Са-ланта-
нощи

$CaOCe_3$

Dupuis Th.,
Lorenzelli V.

1967

C. r. Acad. sci., 264, N 14, B1019-1021

ВР-81-IX

Сравнение спектров поглощения в области 10-40 мк станнатов типа перовскита и из-ре-мелких титанатов, цирконатов и цератов

перекристаллического сегрегения.

(см. $CaOTi_3$)

$Ca_2Yb_2O_5$

$Ca_3Y_2O_6$

C. A. 1973

(Tm)

33341s Reaction of yttrium subgroup rare earth oxides with calcium oxide. Gerasimyuk, G. I.; Zaitseva, Z. A.; Lopato, L. M.; Tresvyatskii, S. G. (Inst. Probl. Materialoved., Kiev, USSR). *Izv. Akad. Nauk SSSR, Neorg. Mater.* 1973, 9(10), 1759-62 (Russ). In the Ln_2O_3–CaO (Ln = Sm to Lu, Y, and Sc) at 30-75 mole % CaO, the formation of 4 types of compds. was established: $CaLn_2O_4$, $CaLn_4O_7$, $Ca_3Ln_2O_6$, and $Ca_4Ln_2O_7$. CaLnO undergo decompn. in the solid phase and crystallize in 2 structural types. The temp. intervals of the existence of the

C.A. 1974. 80 № 6

compds. examd. decrease from Dy to Yb, and in this direction they become [illegible]ced to the more high-temp. region. In the Dy_2O_3–CaO system, $CaDy_2O_4$ forms at 1550° and exists at ≤1960°, above which it decomps. $CaYb_2O_4$ is obtained at 1920°, and it decomps. at >2080°. $Ca_2Ln_2O_5$ crystallize as transparent colorless grains with high birefringence of biaxial, neg., and 45 deg. type optical axes. $Ca_3Y_2O_6$ melts congruently and exists at 1960–2230°, whereas the analogous compd. in the Yb_2O_3–CaO system exists at 2090–2180° and decomps. in the solid phase. $Ca_2Yb_2O_5$ exists at 1800–2200° and melts with decompn. The crystals of this compd. are also transparent, colorless, biaxial, and neg.

S. A. Mersol

$(Er_{0,8}Ca_{0,2})B_6$ (кристал.) 1973

130037j Questions concerning the existence of erbium hexaboride. Crystal structure of erbium calcium hexaboride ($Er_{0.8}Ca_{0.2}$)B_6. Nichols, M. C.; Mar, R. W.; Johnson, Quintin (Mater. Prop. Div., Sandia Lab., Livermore, Calif.). *J. Less-Common Metals* **1973**, 33(2), 317–20 (Eng). When ~4% Ca was present, the decompn. of ErB_6 into ErB_4 and ErB_{12} at 1975° was incomplete, and the cubic phase $Er_{0.8}Ca_{0.2}B_6$ was obtained at room temp. with a_0 4.098 ± 0.001 Å, space group $Pm3m$, R = 0.036, intraoctahedral nearest-neighbor B–B distance 1.751 ± 0.039 Å, and shortest Er–B distance 1.622 ± 0.008 Å.

r_{B-B}

r_{Er-B}

CA1973

79,22

Зак. 247

Tm^{2+}/CaF_2 1973

Wang P. J.:
Drickamer H. G.:

спектр. "J. Chem Phys."
1973, 58 N 10, 4444-51

„High pressure optical studies of rare-earth ions in CaF_2 and other fluorides.

1973

Dy^{2+}/CaF_2 Wang P. J.

Drickamer H.G.

(Синтр) "J. Chem. Phys"

1973, 58, N 10, 4444-51.

"High pressure optical studies of rare-earth ions in CaF_2 and other fluorides.

$CaSc_2O_4$

1981

4 Б325. Колебательные спектры двойных оксидов кальция и скандия. Поротников Н. В., Кондратов О. И., Петров К. И., Оликов И. И. «Ж. неорган. химии», 1981, 26, № 11, 2920—2925

колбат. спектры

Исследованы колебательные спектры двойных оксидов кальция и скандия $^{40}CaSc_2O_4$ и $^{44}CaSc_2O_4$ в области 30—1000 $см^{-1}$. В приближении полимерных цепей метода валентно-силового поля проведен расчет теор. колебательного спектра изотопнозамещенных соединений, предложено отнесение эксперим. спектров, построены частотные ветви колебаний периодич. цепей, оценено силовое поле кристаллов. Резюме

Х. 1982, 19, № 4.

$CaSc_2O_4$

1981

(ИК и СКР)

96: 13258x **Vibration spectra of binary oxides of calcium and scandium.** Porotnikov, N. V.; Kondratov, O. I.; Petrov, K. I.; Olikov, I. I. (Inst. Tonkoi Khim. Tekhnol., Moscow, USSR). *Zh. Neorg. Khim.* 1981, 26(11), 2920–5 (Russ). The IR and Raman spectra were studied of double oxides of Ca and Sc, $^{40}CaSc_2O_4$ and $^{44}CaSc_2O_4$ at 30–1000 cm^{-1}. In the polymer chain approxn. of the valence force field, calcns. were made of the vibrational spectra of isotopic substituted compds., a proposed assignment of the spectra is given, branch frequency vibrations of periodic chains were constructed and the force fields of the crystals were estd.

C.A. 1982, 96, N2.

Cdu 0803 Отписк ~~Н365~~ 14800 1982

De Wispelaere - Schro"-
der U., Tarte P.,

спектр, структура.

C. r. Acad., sce.,
1982, ser. 2., 294, N11,
641 - 644.

$CaMoO_4O_3$ Отпеч ~~14265~~ 14300 1982

De Wispelaere-Schro"
der H., Tarte P.,

спектр,
структура C. r. Acad. sci., 1982,
ser. 2, 294, N 11, 641-
-644.

$CaDyOBO_3$ | Отпеск ~~14300~~ 14300 | 1982

De Wispelaere-Schröder U.,
Tarte P.,
спектр, C.r. Acad. sci., 1982, ser.2,
структура 294, N 11, 641-644.

1982

De Wispelaere-Schro"-
der H., Tarte P.,
C. r. Acad. Sci, 1982,
Ser. 2, 294, N 11,
641-644.

спектр
структура

CaYOBO3 | Омписк ~~14265~~ 14300 | 1982

спектр, структура

De Wispelaere - Schrö-
der H., Tarte P.,
C. r. Acad. sci, 1982,
ser 2, 294, N 11, 641-
- 644.

1982

De Wispelaere-Shröder U., Tarte P.

спектр, сверхпроводящая

C. r. Acad. sci., 1982, Ser 2, 294, N 11, 641-644.

$LaTmO_3$ | Отпись ~~1465~~ 1480 | 1982

De Wispelaere - Schö-
der H., Tarte P.,
спектр,
структура. C. r. Acad. sci., 1982,
Ser 2, 294, N11, 641-
-644.

De Wispelaere - Schröder H., Tarte P., C. r. Acad. sci., 1982, ser 2, 294, N 11, 641-644.