

Солдаты
V

$\text{VPO}_4 (\text{up}) \left\{ \begin{array}{l} \text{(vi)} \\ \text{V}^{\text{III}} - 348 \end{array} \right.$
 $\text{VbPO}_4 (\text{up})$

1966

Richman I.

J. Opt. Soc. America, 1966; 56, 11, 1589.

Raman spectra of VPO_4
and VbPO_4 .

1580/cm

Pu Xue, 1967, 125140

W

YPO_4

Bp-2106-VIII

1968.

Ropp R.C.

(vi)

J. Electrochem Soc.,
1968, 115 N 8, 841-45

YASO₄

1970

Brown R. G., Ross S. D.

vi.

Spectrochim. Acta, 1970,
26, 955-61.

● (Co₄ MgSeO₄ · H₂O)_i III

Y^{3+} — инертн. газ.

1973

Краснов К.С., Соломкин В.Г.

Витика и спектроскопия,
геометр. 1973, 34, № 619-621.

● с.и. Na^+ — ин. газ
III

*4-7723

1974.

Y(NH₂)₃

Linde G.

Fura R.

IR-spectra.

Z. Anorg. allg. Chem.
1974, 409, N2, 199-214

YBO_3

1981

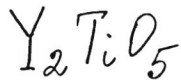
Иванов Ю. Н. и др.

Железные кассеты. Соедин.
бора. 5-е Всесоюз.

V_L ;

Тез. докл. Пуш, 1981,
64-65.

(см. $SeBO_3$; III)



1980

Porotnikov N.V., et al

колебат.
спектр.
сил.ност.

Zh. Neorg. Khim., 1980, 25(8),
2072-81.



(ссылка на Y_2TiO_5 (к)) III.

$\text{Y}_2\text{Ti}_2\text{O}_7$

1983

Vandenborre M. T.,
Musson E., et al.

Ti , cer.
noeu. J. Raman Spectrosc.
1983, 14(2), 63-71.

(cer. $\text{La}_2\text{Ti}_2\text{O}_7$; III)

YA304

Om. 25778 |

1987

Раман

и
иК

спектр

Pradhan A.K., Choudha-
ry R.N.P., et al.,

Phys. Status Solidi,

1987, B 139, N1, 337-345.



Y Si₂
(метал.)

1989

111:45509z The electronic structure of yttrium disilicide. Martinage, L. (CNRS, Univ. Joseph Fourier, 38042 Grenoble, Fr.). *J. Phys.: Condens. Matter* 1989, 1(15), 2593-6 (Eng). The electronic structure was studied of YSi₂. The d. of states is calcd. within a tight-binding scheme and charge transfer is treated in a self-consistent way. The results show that hybridization between Si and Y is mainly due to Si p_z and Y d coupling and that YSi₂ is a metal. The densities of states compare well with those from the UV photoemission and ion photoemission spectra.

метал.
структура

с.А. 1989, III, №6

YNH
NYH

1990

114: 30436m Geometries and energy separations of low-lying states of yttrium imide and yttrium hydride nitride (YNH and NYH). Das, Kalyan K.; Balasubramanian, K. (Dep. Chem., Arizona State Univ., Tempe, AZ 85287-1604 USA). *J. Chem. Phys.* 1990, 93(9), 6671-5 (Eng). Complete active-space multiconfiguration SCF followed by multireference configuration-interaction calcns. are carried out on low-lying electronic states of YNH and NYH. We find the $X^2\Sigma^+$ linear state of Y-N-H to be 55 kcal/mol more stable than the bent NYH and 59 kcal/mol more stable than the linear N-Y-H. Our calcns. confirm the recent assignment of the first obsd. spectra generated by laser vaporization of Y metal + He/ NH_3 . The theor. dipole moment of the Y-N-H mol. (3.06 D) is in excellent agreement with an exptl. value of 3.06 K obtained by Simard et al. The theor. Y-N and N-H bond lengths are also in good agreement with the exptl. results.

геометрии,
энергетика -
теорет. расч.,
расч.

С.А. 1991, 114, NY

X-N-H

OM. 35367

1990

Simard B., Balfour W. F.,
Burgess et al.,

Can. J. Chem. Phys. 1990,

93, N6, 4481-4482.

Jet-cooled
transition



spectroscopy
metal con-

training polyatomic mole-
cules; The visible spectrum
of ~~wood~~ yttrium oxide.

1994

F: YHBr

P: 3

6B146. Смешанные трехатомные молекулы гидрид-галогенидов переходных металлов второго переходного ряда. 2nd Row transition metal mixed hydride halide triatomic molecules / Siegbahn P. E. M. // Theor. chim. acta. - 1994. - 88, N 6. - С. 413-424. - Англ.

РМХ 1994

1994

F: YHI

P: 3

6B146. Смешанные трехатомные молекулы гидрид-галогенидов переходных металлов второго переходного ряда. 2nd Row transition metal mixed hydride halide triatomic molecules / Siegbahn P. E. M. // Theor. chim. acta. - 1994. - 88, N 6. - С. 413-424. - Англ.

Ршх 1997

1996

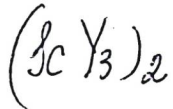
F: YPO₄

P: 3

16B1235. Люминесцентные свойства некоторых фосфатов редкоземельных элементов. Luminescent properties of some rare earth phosphates : [Pap.] 13th Int. Conf. Phosphorus Chem. (XIIIth ICPC), Jerusalem, July 16-21, 1995. Pt 2 / Melnikov P., Massabni Ana Maria, Malta O. [Phosphorus, Sulfur and Silicon and the Related elements] // Phosph., Sulfur and Silicon and Relat. Elem. - 1996. - 111, N 1 - 4. - С. 1. - Англ.

