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DIELECTRIC CONSTANT STUDY OF POLYANILINE / NiCoFe₂O₃ COMPOSITES

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Abstract

The conducting polyaniline/mixed ferrite (PANI / NiCoFe₂O₃) composites were synthesized by single step in situ polymerization technique by placing fine grinded powder of mixed ferrite (NiCoFe₂O₃) during the polymerization of aniline. Dielectric constant of these composites was investigated in the frequency range 10²Hz to 10⁷Hz. It is found that the Dielectric constant obeyed the power law index and the variation of Dielectric constant with wt% of NiCoFe₂O₃ could be related to conductivity relaxation phenomenon.

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Polyaniline, Mixed Ferrite, Dielectric Constant

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