

Use of SHS- Materials as Cathodes of Ion Sources

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ABSTRACT

Unique combination of properties of titanium diboride: high values of hardness, wear resistance, electro- and thermal condition etc., allows it to be used in different spheres of techniques. Principal possibility of use of SHS materials of TiB_2 -Fe system as cathodes of ion sources is shown in the paper. It is shown, that for obtaining of cathodes with $TiB_2 + nFe$ composition various starting reagents may be used. The effect of conditions of ion implantation on properties of tool steels in use of SHS $TiB_2 + nFe$ cathodes was shown.