

Electromagnetic properties of composites based on carbon nanostructures

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Now the microwave waveband being developed actively. Scientists are exploring new radio materials for this wavelength range. The aim of this work is to study the electromagnetic characteristics of the composites containing as filler carbon nanostructures. Reflection and transmission coefficients of composite based on carbon nanostructures: single-walled, multi-walled carbon nanotubes, and graphene were measured. The research results showed that increasing the percentage by weight of the starting carbon nanostructures to 1% leads to an increase in the reflection coefficient and a decrease the transmission coefficient. SWNTs and graphene proved to be more effective materials.

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