RuO$_2$

RuO_2 Gingerich K. A., 1980

RuO_3 Current Topics in Materials

RuO_4 Science, Volume 6, edited

by Kaldes E.

North-Holland Publishing

До; Company, 1980.

(есть оттиск в коробке оттис-

ков Gingerich).

$D_0(Ru-O_2)$ 1986

Ziegler Tom.

структ., теор. расчёт: Inorg. Chem. 1986, 25(16), 2721-7.

(см. $D_0(Ru-CO)$; III)

RuO_2 (om. 30975) 1988

Mayer J. M.,

(r(M-O)) Inorg. Chem. 1988, 27,
N 22, 3899–3903.

(ОМ. 31268) 1988

Di(Ru-O)

(в крист.)

Miskowski V.M., Loehr T.M et al.,

Inorg. Chem., 1988, 27, N 26, 4708-4712.

RuO2 | оттиск N 30 | 1989

Cordfunke E.H.P., Koning R.J.M., Westrum E.F., Jr.,

термофиз. св-ва

J. Nucl. Mater. 1989, 167, 205-212.

(см. коробку 1 „а" с оттисками Cordfunke E.H.P.)

RuO2

1989

110: 162594p Nonempirical Xα-discrete-variational model of the electronic structures of simple ruthenium oxides. Dobrodei, N. V.; Kondratenko, A. V.; Gutsev, G. L. (Inst. Khim. Fiz., Chernogolovka, USSR). *Zh. Fiz. Khim.* 1989, 63(1), 128-34 (Russ). Self-consistent Xα discrete-variational method was used to calc. electronic structure of the series of the clusters modeling Ru oxides with different oxidn. degree (RuO_2, RuO_4, $KRuO_4$). Also, applicability of these models was detd. for describing exptl. photoelectron and x-ray spectra of these oxides.

теор. расчет

42

C.A.1989, 110, N18

RuO_2 1989

Kay Jack G., Green David W., et al.

Спектры в матрице, Vi, структура.

J. Mol. Spectrosc. 1989, 138(1), 49-61.

(См. ● RuO; III)

2000

DM. 40463

F: RuO2-
P: 3
132:300257 Infrared Spectra and Density Functional Calculations of MO2, M (O2)MO2, MO4, MO2- (M = Re, Ru, Os) and ReO3-, ReO4- in Solid Neon and Ar Zhou, Mingfei; Citra, Angelo; Liang, Binyong; Andrews, Lester Department of Chemistry, University of Virginia Charlottesville, VA 22901, USA J. Phys. Chem. A, 104(16), 3457-3465 (English) 2000

Laser-ablated Re, Ru and Os atoms react with O2 in excess Ne and Ar during condensation to form the MO2 dioxide mols. as major products. The oxides with D3h symmetry, the (O2)MO2 dioxide

C.A.2000, 132

complexes with C2v symmetry the tetrahedral MO4 (M = Ru, Os) mols. are formed on sample annealing. Photolysis converts the (O2)MO2 complexes to the more stable MO4 isomers. The MO2- dioxide, ReO3- and ReO4- anions are also formed via electron cap by the neutral mols. The metal oxide neutrals and anions were identified from O-18 substitution and natural metal isotopic splittings and from DFT calcns. of isotopic frequencies. Doping with CCl4 to serve as an electro trap gave the same neutral mol. bands and virtually eliminated the anion absorptions, which further supports the anion identifications. IR spectra density functional metal oxide anion; rhenium ruthenium osmium oxide soli neon argon matrix

2000

F: RuO2
P: 3
132:300257 Infrared Spectra and Density Functional Calculations of MO2, M (O2)MO2, MO4, MO2- (M = Re, Ru, Os) and ReO3-, ReO4- in Solid Neon and Ar Zhou, Mingfei; Citra, Angelo; Liang, Binyong; Andrews, Lester
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Charlottesville, VA 22901, USA J. Phys. Chem. A, 104(16), 3457-3465 (English) 2000 Laser-ablated Re, Ru and Os atoms react with O2 in excess Ne and Ar during condensation to form the MO2 dioxide mols. as major products. The oxides with D3h symmetry, the (O2)MO2 dioxide complexes with C2v symmetry the tetrahedral MO4 (M = Ru, Os) mols. are formed on sample

C.A. 2000, 132

annealing. Photolysis converts the $(O_2)MO_2$ complexes to the more stable MO_4 isomers. The MO_2^- dioxide, ReO_3^- and ReO_4^- anions are also formed via electron cap by the neutral mols. The metal oxide neutrals and anions were identified from O-18 substitution and natural metal isotopic splittings and from DFT calcns. of isotopic frequencies. Doping with CCl_4 to serve as an electro trap gave the same neutral mol. bands and virtually eliminated the anion absorptions, which further supports the anion identifications. IR spectra density functional metal oxide anion; rhenium ruthenium osmium oxide soli neon argon matrix

RuO2

2001

(Ttr)

F: RuO2 (Ttr)
P: 1

02.01-19Б3.94. Тепловые процессы летучего RuO[2] в матрицах нанокристаллического Al[2]O[3], включающие фазовое превращение 'гамма''->''альфа'. Thermal processes of volatile RuO[2] in nanocrystalli Al[2]O[3] matrixes involving 'гамма''->''альфа' phase transformation / Ji Lin J., Zeng H. C. // Chem. Mater. - 2001. - 13, N 7. - С. 2403-2412. - A С использованием методов ИКС с фурье-преобразованием, порошковой дифракци рентгеновских лучей, просвечивающей электронной микроскопии, ДТА, ТГА и Р исследованы сложные тепловые процессы летучего соединения RuO[2] в матриц 'гамма'-Al[2]O[3], включающие фазовые превращения, в интервале температур 400-1000рС. Исследовались образцы нанокомпозитов RuO[2]-Al[2]O[3], получе по золь-гелевой технологии и содержавших от 0,5 до 2,0% Ru. Библ. 54. Биб 54.