

Subject Index of Volume 188

- Alumina**
 crack growth resistance from natural crack lengths in a polycrystalline alumina, 259
 iron–alumina interface in ceramic matrix nanocomposites, 179
- Aluminate sodalites**
 phase transitions and modulated structures in aluminate sodalites, 21
- Aluminium**
 effects of processing parameters on Al–Li ribbon production, 194
 magnetic measurements of point defect elimination in quenched CoGa and FeAl intermetallic compounds, 246
 three-dimensional defects in Ni₃Al(γ') phase identified by computed imaging, 198
- Anisotropy fields**
 computer simulations of electron paramagnetic resonance spectra of P₂O₅–Li₂WO₄–Li₂O glasses, 161
- Antiferromagnetism**
 crystal structure and magnetic properties of α-Mn(H₂PO₂)₂·H₂O, 133
- Antimony**
 bismuth(III)- and antimony(V)-based ceramics with anion-deficient fluorite structure, 174
- Aurivillius phases**
 crystal chemistry and dielectric properties of the Aurivillius family of complex Bi oxides with perovskite-like layered structures, 27
- Bismuth**
 bismuth(III)- and antimony(V)-based ceramics with anion-deficient fluorite structure, 174
 Na₃Bi(PO₄)₂ type solid solutions; investigation of structural and electrical properties, 206
 synthesis and microstructure of Bi-based mixed metal oxides from organic precursors, 165
- Bismuth oxides**
 crystal chemistry and dielectric properties of the Aurivillius family of complex bismuth oxides with perovskite-like layered structures, 27
- Cadmium**
 localization of Cd in Cd-containing hydroxy- and fluorapatites, 141
- Caesium**
 superprotonic phase transition in Cs_{0.9}(NH₄)_{0.1}HSO₄, 215
- Calcium**
 cell determination of Na₃MgH(PO₄)₂ and the effect of partial substitution of Ca for Mg, 102
 effect of humic compounds and some organic acids on dicalcium phosphate dihydrate crystal growth, 65
 evolution of monocalcium phosphate monohydrate in solution containing humic matter, 138
 influence of crystallite size on surface properties of Ca-deficient hydroxyapatites, 152
- Calorimetry**
 phase transitions in (CH₃NH₃)₃Bi₂Cl₇ studied by calorimetric X-ray diffraction and dielectric methods, 186
- Carbon dioxide**
 characterization of zones resulting from the action of CO₂ laser impacts on dentinal hydroxyapatite, 147
- Catalysis**
 electron optical characterization of supported rhodium catalyst, 182
 synthesis, characterization and catalytic behaviour of Cu_{0.5}M₂(PO₄)₃ (M≡Zr, Sn, Ti), 60
- Ceramics**
 bismuth(III)- and antimony(V)-based ceramics with anion-deficient fluorite structure, 174
 iron–alumina interface in ceramic matrix nanocomposites, 179
 microstructure and thermomechanical behavior of ceramic matrix composites, 49
 nanostructures in sol–gel derived materials: application to elaboration of nanofiltration membranes, 8
 two-dimensional SiC/SiC composites processed according to the isobaric–isothermal chemical vapor infiltration gas phase route, 42
- Chemical vapor infiltration**
 two-dimensional SiC/SiC composites processed according to the isobaric–isothermal chemical vapor infiltration gas phase route, 42
- Computed imaging**
 three-dimensional defects in the Ni₃Al(γ') phase identified by computed imaging, 198
- Copper**
 effect of Cu substitution on electrical transport properties of (Bi,Pb)₂MO₄ (M≡Pd, Pt) linear chain compounds, 211
