

Behaviour of endothelial cells on surfaces functionalized by GaN nanoparticles

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In this work, we identify the mechanisms of interaction between GaN semiconductor compound nanoparticles and living endothelial cells. Cellular viability and uptake of nanoparticles by cells as well as adhesion and proliferation of endothelial cells on surfaces functionalized by GaN nanoparticles have been investigated. Rather fast agglomeration of GaN nanoparticles around the endothelial cells was evidenced during incubation, the nanoparticles having not been released even in the cellular division process. The obtained results demonstrate good adhesion and proliferation of endothelial cells on surfaces functionalized by GaN nanoparticles.

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