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Synthesized Nanoparticle Trapping in Capacitively Coupled Plasma

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We proposed a method for synthesized nanoparticle trapping in capacitively coupled plasma (CCP) reactor. The nanoparticle in nonthermal plasma can be negatively charged by a charged particle in plasma. Thus, it can be placed between sheath and bulk plasma with zero net force on nanoparticle. However, synthesized nanoparticle can be pumped out due to the neutral drag force when the large size of sheath thickness. We try to make a potential well using the sheath for trapping the synthesized nanoparticle.

Keywords: Nanoparticle, CCP, Trapping