 Li intercalation in Cu^{II}_{0.5}Ti₂(PO₄)₃, 110
 monovalent Cu in insulators, 36
 phosphates with Nasicon-derived structure: an EXAFS investigation, 107
 synthesis, characterization and catalytic behaviour of Cu_{0.5}M₂(PO₄)₃ (M≡Zr, Sn, Ti), 60
 structure of Cu^I₂CrZr(PO₄)₃ by powder neutron diffraction, 113
 transport properties and magnetic hysteresis of high T_c superconductor EuBa₂(Cu_{1-x}Fe_x)₃O_{7-δ}, 237
- Crystal growth**
 effect of humic compounds and some organic acids added during dicalcium phosphate dihydrate crystal growth, 65
- Czochralski crystals**
 effects of conventional and rapid thermal annealing on minority carrier diffusion length in float zone and Czochralski Si crystals, 221
- Dentine**
 characterisation of zones resulting from the action of CO₂ laser impacts on dentinal hydroxyapatite, 147
- Dichromates**
 diphosphate structures related to the dichromate or thortveitite type, 14

- Electrical transport**
effect of Cu substitution on electrical transport properties of $(\text{Bi,Pb})_2\text{MO}_4$ ($M \equiv \text{Pd, Pt}$) linear chain compound, 211
- Electron irradiation**
evolution of microstructure and mechanical properties of γ/γ' NiAlTi alloys during electron irradiation, 190
- Electron paramagnetic resonance**
computer simulations of electron paramagnetic resonance spectra of $\text{P}_2\text{O}_5\text{-Li}_2\text{WO}_4\text{-Li}_2\text{O}$ glasses, 161
Li intercalation in $\text{Cu}^{\text{II}}_{0.5}\text{Ti}_2(\text{PO}_4)_3$, 110
- Europium**
emission spectra, crystal field calculation of Eu-doped C-type In_2O_3 oxide, 242
 Eu^{3+} luminescence in hexagonal NaYF_4 phase, 250
optical properties of Eu^{3+} activated $\text{Sr}_{10}\text{F}_2(\text{PO}_4)_6$ elaborated by coprecipitation, 82
optical study of Eu-doped garnet $\text{Sr}_3\text{Y}_2\text{Ge}_3\text{O}_{12}$, 75
synthesis, structure and properties of $\text{Eu}_{1/3}\text{Zr}_2(\text{PO}_4)_3$, 117
transport properties, magnetic hysteresis of high T_c superconductor $\text{EuBa}_2(\text{Cu}_{1-x}\text{Fe}_x)_3\text{O}_{7-8}$, 237
- EXAFS**
phosphates with Nasicon-derived structure: an EXAFS investigation, 107
structure of $\text{Cu}^{\text{I}}_2\text{CrZr}(\text{PO}_4)_3$ by powder neutron diffraction, 113
- Fluorapatites**
localization of Cd in Cd-containing hydroxy- and fluorapatites, 141
- Fluorides**
role of inductive effect in solid state chemistry in modification of structural and physical properties of materials, 1
- Fracture**
crack growth resistance from natural crack lengths in a polycrystalline alumina, 259
- Gallium**
magnetic measurements of point defect elimination in quenched CoGa and FeAl intermetallic compounds, 246
- Garnet**
optical study of Eu-doped garnet $\text{Sr}_3\text{Y}_2\text{Ge}_3\text{O}_{12}$, 75
- Glaserite**
cell determination of $\text{Na}_3\text{MgH}(\text{PO}_4)_2$ and effect of partial substitution of Ca for Mg, 102
- Glasses**
 ^{31}P and ^{11}B NMR of borophosphate glasses: correlations between structure and chemical and physical properties, 157
computer simulations of electron paramagnetic resonance spectra of $\text{P}_2\text{O}_5\text{-Li}_2\text{WO}_4\text{-Li}_2\text{O}$ glasses, 161
investigation of glass-crystal transition of $\text{Na}_5\text{Ti}(\text{PO}_4)_3$, 120
- Humic compounds**
effect of humic compounds and some organic acids added during dicalcium phosphate dihydrate crystal growth, 65
