ON THE APPLICATION OF ITERATIVE KINETIC MODEL FOR DIAGNOSTICS OF ABNORMAL GLOW DISCHARGES IN NOBLE GASES

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Abstract. We report the results of application of iterative kinetic model to the experimental profiles and electric field distributions recorded in the cathode sheath (CS) of abnormal glow discharges in noble gases and show the model enables determination of the most important CS parameters.

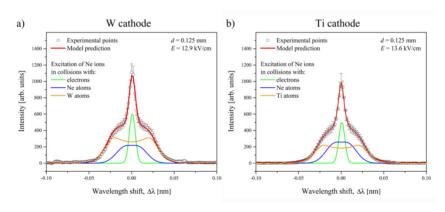


Figure 1: Intensity vs wavelength shift, $\Delta\lambda$, for the Ne II 371.308 nm line profile recorded side-on 0.125 mm from the W (a) and Ti (b) cathode. Experimental points are shown by symbols, and the model profiles by the full lines.

References

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