

Obtaining textile materials with bismuth nanoparticles for protection against microwave radiation influence

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Abstract

Synthesis of metal nanoparticles which consisted in chemical restoration of bismuth nitrate solution is carried out. Optimum parameters of bismuth restoration to zero-valent metal state and its drawing on fabric are developed. The modified fabric subjected to radiation allows to lower the radiation dose. The material can be used in radio protective clothes with the strengthened partial protection which includes overalls, helmets, gloves, boot covers made of radio reflecting materials.