CR/SC MULTILAYER RADIATOR FOR PARAMETRIC EUV RADIATION IN "WATER-WINDOW" RANGE

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Recently, in [1] it was experimentally shown that a Mo/Si multilayer may be used for generation of quasimonochromatic radiation in the range of extreme ultraviolet. This report presents the results of similar experimental study using the multilayer radiator consisted of 100 Cr/Sc bi-layers placed on a 0.5 μm thick Si_3N_4 membrane. The multilayer was specially created for generation of the parametric radiation in the вГЁwater windowвГ№ spectral range of generated photons. The results of test measurements of the angular distributions of the density of extreme ultraviolet radiation generated by 5.7 MeV electrons in a periodic structure of the multilayer are presented and discussed.

The present research was supported by the Ministry of Education and Science, the state order No. 3761, and by the Russian Foundation for Basic Research, the project No. 14-02-01032. The french team was supported by the Agence Nationale pour la Recherche, project No. ANR-10-BLAN-0924.

References

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