

Lysozyme amyloid fibrils doped by carbon nanotubes

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Production of new composites for the creation of modern materials with desired properties is the key feature of nanotechnology. Despite the well known advantages of magnetic nanoparticles, the aim of the present study was syntetised lysozyme amyloid fibrils from hen egg white and subsequently dopped this solution by superparamagnetic magnetite nanoparticles Fe₃O₄ and feromagnetic single wall carbon nanotubes (SWCNT). Transmission electron microscopy was used to obtain the structural and dimensional information of samples. The structural changes of prepared solutions in applied external magnetic field were investigated by Polarization Microscopy. The charge was measured by Zeta Sizer Nano ZS. Presented results indicate the possibility to explore the interaction of feromagnetic nanotubes with fibrils by applying of external magnetic field.

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