Subject Index of Volume 182

Aluminium

equiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl structure type, 87

experimental study of the Al-Cr equilibrium diagram, 271

high-field magnetization of $UAl_{12-x}Fe_x$ (4.0 $\leq x \leq$ 4.8) intermetallic compounds, 55

the influence of the microstructure of the ϵ phase of Mn-Al-C alloys on the stability and Curie point of the precipitated τ phase, 69

characterization of BaSrPbMn $_2$ Al $_9$ O $_{20}$, L19

Anisotropic compounds

magnetic properties and crystal structure of novel high anisotropic compounds on the basis of R-Fe-V systems (R≡Y, Nd, Sm, Gd), 199

Barium

Ba₈Ru₃Ta₂O₁₈Br₂ — synthesis and structure determination of a new oxybromide of ruthenium, 265

lattice parameter of a high-purity barium wire extruded in ultrahigh vacuum, 175

characterization of BaSrPbMn₂Al₉O₂₀, L19

Boron

a study of Pr-Fe-B-Cu permanent magnetic alloys, 233

coercivity through controlled crystallization in melt spun Nd-Fe-B amorphous alloys, 211

magnetic properties and 57 Fe Mössbauer spectroscopy of rare earth compounds of the type $RFe_{12-x}Co_xB_6$, 145

the effect of cooling rate on the intrinsic coercivity of some Nd-Fe-B based permanent magnets, 223

Bromine

Ba₈Ru₃Ta₂O₁₈Br₂ - synthesis and structure determination of a new oxybromide of ruthenium, 265

Caesium

Y₂Co₃Al₉ with Y₂Co₃Ga₉-type structure: an intergrowth of CsCl- and Th₃Pd₅type slabs, 165

Carbides

preparation and crystal structure of the carbides $R_{11}Ni_{60}C_6$ ($R \equiv Y$, Dy-Lu),

Carbon

crystal fields and spin reorientation transitions in $R_2Fe_{17}C_{3-\delta}$ (R=Sm, Er, Tm), 313

the influence of interstitial N, C and H atoms on the hyperfine fields at the Y and Co sites in Y_2CO_{17} , 331

the influence of the microstructure of the ϵ phase of Mn-Al-C alloys on the stability and Curie point of the precipitated τ phase, 69

Cerium

specific heat of $(Ce_{1-c}Gd_c)Rh_2$ compounds, 77

variations in lattice parameters with annealing temperature for L-Pd₅Ce, 61

Chlorine

synthesis and structure of W₃S₄Cl₄, 253 Y₂Co₃Al₉ with Y₂Co₃Ga₉-type structure: an intergrowth of CsCl- and Th₃Pd₅type slabs, 165

experimental study of the Al-Cr equilibrium diagram, 271

Cobalt

a transmission electron microscopy and differential thermal analysis study of the ZrCo-H system, 243

irreversible suppression of spin fluctuations at the metamagnetic phase transition in Er_{0.55}Y_{0.45}CO₂, 171

magnetic properties and ⁵⁷Fe Mössbauer spectroscopy of rare-earth compounds of the type RFe_{12-x}Co_xB₆, 145

the influence of interstitial N, C and H atoms on the hyperfine fields at the Y and Co sites in Y_2Co_{17} , 331

Y₂Co₃Al₉ with Y₂Co₃Ga₉-type structure: an intergrowth of CsCl- and Th₃Pd₅type slabs, 165

Coercivity

coercivity through controlled crystallization in melt spun Nd-Fe-B amorphous alloys, 211

the effect of cooling rate on the intrinsic coercivity of some Nd-Fe-B based permanent magnets, 223

Copper

- a simple method of electroless copper plating for the preparation of metal hydride electrodes, 321
- a study of Pr-Fe-B-Cu permanent magnetic alloys, 233

formation of copper oxides in Cu-Au alloys and pure copper in air at 270 °C, 289

Corrosion

electroplating Ni-P films and their corrosion property, L1

Crystal structure

magnetic properties and crystal structure of novel high anisotropic compounds on the basis of R-Fe-V systems (R≡Y, Nd, Sm, Gd), 199

Electroplating

electroplating Ni-P films and their corrosion property, L1

Erbium

irreversible suppression of spin fluctuations at the metamagnetic phase transition in Er_{0.55}Y_{0.45}CO₂, 171

Gadolinium

low temperature recovery of gadolinium, L15

specific heat of (Ce_{1-c}Gd_c)Rh₂ compounds, 77

Y₂Co₃Al₉ with Y₂Co₃Ga₉-type structure: an intergrowth of CsCl- and Th₃Pd₅type slabs, 165

