

Subject Index of Volume 321

- Actinide compounds
 crystal structure of the ThCu_5M ($\text{M}=\text{In}, \text{Sn}$) compounds 97
- Actinide intermetallic compounds
 density functional prediction of a magnetic ground state of UFeSi 10
- Al–Cr–Nb
 a thermodynamic study of the Al–Cr–Nb ternary system 232
- Alloys
 study on the phase composition of $\text{Mg}_{2-x}\text{M}_x\text{Ni}$ ($\text{M}=\text{Al}, \text{Ti}$) alloys L1
- Aluminum nitride high temperature properties
 micro-mechanical and electrical properties of monolithic aluminum nitride at high temperatures 67
- Amorphous materials
 thermodynamic modeling of the miscibility gaps and the metastability in the $\text{R}_2\text{O}_3\text{--SiO}_2$ systems ($\text{R}=\text{La}, \text{Sm}, \text{Dy}, \text{and Er}$) 84
- Anisotropy
 spin reorientations in $\text{RFe}_{11-x}\text{Co}_x\text{Ti}$ compounds ($\text{R}=\text{Tb}, \text{Er}, \text{Y}$) 40
- Binary alloys
 evolution and application of high-temperature reaction calorimetry at the University of Chicago from 1952 to 2000 153
 thermochemistry of alloys of transition metals and lanthanide metals with some IIIB and IVB elements in the periodic table 183
- Binary halides
 analysis of the enthalpy of mixing data of binary and ternary [rare earth ($\text{Nd}, \text{La}, \text{Y}, \text{Yb}$), Al–alkali metal]–fluoride systems 267
- Binary systems
 contributions to molten salt chemistry by Ole J. Kleppa 164
- Calorimetry
 evolution and application of high-temperature reaction calorimetry at the University of Chicago from 1952 to 2000 153
 thermochemistry of alloys of transition metals and lanthanide metals with some IIIB and IVB elements in the periodic table 183
 composition dependence of the enthalpies of formation of NiAl 228
 a thermodynamic study of the Al–Cr–Nb ternary system 232
 excess thermodynamic functions in the liquid system ($\text{Bi–Cd–Ga–In–Pb–Sn–Zn}$). Measurements and calculations 237
 calorimetric study on hydration of CaO -based oxides 276
 thermochemical studies of nitrides and oxynitrides by oxidative oxide melt calorimetry 300
- CaNi_5
 mechanical alloying and hydrogen storage properties of CaNi_5 -based alloys 146
- Crystal structure
 structure and magnetism of R_5Bi_3 ($\text{R}=\text{Tb}, \text{Dy}, \text{Ho}, \text{Er}$) and Tb_4Bi_3 27
 the ternary system $\text{Gd}_2\text{O}_3\text{--SrO–CuO}$: compounds and phase relations 54
- the interaction of phosphorus with titanium and molybdenum 91
 crystal structure of the ThCu_5M ($\text{M}=\text{In}, \text{Sn}$) compounds 97
 study on the phase composition of $\text{Mg}_{2-x}\text{M}_x\text{Ni}$ ($\text{M}=\text{Al}, \text{Ti}$) alloys L1
 the Tb–Ag–Al system 132
- Cu, In, Pb, Sn, Zn system
 what will be done in the future with O.J. Kleppa's enthalpy data set? 201
- Density functional calculations
 density functional prediction of a magnetic ground state of UFeSi 10
- Differential scanning calorimetry
 hydrogen desorption behavior from magnesium hydrides synthesized by reactive mechanical alloying 46
- Diffusion
 hydrogen permeability measurement through Pd, Ni and Fe membranes 17
- Electrochemical reactions
 distribution behavior of plutonium and americium in LiCl–KCl eutectic/liquid cadmium systems 76
- Electrode materials
 distribution behavior of plutonium and americium in LiCl–KCl eutectic/liquid cadmium systems 76
- Electromotive force
 thermodynamic studies on chromium carbides by the electromotive force (emf) method 138
- Electronic materials
 micro-mechanical and electrical properties of monolithic aluminum nitride at high temperatures 67
- Electronic states
 electronic structure of La 3d in gallate and aluminate single crystals 24
- Electronic structure
 electronic structure and magnetic properties of CoFe_3N , CrFe_3N and TiFe_3N 60
- Electronic transport
 structure and magnetism of R_5Bi_3 ($\text{R}=\text{Tb}, \text{Dy}, \text{Ho}, \text{Er}$) and Tb_4Bi_3 27
- EMF
 thermodynamic properties of Ti–Al intermetallics 223
- Enthalpies of formation
 the standard enthalpies of formation of the compounds of early transition metals with late transition metals and with noble metals as determined by Kleppa and co-workers at the University of Chicago — A review 169
 thermochemistry of alloys of transition metals and lanthanide metals with some IIIB and IVB elements in the periodic table 183
 what will be done in the future with O.J. Kleppa's enthalpy data set? 201
- Enthalpies of mixing
 contributions to molten salt chemistry by Ole J. Kleppa 164

