

However, a better agreement with the experimental data for metallic technetium is obtained when the band structure calculations [5] is applied. For the dilute solid solutions formed by technetium into platinum and gold matrices, the local electron structure calculations was not carried out with the exception of reference [6]. An agreement of the theoretical and experimental results is satisfactory only for technetium into platinum matrix.

The results obtained in the present work demonstrate a fairly fine local band structure analysis for the impurity atoms of technetium into metallic technetium, platinum and gold matrices by the CES method. The application of this method to the investigation of the local electron density appears to be particularly promising.

The research described in this publication was made possible in part by Grant No. N9E000 from the International Science Foundation and by Grant No. N9E300 from the International Science Foundation and Russian Government.

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