Gold

formation of copper oxides in Cu–Au alloys and pure copper in air at 270 °C, 289

Hydrides

a simple method of electroless copper plating for the preparation of metal hydride electrodes, 321 thermodynamics of nitride and hydride formation by the reaction of metals with flowing NH₃, 91

Hydrogen

- a transmission electron microscopy and differential thermal analysis study of the ZrCo-H system, 243
- effect of alloying elements on the sloping hydrogen plateaux in the Zrbased Laves phase system, 43
- the influence of interstitial N, C and H atoms on the hyperfine fields at the Y and Co sites in Y_2Co_{17} , 331

Iridium

chemical constitution of various Sr-Ir-O phases, 355

Iron

- a study of Pr-Fe-B-Cu permanent magnetic alloys, 233
- coercivity through controlled crystallization in melt spun Nd-Fe-B amorphous alloys, 211
- crystal fields and spin reorientation transitions in $R_2Fe_{17}C_{3-\delta}$ (R=Sm, Er, Tm), 313
- equiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl-structure type, 87
- high-field magnetization of $UAl_{12-x}Fe_x$ intermetallic compounds, 55
- magnetic properties and crystal structure of novel high anisotropic compounds on the basis of R-Fe-V systems (R≡Y, Nd, Sm, Gd), 199
- magnetic properties and ⁵⁷F Mössbauer spectroscopy of rare earth compounds of the type RFe_{12-x}Co_xB₆, 145
- the effect of cooling rate on the intrinsic coercivity of some Nd-Fe-B based permanent magnets, 223

Lanthanum

ternary phases MPtGe (M≡Ca, Eu, Sr, Ba) of the LaIrSi- and TiNiSi types, L23

Lattice parameters

lattice parameter of a high-purity barium wire extruded in ultrahigh vacuum, 175 variations in lattice parameters with annealing temperature for L-Pd₅Ce, 61

Lead

characterization of BaSrPbMn₂Al₉O₂₀, L19

Magnetic properties

a study of Pr-Fe-B-Cu permanent magnetic alloys, 233

magnetic properties and crystal structure of novel high anisotropic compounds on the basis of R-Fe-V systems (R≡Y, Nd, Sm, Gd), 199

Magnetization

high-field magnetization of $UAl_{12-x}Fe_x$ intermetallic compounds, 55

Manganese

preparation of manganese(II) tungstate by a precipitation method, 189

the influence of the microstructure of the ϵ phase of Mn-Al-C alloys on the stability and Curie point of the precipitated τ phase, 69

characterization of $BaSrPbMn_2Al_9O_{20}$, L19

Mercury

Na₂Hg₃S₄: a thiomercurate with layered anions, 281

Microscopy

a transmission electron microscopy and differential thermal analysis study of the ZrCo-H system, 243

Microstructure

a study of Pr-Fe-B-Cu permanent magnetic alloys, 233

the influence of the microstructure of the ϵ phase of Mn–Al–C alloys on the stability and Curie point of the precipitated τ phase, 69

Mössbauer study

magnetic properties and 57 Fe Mössbauer spectroscopy of rare earth compounds of the type $RFe_{12-x}Co_xB_6$, 145

Neodymium

coercivity through controlled crystallization in melt spun Nd-Fe-B amorphous alloys, 211

the effect of cooling rate on the intrinsic coercivity of some Nd-Fe-B based permanent magnets, 223

Nickel

electroplating Ni-P films and their corrosion property, L1

equiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl-structure type, 87

preparation and crystal structure of the carbides $R_{11}Ni_{60}C_6$ ($R \equiv Y$, Dy-Lu), 157

ternary phases MPtGe (M≡Ca, Eu, Sr, Ba) of the LaIrSi- and TiNiSi types, L23

Niobium

Rb₄(Si,Nb)₂Nb₃₅O₇₀: a new phase containing isolated Nb₆O₁₂-clusters, 343 ternary metal-rich Ta-Nb-S at high temperatures, 299

Nitrogen

the influence of interstitial N, C and H atoms on the hyperfine fields at the Y and Co sites in Y_2Co_{17} , 331

Oxygen

chemical constitution of various Sr–Ir–O phases, 355 Rb₄(Si,Nb)₂Nb₃₅O₇₀: a new phase containing isolated Nb₆O₁₂-clusters, 343 characterization of BaSrPbMn₂Al₉O₂₀, L19