Enthalpy

- thermodynamic studies on chromium carbides by the electromotive force (emf) method 138
- composition dependence of the enthalpies of formation of NiAl 228

high-temperature electrochemical study of Na_2O – MoO_3 melts 261

Enthalpy of formation

- a thermodynamic study of the Al–Cr–Nb ternary system 232

Enthalpy of mixing

- enthalpies of mixing in Fe–C–Si melts 242
- analysis of the enthalpy of mixing data of binary and ternary [rare earth (Nd, La, Y, Yb), Al–alkali metal]–fluoride systems 267

Fe–C–Si

- enthalpies of mixing in Fe–C–Si melts 242

Formation enthalpy

- comments on the formation thermodynamics of selected groups of rare earth compounds 248

Functional ceramics high temperatures

- micro-mechanical and electrical properties of monolithic aluminum nitride at high temperatures 67

Gas–solid reactions

- hydrogen permeability measurement through Pd, Ni and Fe membranes 17

Graph method

- determination of phase equilibria in the Ni–V–Nb–Ta–Cr–Mo–W system at 1375 K using the graph method 102

Heat of hydration

- calorimetric study on hydration of CaO-based oxides 276

High pressure

- high pressure effects on the Jahn–Teller distortion in perovskite $\text{La}_{0.5-x}\text{Bi}_x\text{Ca}_{0.5}\text{MnO}_3$ 72

High-temperature direct synthesis calorimetry

- the standard enthalpies of formation of the compounds of early transition metals with late transition metals and with noble metals as determined by Kleppa and co-workers at the University of Chicago — A review 169

High temperature EMF cells

- high-temperature electrochemical study of Na_2O – MoO_3 melts 261

Hot corrosion

- high-temperature electrochemical study of Na_2O – MoO_3 melts 261

Hydride batteries

- the development of hydrogen storage alloys and the progress of nickel hydride batteries 307

Hydrogen absorbing alloys

- mechanical alloying and hydrogen storage properties of CaNi_5 -based alloys 146

Hydrogen absorbing materials

- hydrogen permeability measurement through Pd, Ni and Fe membranes 17
- study on the phase composition of $\text{Mg}_{2-x}\text{M}_x\text{Ni}$ (M=Al, Ti) alloys L1

Hydrogen desorption

- hydrogen desorption behavior from magnesium hydrides synthesized by reactive mechanical alloying 46

Hydrogen storage

- the development of hydrogen storage alloys and the progress of nickel hydride batteries 307

Hyperfine fields

- electronic structure and magnetic properties of CoFe_3N , CrFe_3N and TiFe_3N 60

Hyperfine interactions

- hyperfine interaction of ^{111}Cd in Fe–Sn compounds 1

Intermetallic compounds

- the standard enthalpies of formation of the compounds of early transition metals with late transition metals and with noble metals as determined by Kleppa and co-workers at the University of Chicago — A review 169

Intermetallics

- distribution behavior of plutonium and americium in LiCl–KCl eutectic/liquid cadmium systems 76
 - thermodynamic properties of Ti–Al intermetallics 223
- Internal friction high temperature dielectric measurements
- micro-mechanical and electrical properties of monolithic aluminum nitride at high temperatures 67

Itinerant magnetism

- density functional prediction of a magnetic ground state of UFeSi 10

Kleppa work

- what will be done in the future with O.J. Kleppa's enthalpy data set? 201

Liquid quenching

- thermodynamic modeling of the miscibility gaps and the metastability in the R_2O_3 – SiO_2 systems (R=La, Sm, Dy, and Er) 84

Liquidus

- thermodynamic modeling of the miscibility gaps and the metastability in the R_2O_3 – SiO_2 systems (R=La, Sm, Dy, and Er) 84

