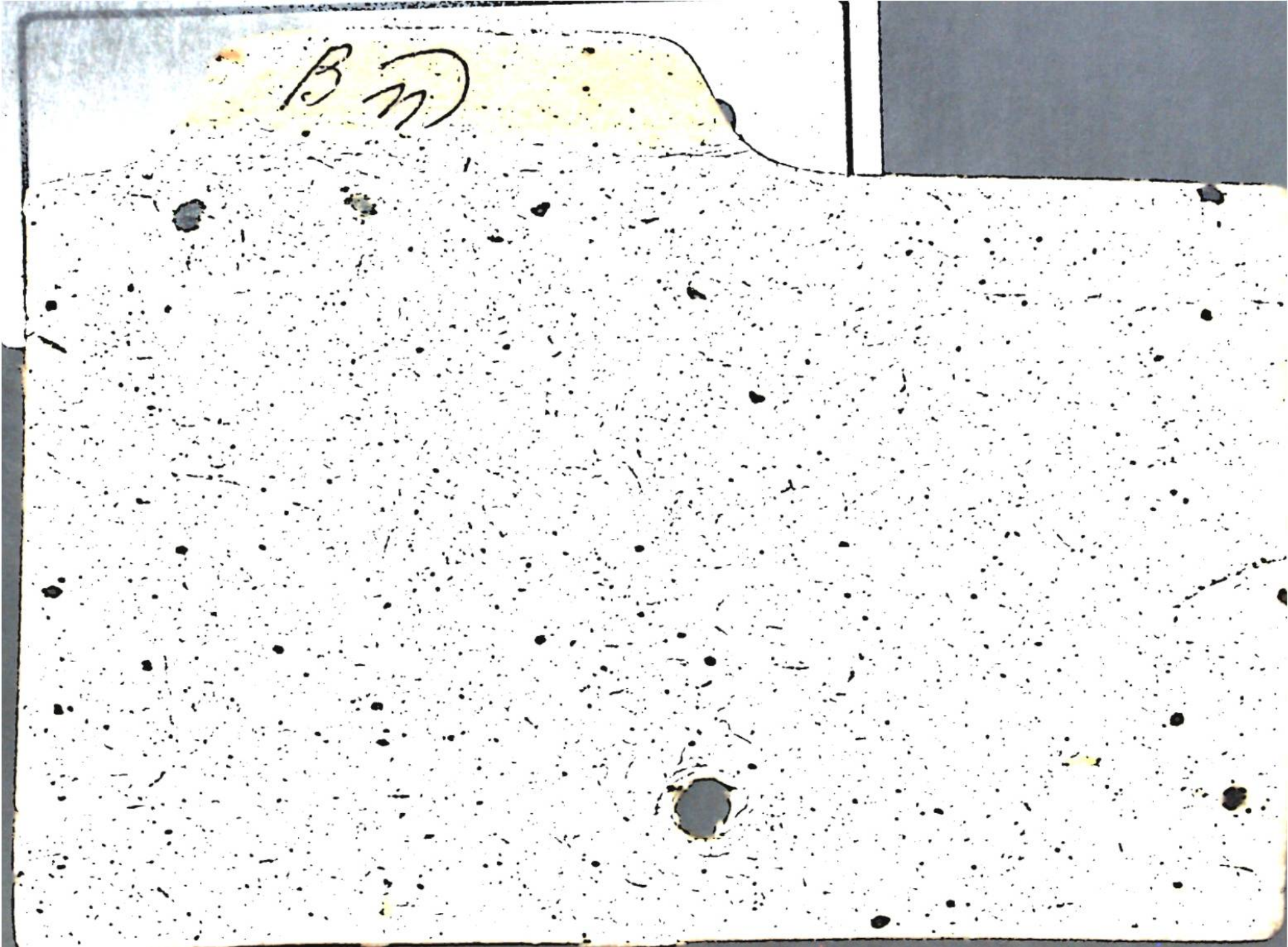

B (ионы, комплексы, полиядерные в водн. р-ре)

1980

93: 211164q A critical evaluation of the thermodynamic data for boron ions, ion pairs, complexes, and polyanions in aqueous solution at 298.15 K and 1 bar. Bassett, R. L. (US Geol. Surv., Denver, CO 80225 USA). *Geochim. Cosmochim. Acta* 1980, 44(8), 1151–60 (Eng). A polemic. Thermodn. data for B ions, ions pairs, complexes, and polyanions in aq. soln. a- critically evaluated.

