Ni-Pb

$PbNiF_3$

полиморфизм

Syono Y. и др.

1968

Techn. Rept. I.S.S.P

A, N337, 23pp., ill.

(См. $BaMnO_3$) I

V 852 1897

Mosnier

Ann.chim.phys., 1897, 12, 374

ZnJ_2, aq)
$2ZnJ_2.PbJ_2$) ΔHf
$2CdJ_2.PbJ_2$)
$2FeJ_2.PbJ_2$)

$2NiJ.PbJ_2$)
$2NiJ.PbJ_2.3H_2O$) ΔHf
COJ_2, FeJ_2)
MnJ)

W, M

F

$MnJ_2 \cdot PbJ_2$, $MnJ_2, PbJ_2 \cdot 3H_2O$, CrJ_2,

$2CrJ_2 \cdot PbJ_2$, $2CrJ_2 \cdot PbJ_2 \cdot 3H_2O$ (ΔHf)

VI IX $MePbF_6$, Me = Mg, Zn, Cd, Hg, Ni 1969

cr. str.

VI 7023

Homann R., Hoppe R.

Z. anorgan. und allgem. Chem., 1969, 368, N5-6, 271-278

Neue Hexafluroplumbate (IV). $MgPbF_6$, $ZnPbF_6$, $CdPbF_6$, $HgPbF_6$ und $NiPbF_6$.

РХ, 6Б 551 (1970). Me II

BP-VI-6709 1969

$Ni_3Pb_2Se_2$

Ni-6709

Tm

48117g Lead selenide-nickel system. Myuller, N. N.; Sotnikova, L. I. (Giprotsvetmetobrabotka, Moscow, USSR). *Izv. Akad. Nauk SSSR, Neorg. Mater.* 1969, 5(11), 1899-902 (Russ). The polythermal PbSe-Ni section of the ternary Pb-Se-Ni system was constructed. The formation by a peritectic reaction of the ternary compd. $Ni_3Pb_2Se_2$ m. 700° was established. The unit cell parameters for this compd. were detd. The formation of the eutectic between this compd. and PbSe contg. 20 wt. % Ni and having a m.p. of 670° was established. X-ray, microhardness, and DTA analyses were used for the study. S. A. Mersol

C.A. 1970. 72. 10

30411.8755 TE, Ph	Ni – Pb 42530	1973

Candland C.T., Vanfleet H.B.

Effect of pressure on the interstitial diffusion of nickel in lead to 50 kbar. "Phys. Rev.B: Solid State", 1973, 7, N 2, 575-580

(англ.)

0851 пик

839 841

ВИНИТИ

$Ni_3Pb_2S_2$ BФ-XVI-3342 1976

85: 184994m Reaction of lead(II) sulfide with nickel. Zargarova, M. I.; Kakhramanov, K. Sh.; Roshal, R. M.; Guseinov, G. G. (Spets. Konstr. Byuro, Inst. Fiz., Baku, USSR). *Izv. Akad. Nauk SSSR, Neorg. Mater.* 1976, 12(9), 1557–9 (Russ). The quasi-binary system PbS–Ni was examd., and the phase diagram constructed. A complex chem. interaction was obsd. in this system with the formation according to a peritectic reaction of $Ni_3Pb_2S_2$ (chem. analog of $Ni_3Pb_2Se_2$). Close phys. properties of the $Ni_3Pb_2S_2$ and $Ni_3Pb_2Se_2$ are noted, and also a semimetallic charcter of their elec. parameters. A thermal effect and a sharp discontinuity in elec. properties were detected at $550 \pm 10°$, which is attributed to a structural transformation of $Ni_3Pb_2S_2$ in the solid state.

(T_{tr})

C. A. 1976. 85 N24.

Ni3Pb2S2 ВР-XVI-3342 1976

2 Б861. Взаимодействие PbS с Ni. Заргарова М. И., Кахраманов К. Ш., Рошаль Р. М., Гусейнов Г. Г. «Изв. АН СССР. Неорган. материалы», 1976, 12, № 9, 1557—1559

Показана квазибинарность системы PbS—Ni и построена диаграмма состояния. Выявлено сложное хим. взаимодействие в этой системе с образованием по перитектич. р-ции соединения $Ni_3Pb_2S_2$ — хим. аналога $Ni_3Pb_2Se_2$. Отмечена близость физ. св-в сульфоплюмбата и селеноплюмбата Ni, а также полуметаллич. характер их электрофиз. параметров. Обнаружены термич. эффект и резкий скачок электрич. св-в при 550±10°, объясняющиеся структурными превращениями $Ni_3Pb_2S_2$ в тв. состоянии. Резюме

(Tеr)

X 1977 N2

Ni-Pb

1986

22 Б3064. **Термодинамические свойства свинца в растворах Ni—Pb.** Thermodynamische Eigenschaften des Bleis in Ni—Pb-Lösungen. Pomlanek T. «Z. Metallk.», 1986, 77, № 6, 388—392 (нем., рез. англ.)

