

THE APPLICATION OF THE PD-BA COATING IN THE PENNING ION SOURCE

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The method to improve service characteristics of the gas-filled electrovacuum devices, based on the Pd-Ba coating of the Penning ion source, is described. This improvement is achieved due to the rise of the atomic ion fraction in the extracted beam as well as to the fall of the discharge potential. The first effect may be explained by the Pd catalytic properties, whereas the second – by the adding of the emission active doping (Ba). The improved service characteristics data are exemplified.