1995 uranium, U

uranium, U I 5900 $\boxed{42-023}$

Synthesis and Characterization of Mixed Valence Uranium Orthophosphate: U(UO2)(PO4)2. — Reinvestigation of the system UO2-P2O5 leads to preparation of the novel mixed valent title compound by both dry and wet chemical methods. Under the experimental conditions used, the previously mentioned compounds U3(PO4)4 and U2O3P2O7 do not exist as shown by XRD, UV-VIS, IR, Raman, and XPS spectroscopies. The title compound crystallizes with triclinic symmetry with four formula units in the unit cell (Z = 4). — (DACHEUX, N.; BRANDEL, V.; GENET, M.; New J. Chem. 19 (1995) 1, 15-25; GroupeRadiochim., Inst. Phys. Nucl., Univ. Paris Sud, F-91406 Orsay, Fr.; FR)