Исследованы спектры ЛМ матриц переменного состава Sc_xY_[1-y]PO₄ (x=0,25; 0,5 и 0,75), а также ScVO₄. Положение полос обусловлено взаимодействием катионных и анионных орбиталей. Обсуждены точечная симметрия активных центров, неприводимые представления уровней, природа наблюдаемой ЛМ и ее тушения при следовании по ряду соединений от слабой голубой в YPO₄ до красной ЛМ в ScPO₄.

РЖХ 1997



1997

Ezhov Yu. S., et al.,

J. Struct. Chem. (Transl.
of Zh. Struct. Khim)
1997, 38 (3), 403-407

сруктура,
Di, некро
ногродил



YPS₄

1998

/ 130: 87532z Raman spectroscopy of rare earth thiophosphate-
(LnPS₄, Ln = Y, La - Lu) series compounds. Huang, Zhongle
(Department of Chemistry, Xiamen University, Xiamen, Peop. Rep. China
361005). *Zhongguo Xitu Xuebao* 1998, 16(3), 208-212 (Ch), Yejin
Gongye Chubanshe. The Raman spectroscopy study of LnPS₄ series
compds. with tetragonal xenotime structure shows that the sym. stretch-
ing vibration frequency ν_1 increases linearly with the lanthanide contrac-
tion, i.e., the decrease of the effective ionic radius $r_{Ln^{3+}}$. Also, the ν_1

(CKP, ν_1)

frequency for the nontetragonal LuPS₄ falls off the line running through
the corresponding values for the tetragonal phases. This tendency is
consistent with their structural modifications.

LnPS₄ (Ln = La - Lu)

(H) Δ 

C. A. 1999, 130, N 7

F: AunYm+

P: 3

132:140459 Stability effects of AunXm+ (X=Cu, Al, Y, In) clusters. Bouwen W.; Vanhoutte, F.; Despa, F.; Bouckaert, S.; Neukermans, S.; Theil Kuhn, Weidele, H.; Lievens, P.; Silverans, R. E. Laboratorium voor Vaste-Stoffysica en Magnetisme, K.U. Leuven Louvain B-3001, Belg. Chem. Phys. Lett., 314(3,4), 227-233 (English) 1999 Bimetallic AunXm clusters (X=Cu, Al, Y, In, n=1-65, m=1 and 2) were produced by a dual-target dual-laser vaporization source. Following mult absorption, the stability patterns resulting from fragmentation were investigated by time-of-flight mass abundance

C-A. 2000, 132

spectrometry. $\text{Au}_{n\text{Cum}}^+$ clus exhibit the same electronic shell effects as Au_n^+ . Different abundance p are obsd. for $\text{Au}_{n\text{Al}}^+$ compared to $\text{Au}_{n\text{Y}}^+$ or $\text{Au}_{n\text{In}}^+$. The patterns are re to the magic nos. of the electronic shell model for clusters. The differ between the bimetallic clusters are interpreted in terms of different clu geometries dependent on the dopant atoms nature.

ОУММUCK № 40049

1999

HeY^{3+}

α_e, D_0, w_e
 $w_e \alpha_e, B_e$
Геоп.параметры

Wesendrup R., Pernpointner M.,
Schwerdtfeger P.

Phys. Rev. A, 1999, 60, 55,
R 3347 - R 3349

Coulomb-stable triply charged
diatomic : HeY^{3+}

Y/Bz3

AM. 40661

2080

Jonathan C Wass et al.,

cmp-pa

J. Phys.: Condens. Matter
2000, 12, N46; 9539-9550

YB₅₆

2001

134: 152890p Atomic structure of YB₅₆ studied by digital high-resolution electron microscopy and electron diffraction. Oku, Takeo; Bovin, Jan-Olov; Higashi, Iwami; Tanaka, Takaho; Ishizawa, Yoshio (Institute of Scientific and Industrial Research, Osaka University, Ibaraki, Japan 567-0047). *J. Mater. Res.* 2001, 16(1), 101-107 (Eng), Materials Research Society. At. positions for Y atoms were detd. by

Атомная
и электрон.
микроскопия.

using high-resoln. electron microscopy and electron diffraction. A slow-scan charge-coupled device camera which had high linearity and electron sensitivity was used to record high-resoln. images and electron diffraction patterns digitally. Crystallog. image processing was applied for image anal., which provided more accurate, averaged Y atom positions. In addn., at. disordering positions in YB₅₆ were detected from the differential images between obsd. and simulated images based on x-ray data, which were B₂₄ clusters around the Y-holes. The present work indicates that the structure anal. combined with digital high-resoln. electron microscopy, electron diffraction, and differential images is useful for the evaluation of at. positions and disordering in the boron-based crystals.

C.A. 2001, 134, N11

Yb₂

2001

Vajeeston P. et al.,

neopem-
pacem
mekmoh.

Phys. Rev. B: Condens.
Matter Matter Phys.

cmr jr
u co b

2001 / 63 (4), 045115/1 —

o ocr-m.

045115/12

cocm.

Δ+H, Ce u g.

(all. ● Sc B₂; III)