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PLASMA GENERATION IN AN ARC DISCHARGE WITH A CATHODE SPOT AND A NON-SELF-SUSTAINED DISCHARGE WITH A HOT ANODE*

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The paper presents the results of a study of plasma generation during the simultaneous operation of an arc metal evaporator and a PINK plasma generator with a hot evaporated anode made of boron powder. This discharge system makes it possible to obtain coatings from borides of various metals.

The plasma concentration, electron temperature, and ion current density, and their dependence on the operating modes of the discharge system, as well as their influence on the properties, structure, and composition of the modified substrate layer, were studied by the probe method.

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