

538.9

_____ , « » ,
 . . , . . , « » ,

WC/Si

()

(0,01-3 12,3-50)

[1].

W Si

WC/Si.

WC

W

Ar

~1

W /Si

d

0,2...3,4

W

0,17 / , Si – 0,51 / .

$t_w : t_{Si2}$

1:3.

-3 ,

Cu-K .

1,4° , . .

2 -

W/Si

WC/Si

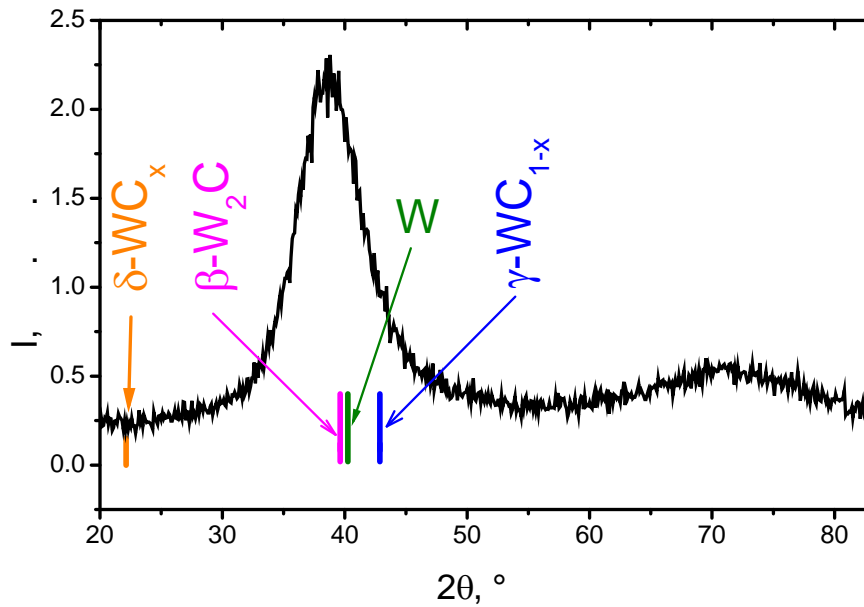
WC, WC_{1-x}, W₂C, W₅Si₃ SiC.

20

W

1

WC 3,4 (WC 20,2).



1 -

WC 3,4

($2\Delta\theta > 6^\circ$).

(~40°)

100%

[2],

WC/Si

0,7

W₂C.

0,5

WC

WSi₂

SiC.

1. David, L. Stress, microstructure, and stability of Mo/Si, W/Si, and Mo/C multilayer films / L. David // Windt. J. Vac. Sci. Technol. A. – 18(3). – 2000. – p. 980-991.

2. , . . . , . . . , . . . ,

// // , . . . , – 1999. – 1. – . 102–110.