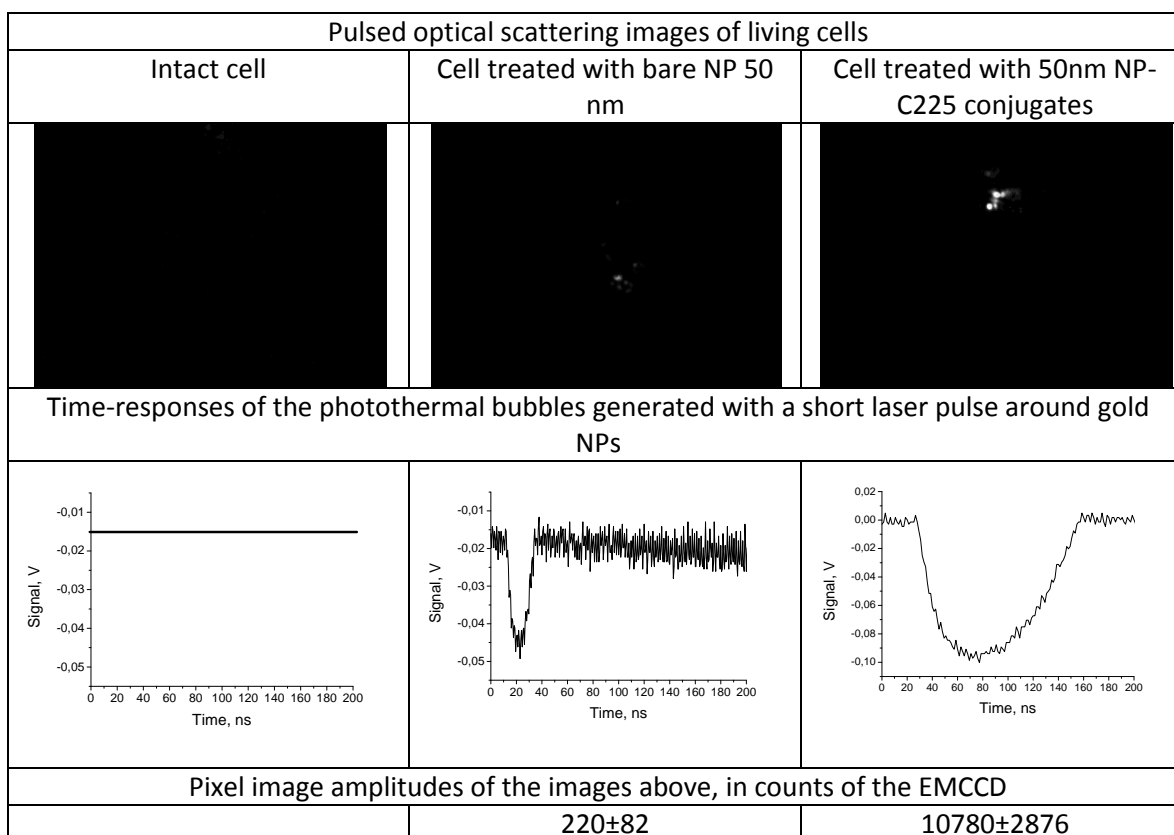


Effect of the gold conjugates on optical scattering signal by gold nanoparticles in living cells

Living cancerous cells (A549) were incubated with the 2 types of the gold nanoparticles: *Nanopartz™* bare 50 nm gold spheres (NP) and with the *Nanopartz™* 50 nm gold spheres custom conjugated by *Nanopartz™* to an NP-C225 antibody conjugates. The data below show the effect of the cell-specific targeting vectors (C225 antibodies) on the sensitivity of optical imaging of the living cells. Imaging is based on the scattering by NPs and by the transient bubbles that are generated around gold NPs with a short laser pulse so to enhance scattering effect.



Application of the specific *Nanopartz™* custom conjugated to the NP-C225 antibody and the nanoparticle-bubble mechanism for imaging has resulted in 50 time improvement of the sensitivity over bare gold nanoparticles.

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