Magnesium hydride

- hydrogen desorption behavior from magnesium hydrides synthesized by reactive mechanical alloying 46

Magnetically ordered materials

- hyperfine interaction of ^{111}Cd in Fe–Sn compounds 1
- magnetic properties of $\text{Nd}_{1-x}\text{Gd}_x\text{Mn}_2\text{Ge}_2$ compounds 35

Magnetic measurements

- structure and magnetism of R_5Bi_3 (R=Tb, Dy, Ho, Er) and Tb_4Bi_3 27
- magnetic properties of $\text{Nd}_{1-x}\text{Gd}_x\text{Mn}_2\text{Ge}_2$ compounds 35
- spin reorientations in $\text{RFe}_{11-x}\text{Co}_x\text{Ti}$ compounds (R=Tb, Er, Y) 40

Magnetic properties

- electronic structure and magnetic properties of CoFe_3N , CrFe_3N and TiFe_3N 60

Magnetocrystalline anisotropy

- density functional prediction of a magnetic ground state of UFeSi 10

Mechanical alloying

- hydrogen desorption behavior from magnesium hydrides synthesized by reactive mechanical alloying 46
- mechanical alloying and hydrogen storage properties of CaNi_5 -based alloys 146

Metallurgical thermodynamics

- what will be done in the future with O.J. Kleppa's enthalpy data set? 201

Metals

- distribution behavior of plutonium and americium in LiCl–KCl eutectic/liquid cadmium systems 76

Model

- analysis of the enthalpy of mixing data of binary and ternary [rare earth (Nd, La, Y, Yb), Al–alkali metal]–fluoride systems 267

Modeling

- excess thermodynamic functions in the liquid system (Bi–Cd–Ga–In–Pb–Sn–Zn). Measurements and calculations 237
- thermochemistry and modeling in oxides 282