evolution of monocalcium phosphate monohydrate in solution containing humic matter, 138
- Hydroxyapatites**
characterization of zones resulting from the action of CO_2 laser impacts on dentinal hydroxyapatite, 147
influence of crystallite size on surface properties of Ca-deficient hydroxyapatites, 152
localization of Cd in Cd-containing hydroxy- and fluorapatites, 141
- Inductive effect**
role of inductive effect in solid state chemistry in modification of structural and physical properties of materials, 1
- Insulators**
monovalent Cu in insulators, 36
- Ionic crystals**
discrete theory of induced polarization of adsorbed atoms and molecules on an ionic crystal, 225
- IR spectroscopy**
optical properties of Eu^{3+} activated $\text{Sr}_{10}\text{F}_2(\text{PO}_4)_6$ elaborated by coprecipitation, 82
electron optical characterization of supported rhodium catalyst, 182
- Iron**
iron-alumina interface in ceramic matrix nanocomposites, 179
transport properties, magnetic hysteresis of high T_c superconductor $\text{EuBa}_2(\text{Cu}_{1-x}\text{Fe}_x)_3\text{O}_{7-8}$, 237
- Laser irradiation**
characterisation of zones resulting from the action of CO_2 laser impacts on dentinal hydroxyapatite, 147
- Lithium**
effects of processing parameters Al-Li ribbon production, 194
Li intercalation in $\text{Cu}^{\text{II}}_{0.5}\text{Ti}_2(\text{PO}_4)_3$, 110
synthesis, structure and properties of $\text{Eu}_{1/3}\text{Zr}_2(\text{PO}_4)_3$, 117
- Luminescence**
monovalent Cu in insulators, 36
 Eu^{3+} luminescence in hexagonal NaYF_4 phase, 250
- Lysozyme**
influence of crystallite size on surface properties of Ca-deficient hydroxyapatites, 152
- Magnesium**
cell determination of $\text{Na}_3\text{MgH}(\text{PO}_4)_2$ and effect of partial substitution of Ca for Mg, 102
mechanical properties of internally oxidized Ag alloys, 268
- Magnetic behaviour**
crystallographic and magnetic studies of mixed pyrophosphates AMnP_2O_7 , $A \equiv \text{Co, Ni, Cu}$, 230
magnetic measurements of point defect elimination in quenched CoGa and FeAl intermetallic compounds, 246
magnetic studies of ordered and disordered NbFeO_4 phases, 234
superexchange pathways in oxovanadium(IV) phosphates, 123
- Manganese**
crystal structure, magnetic properties of $\alpha\text{-Mn}(\text{H}_2\text{PO}_2)_2 \cdot \text{H}_2\text{O}$, 133
- Micromechanism**
microstructure, thermomechanical behavior of ceramic matrix composites, 49
- Microscopy**
preparation, characterization of melt-spun Ni-based alloys containing heavy metals, 87
- Nanofiltration**
nanostructures in sol-gel derived materials: application to elaboration of nanofiltration membranes, 8
- Neodymium**
synthesis and characterization of NdNiO_3 prepared by low temperature methods, 170

- Neutron diffraction
phosphates with Nasicon-derived structure: an EXAFS investigation, 107
- Nickel
characterization of irradiation defects using positron annihilation spectroscopy in γ -NiSb and δ -Ni₂Si intermetallic phases, 94
evolution of microstructure and mechanical properties of γ/γ' NiAlTi alloys during electron irradiation, 190
three-dimensional defects in Ni₃Al(γ') phase identified by computed imaging, 198
preparation, characterization of melt-spun Ni-based alloys containing heavy metals, 87
