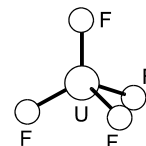


**198**  
ED, IR**F<sub>4</sub>U****Uranium tetrafluoride**  
Uranium(IV) fluoride**T<sub>d</sub>**  
**UF<sub>4</sub>**

$r_g$	$\text{\AA}^a$
U-F	2.059(5)
F...F	3.338(36)
$r_\alpha$	$\text{\AA}^a$
U-F	2.017(5)



The experimental ED data from [1] were reanalyzed. The molecular models of T<sub>d</sub>, C<sub>2v</sub>, C<sub>3v</sub> and D<sub>2d</sub> symmetry were verified. The values of the *R*-factors for these models were found to be very close to each other, but the tetrahedral structure was preferred. The spectroscopic data were also compatible with T<sub>d</sub> symmetry. The nozzle temperature was 1300(50) K.

<sup>a</sup>) 2.5 times the estimated standard errors including a systematic error.

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[1] Girichev, G.V., Petrov, V.M., Giricheva, N.I., Zasorin, E.Z., Krasnov, K.S., Kiselev, Yu.M.: Zh. Struct. Khim. **24** No.1 (1983) 70; J. Struct. Chem. (Engl. Transl.) **24** (1983) 61.

See also: Bazhanov, V.I.: Zh. Struct. Khim. **31** No.6 (1990) 46; J. Struct. Chem. (Engl. Transl.) **31** (1990) 888.

Replaces [II/25A\(2, 599\)](#)