Molten salts

- contributions to molten salt chemistry by Ole J. Kleppa 164

- Monotectic
thermodynamic modeling of the miscibility gaps and the metastability in the R_2O_3 – SiO_2 systems ($R=La, Sm, Dy, \text{ and } Er$) 84
- Multicomponent alloys
what will be done in the future with O.J. Kleppa's enthalpy data set? 201
- Multicomponent system
determination of phase equilibria in the Ni – V – Nb – Ta – Cr – Mo – W system at 1375 K using the graph method 102
- Multicomponent systems
excess thermodynamic functions in the liquid system (Bi – Cd – Ga – In – Pb – Sn – Zn). Measurements and calculations 237
- Nanostructures
mechanical alloying and hydrogen storage properties of $CaNi_5$ -based alloys 146
- Na_2O – MoO_3 system
high-temperature electrochemical study of Na_2O – MoO_3 melts 261
- $NiAl$
composition dependence of the enthalpies of formation of $NiAl$ 228
- Ni – V – Nb – Ta – Cr – Mo – W alloys
determination of phase equilibria in the Ni – V – Nb – Ta – Cr – Mo – W system at 1375 K using the graph method 102
- Oxide
thermochemistry and modeling in oxides 282
- Oxide materials
the ternary system Gd_2O_3 – SrO – CuO : compounds and phase relations 54
- Oxynitrides
thermochemical studies of nitrides and oxynitrides by oxidative oxide melt calorimetry 300
- Perovskite manganite
high pressure effects on the Jahn–Teller distortion in perovskite $La_{0.5-x}Bi_xCa_{0.5}MnO_3$ 72
- Perovskite nitrides
electronic structure and magnetic properties of $CoFe_3N$, $CrFe_3N$ and $TiFe_3N$ 60
- Phase diagram
the ternary system Gd_2O_3 – SrO – CuO : compounds and phase relations 54
the interaction of phosphorus with titanium and molybdenum 91
study on the phase composition of $Mg_{2-x}M_xNi$ ($M=Al, Ti$) alloys L1
the Tb – Ag – Al system 132
- Phase diagram calculation
what will be done in the future with O.J. Kleppa's enthalpy data set? 201
- Phase equilibria
determination of phase equilibria in the Ni – V – Nb – Ta – Cr – Mo – W system at 1375 K using the graph method 102
- Phase transitions
magnetic properties of $Nd_{1-x}Gd_xMn_2Ge_2$ compounds 35
- Photoelectron spectroscopies
electronic structure of La 3d in gallate and aluminate single crystals 24
- Polyhydration of systems
determination of phase equilibria in the Ni – V – Nb – Ta – Cr – Mo – W system at 1375 K using the graph method 102
- Raman spectra
solubility and Raman spectra of $Nb(V)$ in LiF – NaF – KF – Na_2O melts 284
- Rare earth alloys
comments on the formation thermodynamics of selected groups of rare earth compounds 248
- Rare earth aurides
comments on the formation thermodynamics of selected groups of rare earth compounds 248
- Rare earth chalcogenides
comments on the formation thermodynamics of selected groups of rare earth compounds 248
- Rare earth compounds
structure and magnetism of R_5Bi_3 ($R=Tb, Dy, Ho, Er$) and Tb_4Bi_3 27
magnetic properties of $Nd_{1-x}Gd_xMn_2Ge_2$ compounds 35
spin reorientations in $RFe_{11-x}Co_xTi$ compounds ($R=Tb, Er, Y$) 40
the ternary system Gd_2O_3 – SrO – CuO : compounds and phase relations 54
the Tb – Ag – Al system 132
- Rare earth pnictides
comments on the formation thermodynamics of selected groups of rare earth compounds 248
- Silicates
thermodynamic modeling of the miscibility gaps and the metastability in the R_2O_3 – SiO_2 systems ($R=La, Sm, Dy, \text{ and } Er$) 84
- Single crystal
electronic structure of La 3d in gallate and aluminate single crystals 24
- Slags
calorimetric study on hydration of CaO -based oxides 276
- Solubility
solubility and Raman spectra of $Nb(V)$ in LiF – NaF – KF – Na_2O melts 284
- Synchrotron radiation
high pressure effects on the Jahn–Teller distortion in perovskite $La_{0.5-x}Bi_xCa_{0.5}MnO_3$ 72
- Ternary halides
analysis of the enthalpy of mixing data of binary and ternary [rare earth (Nd, La, Y, Yb), Al –alkali metal]–fluoride systems 267
- Ternary melts
enthalpies of mixing in Fe – C – Si melts 242
- Ternary systems
solubility and Raman spectra of $Nb(V)$ in LiF – NaF – KF – Na_2O melts 284
- Thermal analysis
hydrogen desorption behavior from magnesium hydrides synthesized by reactive mechanical alloying 46
- Thermochemistry
comments on the formation thermodynamics of selected groups of rare earth compounds 248
high-temperature electrochemical study of Na_2O – MoO_3 melts 261
thermochemistry and modeling in oxides 282
thermochemical studies of nitrides and oxynitrides by oxidative oxide melt calorimetry 300
- Thermodynamic properties
distribution behavior of plutonium and americium in $LiCl$ – KCl eutectic/liquid cadmium systems 76
thermodynamic modeling of the miscibility gaps and the metastability in the R_2O_3 – SiO_2 systems ($R=La, Sm, Dy, \text{ and } Er$) 84
thermodynamic studies on chromium carbides by the electromotive force (emf) method 138
- Thermodynamics
thermodynamic properties of Ti – Al intermetallics 223
- Ti – Al alloys
thermodynamic properties of Ti – Al intermetallics 223

Transition metal compounds

- hyperfine interaction of ^{111}Cd in Fe–Sn compounds 1
- magnetic properties of $\text{Nd}_{1-x}\text{Gd}_x\text{Mn}_2\text{Ge}_2$ compounds 35
- spin reorientations in $\text{RFe}_{11-x}\text{Co}_x\text{Ti}$ compounds (R=Tb, Er, Y) 40
- the interaction of phosphorus with titanium and molybdenum 91
- thermodynamic studies on chromium carbides by the electromotive force (emf) method 138

X-Ray diffraction

- the ternary system Gd_2O_3 – SrO – CuO : compounds and phase relations 54

high pressure effects on the Jahn–Teller distortion in perovskite

- $\text{La}_{0.5-x}\text{Bi}_x\text{Ca}_{0.5}\text{MnO}_3$ 72
- the interaction of phosphorus with titanium and molybdenum 91
- crystal structure of the ThCu_5M (M=In, Sn) compounds 97
- study on the phase composition of $\text{Mg}_{2-x}\text{M}_x\text{Ni}$ (M=Al, Ti) alloys L1
- the Tb–Ag–Al system 132