

## THE ENERGY LEVELS OF URANIUM IV, V, AND VI

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Spin-orbit configuration-interaction calculations are performed on  $U^{3+}$ ,  $U^{4+}$ , and  $U^{5+}$ . Uranium is modeled with relativistic effective core potentials of various sizes and Gaussian cc-pVDZ and cc-pVTZ basis sets. The  $U^{4+} 5f^2$  ion has been studied extensively, and the calculations are compared with the experimental spectrum<sup>a</sup>.

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<sup>a</sup>J. F. Wyart, V Kaufman, and J. Sugar *Phys. Scr.* **22**, 389 (1980)