = \text{La}, \text{Ce}, \text{Pr}, \text{Nd}, \text{Sm}, \text{Gd}, \text{Tb}$ and Dy) compounds 274
microstructural characterization of sol–gel derived $\text{Pb}_{1-x}\text{La}_x\text{TiO}_3$ ferroelectrics 308
- X-ray scattering
pressure and temperature effect on the electrical resistivity of $\text{Nd}_{0.94}\text{Ca}_{0.06}\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$ 221
- XRD
the influence of thermal treatment on the phase development in $\text{HfO}_2\text{-Al}_2\text{O}_3$ and $\text{ZrO}_2\text{-Al}_2\text{O}_3$ systems 126
- Y compounds
crystal structures of the compounds YCuS_2 , Y_3CuSnS_7 and YCuPbS_3 59
- Yttria-stabilized zirconia (YSZ)
theoretical investigations of the g factors and the local structure for the trigonal Zr^{3+} center in X-ray irradiated YSZ 168
- Zircaloy
corrosion characteristics of zirconium alloy with a high temperature preformed oxide film 279
- Zirconium
corrosion characteristics of zirconium alloy with a high temperature preformed oxide film 279
- Zr^{3+}
theoretical investigations of the g factors and the local structure for the trigonal Zr^{3+} center in X-ray irradiated YSZ 168
- $\text{ZrO}_2\text{-AlO}_{1.5}$
the influence of thermal treatment on the phase development in $\text{HfO}_2\text{-Al}_2\text{O}_3$ and $\text{ZrO}_2\text{-Al}_2\text{O}_3$ systems 126