PERCOLATION PROPERTIES OF SYSTEMS BASED ON POLYPROPYLENE GLYCOL AND CARBON NANOTUBES

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S u m m a r y

Impedance spectroscopy researches have been carried out for the electric and dielectric properties of systems based on polypropylene glycol and carbon nanotubes. The fractal behavior of those systems was revealed. The corresponding percolation threshold of 0.45% was found. The critical index of conductivity $t = 1.43$ was determined in the framework of the scaling approach. The processes of charge transfer in the systems concerned were found to be described well by the intercluster polarization model.