Методом равновесного насыщения в вакууме с использованием в кач-ве станд. р-ра Cu—Pb измерены коэф. активности Pb в жидк. р-рах Ni—Pb для $x_{Pb}<0{,}10$ при т-рах 1430, 1480 и 1510° С. Результаты описаны ур-нием $\ln\gamma_{Pb}=(7245\pm3{,}13)/T(1635\pm0{,}071)+$ $+[(42\,906\pm1853)/T+(18{,}54\pm0{,}80)]\cdot x_{Pb}$. С использованием лит. данных рассчитаны коэф. активности Pb и Ni в тв. р-рах Pb—Ni и вычислен состав монотектич. точки $x_{Pb}=0{,}105$. В. Ф. Байбуз

термод. св-ва Pb в р-рах Ni-Pb.

Х. 1986, 19, N 22

Ni – Pb

1987

108: 117032b The Ni–Pb (nickel–lead) system. Nash, P. (... Coll. Eng., Illinois Inst. Technol., Chicago, IL 60616 USA). *Alloy Phase Diagrams* 1987, 8(3), 264–8 (Eng). The Ni-Pb ... diagram was assessed. Crystal structures and lattice param... Ni, Pb, and metastable NiPb and activity coeffs. for Ni in liq. Pb ... given. Extensive Ni–Pb liquidus data was included.

фазов. диагр.

C.A. 1988, <u>108</u>, N 14

1999

F: Ni-Pb-Sn
P: 1
131:173327 Thermodynamic modeling of the nickel-lead-tin system. Ghosh, G (Department of Materials Science and Engineering, Robert R. McCormick Sch Engineering and Applied Science, Northwestern University, Evanston, IL 60 3108, USA). Metall. Mater. Trans. A, 30A(6), 1481-1494 (English) 1999 A set of self-consistent thermodn. model parameters is presented to describe the phase equil. in the Ni-Pb and Ni-Sn systems. Sublattice descriptions are used for thermodn.

modeling of the .eta.-Ni3Sn, .lambda. .eta.-Ni3Sn2, .lambda.-Ni3Sn2, and Ni3Sn4 phases. A three-sublattice and sublattice model are used to describe the molar Gibbs energies of .eta.-N and .lambda.-Ni3Sn2, resp., and also to describe the second-order phase transition from .eta.-Ni3Sn2 to .lambda.-Ni3Sn2. In a majority of the ca the agreement between the exptl. data and calcd. values was satisfactory. the exptl. Ni-Pb-Sn ternary phase diagram is not known, several isotherma sections are calcd. based on thermodn. principles.

Ni – Pb

2001

134: 153192z **Thermodynamic assessment of the Cu–Ni–Pb system.** Wang, Cui Ping; Liu, Xing Jun; Ohnuma, Ikuo; Kainuma, Ryosuke; Ishida, Kiyohito (Department of materials Science, Graduate School of Engineering, Tohoku University, Sendai, Japan 980–8579). *CALPHAD: Comput. Coupling Phase Diagrams Thermochem.* 2000 (Pub. 2001), 24(2), 149–167 (Eng), Elsevier Science Ltd. A thermodn. assessment of the binary systems Ni–Pb, Cu–Pb and the ternary system Cu–Ni–Pb was carried out by the CALPHAD method. The Gibbs free energies of both the liq. and solid soln. phases were described by subregular soln. models. A set of parameters describing the Gibbs energies of the different phases in this ternary system was optimized using exptl. phase diagram and thermodn. information. Good agreement between the calcd. phase diagrams and exptl. data was obtained in the binary Ni–Pb, Cu–Pb and ternary Cu–Ni–Pb systems.

(эл., мб. д-мм ΔF, фаз. диаг.)

(+2)

C.A. 2001, 134, N11