Palladium

A15 structure formation in Ti-Pd, 35 variations in lattice parameters with annealing temperature for L-Pd₅Ce, 61

Phosphorus

electroplating Ni-P films and their corrosion property, L1

equiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl-structure type, 87

Plutonium

phase diagram of Pu-Zr system in Zrrich region, L9

the mediated electrochemical dissolution of plutonium oxide: kinetics and mechanism, 115

Praseodymium

a study of Pr-Fe-B-Cu permanent magnetic alloys, 233

quiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl-structure type, 87 agnetic properties and ⁵⁷Fe Mössbauer spectroscopy of rare earth compounds of the type $RFe_{12-x}Co_xB_6$, 145 pecific heat of (Ce1-cGdc)Rh2 compounds, 77 b₄(Si,Nb)₂Nb₃₅O₇₀: a new phase containing isolated Nb₆O₁₂-clusters, 343 enium a₈Ru₃Ta₂O₁₈Br₂ - synthesis and structure determination of a new oxybromide of ruthenium, 265 taining isolated Nb₆O₁₂-clusters, 343 L23

on

(b₄(Si,Nb)₂Nb₃₅O₇₀: a new phase containing isolated Nb₆O₁₂-clusters,
343

ernary phases MPtGe (M≡Ca, Eu, Sr, Ba) of the LaIrSi- and TiNiSi types,
L23

ernatstable extension of solid solubility of alloying elements in silver, 131

tum

(la₂Hg₃S₄: a thiomercurate with layered anions, 281

ntium

chemical constitution of various
Sr-Ir-O phases, 355

characterization of BaSrPbMn₂Al₉O₂₀,
L19

cture

115 structure formation in Ti-Pd, 35

ntomic-environment classification of the

 $3a_8Ru_3Ta_2O_{18}Br_2$ — synthesis and structure determination of a new oxybromide of ruthenium, 265 equiatomic ternary compounds of rare earths with the Fe₂P or ZrNiAl-structure type, 87 preparation and crystal structure of the carbides $R_{11}Ni_{60}C_6$ (R = Y Dy-Lu),

cubic intermetallic structure types,

synthesis and structure of $W_3S_4Cl_4$, 253 $Y_2Co_3Al_9$ with $Y_2Co_3Ga_9$ -type structure: an intergrowth of CsCl- and Th_3Pd_5 -type slabs, 165

Sulphur

Na₂Hg₃S₄: a thiomercurate with layered anions, 281

synthesis and structure of W₃S₄Cl₄, 253 ternary metal-rich Ta-Nb-S at high temperatures, 299

Synthesis

Ba₈Ru₃Ta₂O₁₈Br₂ — synthesis and structure determination of a new oxybromide of ruthenium, 265 synthesis and structure of W₃S₄Cl₄, 253

Tantalum

Ba₈Ru₃Ta₂O₁₈Br₂ — synthesis and structure determination of a new oxybromide of ruthenium, 265 ternary metal-rich Ta-Nb-S at high temperatures, 299

Thermodynamics

thermodynamics of nitride and hydride formation by the reaction of metals with flowing NH₃, 91

Fitanium

A15 structure formation in Ti-Pd, 35 ternary phases MPtGe (M≡Ca, Eu, Sr, Ba) of the LaIrSi- and TiNiSi types, L23

Tungsten

preparation of manganese(II) tungstate by a precipitation method, 189 synthesis and structure of W₃S₄Cl₄, 253

Uranium

high-field magnetization of $UAl_{12-x}Fe_x$ intermetallic compounds, 55

Vanadium

magnetic properties and crystal structure of novel high anisotropic compounds on the basis of R-Fe-V systems (R≡Y, Nd, Sm, Gd), 199

Yttrium

irreversible suppression of spin fluctuations at the metamagnetic phase transition in Er_{0.55}Y_{0.45}Co₂, 171

- preparation and crystal structure of the carbides $R_{11}Ni_{60}C_6$ (R = Y, Dy-Lu), 157
- the influence of interstitial N, C and H atoms on the hyperfine fields at the Y and Co sites in Y_2Co_{17} , 331
- $Y_2Co_3Al_9$ with $Y_2Co_3Ga_9$ -type structure: an intergrowth of CsCl- and Th_3Pd_5 -type slabs, 165

Zirconium

- a transmission electron microscopy and differential thermal analysis study of the ZrCo-H system, 243
- effect of alloying elements on the sloping hydrogen plateaux in the Zrbased Laves phase system, 43
- phase diagram of Pu–Zr system in Zr-rich region, L9