

Singular optics of carbon nanotubes dispersion in liquid crystals

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Summary

Fractal nanotubes clusters dispersed in nematic 5CB were investigated first by singular Stokes polarimetry. They induce *optical vortices* in the scattered laser light and *polarization singularities* in the passed laser beam refracted on the microns size inhomogeneous birefringent interfacial layers of 5CB surrounding nanotubes clusters.