synthesis, characterization of NdNiO₃ prepared by low temperature methods, 170
- Niobium
magnetic studies of ordered and disordered NbFeO₄ phases, 234
- Nuclear magnetic resonance
³¹P and ¹¹B NMR of borophosphate glasses: correlations between structure and chemical and physical properties, 157
superexchange pathways in oxovanadium(IV) phosphates, 123
- Oil shales
pyrolysis, reactivity of Timahdit and Tarfaya (Morocco) oil shales, 202
- Organic acids
effect of humic compounds and some organic acids added during dicalcium phosphate dihydrate crystal growth, 65
- Oxidation
two-dimensional SiC/SiC composites processed according to isobaric-isothermal chemical vapor infiltration gas phase route, 42
- Oxides
mechanical properties of internally oxidized Ag alloys, 268
synthesis, microstructure of Bi-based mixed metal oxides from organic precursors, 165
role of inductive effect in solid state chemistry in modification of structural and physical properties of materials, 1
transport properties, magnetic hysteresis of high T_c superconductor EuBa₂(Cu_{1-x}Fe_x)₃O_{7- δ} , 237
- Oxyfluorides
superconductivity in La_{2-x}Ba_xCuO₄ ($0 \leq x \leq 0.04$) and La_{2-x}Nd_xCuO₄ ($0 \leq x \leq 0.3$) systems after fluorination, 69
- Palladium
effect of Cu substitution on electrical transport properties of (Bi,Pb)₂Mo₄ (M≡Pd, Pt) linear chain compounds, 211
- Phase transitions
phase transitions, modulated structures in aluminate sodalites, 21
phase transitions in (CH₃NH₃)₃Bi₂Cl₉ studied by calorimetric X-ray diffraction and dielectric methods, 186
- Phase transition
superprotonic phase transition in mixed ammonium-caesium acid sulphate Cs_{0.9}(NH₄)_{0.1}HSO₄, 215
- Phosphates
synthesis, characterization and catalytic behaviour of Cu_{0.5}M₂(PO₄)₃ (M≡Zr, Sn, Ti), 60
- Platinum
effect of Cu substitution on electrical transport properties of (Bi,Pb)₂Mo₄ (M≡Pd, Pt) linear chain compounds, 211
- Polarization
discrete theory of induced polarization of adsorbed atoms and molecules on an ionic crystal, 225
- Positron annihilation
characterization of irradiation defects using positron annihilation spectroscopy in γ -NiSb and δ -Ni₂Si intermetallic phases, 94
- Potassium
crystal structure of the orthophosphate RbBaPO₄, 99
- Powder diffraction
crystal chemistry of Cd₂P₂O₇-A₂P₂O₇ phosphates; A≡Sr, Pb, Mg, Co and Ni, 128
- Powder neutron diffraction
structure of Cu¹CrZr(PO₄)₃ by powder neutron diffraction, 113
- Pyrolysis
pyrolysis, reactivity of Timahdit and Tarfaya (Morocco) oil shales, 202
- Pyrophosphates
crystallographic, magnetic studies of AMnP₂O₇, A≡Co, Ni, Cu, 230
- Rare earths
optical study of Eu-doped garnet Sr₃Y₂Ge₃O₁₂, 75
emission spectra, crystal field calculation of Eu-doped C-type In₂O₃ oxide, 242
vacuum UV excitation of luminescent materials by synchrotron radiation — electronic structure, 77
- Rhodium
electron optical characterization of supported rhodium catalyst, 182
- Rubidium
crystal structure of RbBaPO₄, 99
- SiC
two-dimensional SiC/SiC composites processed according to the isobaric-isothermal chemical vapor infiltration gas phase route, 42
- Silicon
effects of conventional and rapid thermal annealing on minority carrier diffusion length in float zone and Czochralski silicon crystals, 221
preparation, characterization of melt-spun Ni-based alloys containing heavy metals, 87
- Silver