м. дин. сб-ка

C.A. 1980, 93 n 22

B+ 1984

12 Л98. Возобновленное изучение однократно ионизованного бора. A renewed study of singly ionized boron. Bashkin S., McIntyre L. C., Von Buttlar H., Ekberg J. O., Martinson I. «Nucl. Instrum. and Meth. Phys. Res.», 1985, B9, № 4: Phys. Highyl Ionised Atoms. Proc. Int. Conf., Oxford, 2—5 July, 1984, 593—597 (англ.)

С помощью классической эмиссионной спектроскопии, а также при возбуждении пучково-пленочным методом выполнено новое исследование спектра B II. Предложены новые идентификации спектра, приведшие к пересмотру энергий уровней $2s3s\,^1S$ и $2s5p\,^1P^\circ$. Установлены также значения уровней $2p3s\,^1P^\circ$ и $2s6p\,^1P^\circ$. Измерены времена жизни для уровней $2s2p\,^1P^\circ$, $2p^2\,^1S$, $2s3d\,^1D$ и $2p^2\,^3P$. Найдены силы осцилляторов переходов $2s^2\,^1S$—$2s2p\,^1P^0$, $2s2p\,^1S$ —$2p^2\,^1S$ и $2s2p^3P^0$—$2p^2\,^3P$. Найденные значения находятся в хорошем согласии с теоретич. величинами.

А. Н. Рябцев

E, спектр

сф. 1985, 18, N 12

$B_2(\Gamma)$ (ОП. 24028) 1986

Lilov S.K.,

K_p, $\Delta_f H$; J. Phys. and Chem. Solids, 1986, 47, N3, 245-250.

B_{12}

1991

Kleinman Leonard.

Boron-Rich Solids : Pap. 10th Int. Symp. Boron. Borides, and Relat. Compounds, Albuquerque, N.M. 1990. New York (N.Y.), 1991. c. 13-20.

(сер. ВСх ; I)

ΔHf, расчёт

B_{50}

1992

116: 266135c **Computational search for the real tetragonal boron (B_{50}).** Lee, Seoungbok; Bylander, D. M.; Kim, Suck Whan; Kleinman, Leonard (Dep. Phys., Univ. Texas, Austin, TX 78712 USA). *Phys. Rev. B: Condens. Matter* 1992, 45(7), 3248–51 (Eng). Using an expansion of ~12,700 plane waves, the lattice consts. and heat of formation of tetragonal B_{50}, $B_{48}C_2$ $(B_{50}C_2)_a$, $(B_{50}C_2)_s$, $(B_{52}C_2)_a$, and $(B_{52}C_2)_s$ were calcd. Of these only $(B_{50}C_2)_s$ has both a and c within 1% of their x-ray values as well as having, by far, the least neg. heat of formation.

(расчет $\Delta_f H$)

(+) $B_{48}C_2$ и др

C. A. 1992, 116, N26

B_2^{3+}

1992

116: 224106r Molecular ion stability and populations in tandem accelerator mass spectrometry. Matteson, S.; Weathers, D. L.; Kim, Y. D.; Arrale, A. M.; McDaniel, F. D.; Duggan, J. L.; Anthony, J. M.; Douglas, M. A. (Cent. Mater. Charact., Univ. North Texas, Denton, TX 76203 USA). *Nucl. Instrum. Methods Phys. Res., Sect. B* 1992, B64(1-4), 330-5 (Eng). The success of tandem accelerator mass spectrometry (AMS) rests, in part, on the dissocn. of interfering mol. species in high charge states. Previous work in this lab. has detected persistent mols. of B_2^{3+}. MO calcns. suggest that the mol. ion is bound in an excited state, but unbound in the ground state. Other binary homonuclear and heteronuclear ions have been examd. theor., and AlO^{3+} appears to be bound in the ground state. In the present work, exptl. detn. of the relative abundance, dissocn. cross section in the stripper gas and the charge fraction branching ratios for the at. fragments of B_2 are presented. These results permit an assessment of the expected background levels to be encountered in the application of AMS to stable isobar mass spectrometry.

(масспектр.)

⊠ (+) AlO^{3+}

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