

Influence of magnetite nanoparticles on freezing of transformer oil

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Magnetic liquids or ferrofluids are new technological materials which are of great interest for many applications. The addition of the magnetite nanoparticles into transformer oil enhances the power transformer properties via the increase of the cooling efficiency. In this contribution the influence of magnetite nanoparticles with the concentrations up to 5 % added into the transformer oil on the freezing and defrosting of the prepared magnetic fluid was studied. The experimental results revealed not very significant influence of magnetite nanoparticles on the studied properties.

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