

Са-ланта-
ноиды

CaOSe_3

Dupuis Th.,
Lorenzelli V.

1967

C. r. Acad. Sci., 264, N 14, B1019.
— 1024

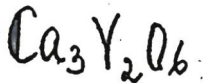
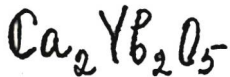
ВФ-81-IX/

Сравнение спектров погло-
щения в области 10-40 мк
слюдистых типа перовскита
и из.-ж.-меломикс пирита-
матов, цирконатов и цирконов

подшипникового сепаратора.

(см. CaOTi_3)

C.A. 1973



(Tm)

33341s Reaction of yttrium subgroup rare earth oxides with calcium oxide. Gerasimiyuk, 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_5 , CaLn_3O_6 , $\text{Ca}_2\text{Ln}_2\text{O}_7$, and $\text{Ca}_3\text{Ln}_2\text{O}_9$. 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 n 6

comps. examd. decrease from Dy to Yb, and in this direction they become ... to the more high-temp. region. In the $\text{Dy}_2\text{O}_3\text{-CaO}$ system, CaDy_2O_4 forms at 1550° and exists at $\leq 1960^\circ$, above which it decomp. CaYb_2O_4 is obtained at 1920° , and it decomp. at $>2080^\circ$. $\text{Ca}_2\text{Ln}_2\text{O}_4$ crystallize as transparent colorless grains with high birefringence of biaxial, neg., and 45 deg. type optical axes. $\text{Ca}_2\text{Y}_2\text{O}_4$ melts congruently and exists at $1960\text{--}2230^\circ$, whereas the analogous compd. in the $\text{Yb}_2\text{O}_3\text{-CaO}$ system exists at $2090\text{--}2180^\circ$ and decomp. in the solid phase. $\text{Ca}_2\text{Yb}_2\text{O}_4$ exists at $1800\text{--}2200^\circ$ and melts with decompn. The crystals of this compd. are also transparent, colorless, biaxial, and neg.

S. A. Mersol

1973

 $(\text{Er}_{0.8}\text{Ca}_{0.2})\text{B}_6$ (кремен.)

130037j Questions concerning the existence of erbium hexaboride. Crystal structure of erbium calcium hexaboride $(\text{Er}_{0.8}\text{Ca}_{0.2})\text{B}_6$. 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 $\sim 4\%$ Ca was present, the decompn. of ErB_6 into ErB_4 and ErB_{12} at 1975° was incomplete, and the cubic phase $\text{Er}_{0.8}\text{Ca}_{0.2}\text{B}_6$ was obtained at room temp. with a_0 4.098 ± 0.001 Å, space group $Pm\bar{3}m$, $R = 0.036$, intraoctahedral nearest-neighbor B-B distance 1.751 ± 0.039 Å, and shortest Er-B distance 1.622 ± 0.008 Å.

CA 1973

79, 22

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.

(Chemtr) "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. неорганич. химии», 1981, 26, № 11, 2920—2925

колебам.
спектры

Исследованы колебательные спектры двойных оксидов кальция и скандия $^{40}\text{CaSc}_2\text{O}_4$ и $^{44}\text{CaSc}_2\text{O}_4$ в области 30—1000 см^{-1} . В приближении полимерных цепей метода валентео-силового поля проведен расчет теор. колебательного спектра изотопнозамещенных соединений, предложено отнесение эксперим. спектров, построены частотные ветви колебаний периодич. цепей, оценено силовое поле кристаллов. Резюме

X. 1982, 19, № 4.

CaSc_2O_4

1981

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, $^{40}\text{CaSc}_2\text{O}_4$ and $^{44}\text{CaSc}_2\text{O}_4$ 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.

(UK u CKP)

C.A. 1982, 96, N2.

CaduDBD3

Ommuck ~~4485~~ 1982
14800

De Wispelaere - Schrö-
der U., Tarte P.,

спектр,
структура.

C. r. Azad., sci.,
1982, ser. 2., 294, N 11,

● 641 - 644.

$\text{CaMoO}_4\text{BO}_3$

[Omnium ~~14265~~
14300] 1982

De Wispelaere-Schroö-
der U., Tarte P.,

стр. 1р,

сир. кт. 1р

C. z. Acad. sci., 1982,
ser. 2, 294, N 11, 641-
-644.

Ca DyOBoz

Ommuck ~~14200~~
14300

1982

De Wispelaere-Schröder U.,
Tarte P.,

члени,
членки

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

Ca ScOBD₃

[Ommuck ~~44265~~
14300]

1982

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

чекер
сируктура

C. r. Acad. Sci, 1982,
ser. 2, 294, N 11,

● 641-644.

CaYOB_3 Ommuck ~~4465~~
14300 1982

De Wispelaere - Schrö-
der U., Tarte P.,

структур,
сирруктура

C. z. Acad. sci, 1982,
ser 2, 294, N 11, 641-
- 644.

Ca Er₂O₃BO₃ Ommuck #4265 1982
14800

De Wispelaere-Schröder
U., Tarte P.

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сѣрѣкшрѣ

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

CaTmOBO_3 Ummuck 4465 1982
14800

De Wispelavere-Schö-
der U., Tarte P.,

спектр,
структура.

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

CaYBOBO₃

[Dm meek 44265
14300]

1982

De Wispelaere-Schrö-
der L., Tarte P.,

чекіў,
випрытупа

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