mechanical properties of internally oxidized Ag alloys, 268
- Sodium
Na₃Bi(PO₄)₂ type solid solutions; structural and electrical properties, 206
- Sol-gel
nanostructures in sol-gel derived materials: elaboration of nanofiltration membranes, 8
- Solid solutions
Na₃Bi(PO₄)₂ type solid solutions; structural and electrical properties, 206
- Spectroscopy
characterization of irradiation defects using positron annihilation spectroscopy in γ -NiSb and δ -Ni₂Si intermetallic phases, 94
Raman study of mechanisms of formation of water-monomethylhydrazine solid mixtures, 272
two-photon spectroscopy of transition metal ions in cubical symmetry, 255
- Superconductors
superconductivity in La_{2-x}Ba_xCuO₄ ($0 \leq x \leq 0.04$) and La_{2-x}Nd_xCuO₄ ($0 \leq x \leq 0.3$) systems after fluorination, 69

- transport properties, magnetic hysteresis of high T_c superconductor $\text{EuBa}_2(\text{Cu}_{1-x}\text{Fe}_x)_3\text{O}_{7-b}$, 237
- Synchrotron radiation
vacuum UV excitation of luminescent materials by synchrotron radiation – electronic structure, 77
- Thermal annealing
effects of conventional and rapid thermal annealing on minority carrier diffusion length in float zone and Czochralski silicon crystals, 221
- Thermal expansion
synthesis, structure and properties of $\text{Eu}_{1/3}\text{Zr}_2(\text{PO}_4)_3$, 117
- Thermogravimetric analysis
optical properties of Eu^{3+} activated $\text{Sr}_{10}\text{F}_2(\text{PO}_4)_6$ elaborated by coprecipitation, 82
- Thermogravimetry
pyrolysis, reactivity of Timahdit and Tarfaya (Morocco) oil shales, 202
- Thortveitites
diphosphate structures related to dichromate or thortveitite type, 14
- Titanium
evolution of microstructure and mechanical properties of γ/γ' NiAlTi alloys during electron irradiation, 190
glass-crystal transition of $\text{Na}_3\text{Ti}(\text{PO}_4)_3$, 120
Li intercalation in $\text{Cu}^{\text{II}}_{0.5}\text{Ti}_2(\text{PO}_4)_3$, 110
- Transition metals
two-photon spectroscopy of transition metal ions in cubical symmetry, 255
- Tungsten
preparation, characterization of melt-spun Ni-based alloys containing heavy metals, 87
- Two-beam diffraction
three-dimensional defects in $\text{Ni}_3\text{Al}(\gamma')$ phase identified by computed imaging, 198
- Ultraviolet radiation
vacuum UV excitation of luminescent materials by synchrotron radiation – electronic structure, 77
- Vanadium
superexchange pathways in oxovanadium(IV) phosphates, 123
- X-ray diffraction
crystal chemistry of $\text{Cd}_2\text{P}_2\text{O}_7$ - $\text{A}_2\text{P}_2\text{O}_7$ phosphates; $\text{A} \equiv \text{Sr}, \text{Pb}, \text{Mg}, \text{Co}$ and Ni , 128
crystal structure, magnetic properties of α - $\text{Mn}(\text{H}_2\text{PO}_2)_2 \cdot \text{H}_2\text{O}$, 133
crystal structure of RbBaPO_4 , 99
electron optical characterization of supported rhodium catalyst, 182
optical properties of Eu^{3+} activated $\text{Sr}_{10}\text{F}_2(\text{PO}_4)_6$ elaborated by coprecipitation, 82
phase transitions in $(\text{CH}_3\text{NH}_3)_3\text{Bi}_2\text{Cl}_9$ studied by calorimetric X-ray diffraction and dielectric methods, 186
phosphates with Nasicon-derived structure: an EXAFS investigation, 107
- Yttrium
optical study of Eu-doped garnet $\text{Sr}_3\text{Y}_2\text{Ge}_3\text{O}_{12}$, 75
- Zirconium
synthesis, structure and properties of $\text{Eu}_{1/3}\text{Zr}_2(\text{PO}_4)_3$, 117