

hexagonal phase.

McHargue and Yakel [9] have examined cerium by X-ray diffraction analysis in the range of temperatures from room to helium level, and they found that plastic deformation suppresses the γ - β transition; all the transitions covered a considerable range of temperatures.

The authors would like to thank V. P. Goryachev, O. I. Solov'yev for assisting in the experiments and processing of the results.

REFERENCES

1. P. W. Bridgman, *Proc. Am. Acad. Arts. Sci.*, 62, 207 (1927).
2. P. W. Bridgman, *Proc. Am. Acad. Arts. Sci.*, 76, 71 (1948).
3. P. W. Bridgman, *Proc. Am. Acad. Arts. Sci.*, 79, 125 (1951).
4. A. I. Likhter, Yu. N. Ryabinin and L. F. Vereshchagin, *Zh. eksp. teor. fiz.*, 33, 610 (1957).
5. Ye. G. Ponyatovskiy, *Dokl. Akad. Nauk. SSSR*, 120, 1021 (1958).
6. R. Herman and C. A. Swenson, *J. Chem. Phys.*, 29, 398 (1958).
7. F. F. Voroniv, L. F. Vereshchagin and V. A. Goncharov, *Dokl. Akad. Nauk. SSSR*, 135, 704 (1960).
8. L. D. Livshits, Yu. S. Genshaft and Yu. N. Ryabinin, *Fiz. metal. metalloved.*, 9, 726 (1960).
9. C. J. McHargue and H. L. Yakel, *Acta met.*, 8, 637 (1960).
10. R. G. Beecroft and C. A. Swenson, *Phys. Chem. Solids*, 15, 234 (1960).
11. M. K. Wilkinson, H. R. Child, C. J. McHargue, W. C. Koehler and F. O. Wollan, *Phys. Rev.*, 122, 1409 (1961).
12. L. D. Livshits, Yu. S. Genshaft and V. K. Markov, *Zh. eksp. teor. fiz.*, 43, 1262 (1962).
13. Ye. S. Itskevich, *Zh. eksp. teor. fiz.*, 42, 1173 (1962).
14. K. A. Gschneidner, R. O. Elliott and R. R. McDonald, *J. Phys. Chem. Solids*, 23, 555 (1962).
15. Ye. G. Ponyatovskiy, *Kristallografiya*, 7, 287 (1963).
16. B. L. Davis and L. H. Adams, *Phys. Chem. Solids*, 25, 379 (1964).
17. G. J. Piermarini and C. E. Weir, *Science*, 144, 69 (1964).
18. A. Jayaraman, *Phys. Rev.*, 137, A179 (1965).
19. A. W. Lawson and T. Y. Tang, *Phys. Rev.*, 76, 301 (1949).
20. L. H. Adams and B. L. Davis, *Proc. Nat. Acad. Sci.*, 48, 982 (1962).
21. V. V. Yevdokimova and Yu. S. Genshaft, *Fiz. tverd. tel.*, 6, 2449 (1964).
22. A. P. Frolov, L. F. Vereshchagin, K. P. Rodionov and M. I. Oleynik, *Fiz. metal. metalloved.*, 14, 80 (1962).
23. S. A. Nemnonov, M. I. Oleynik and A. P. Frolov, *Fiz. metal. metalloved.*, 8, 158 (1959).
24. K. Gschneidner, *Solid St. Phys.*, 16, 275 (1964).
25. V. V. Yevdokimova, Author's Abstract of Dissertation, IFZ, Moscow (1966).