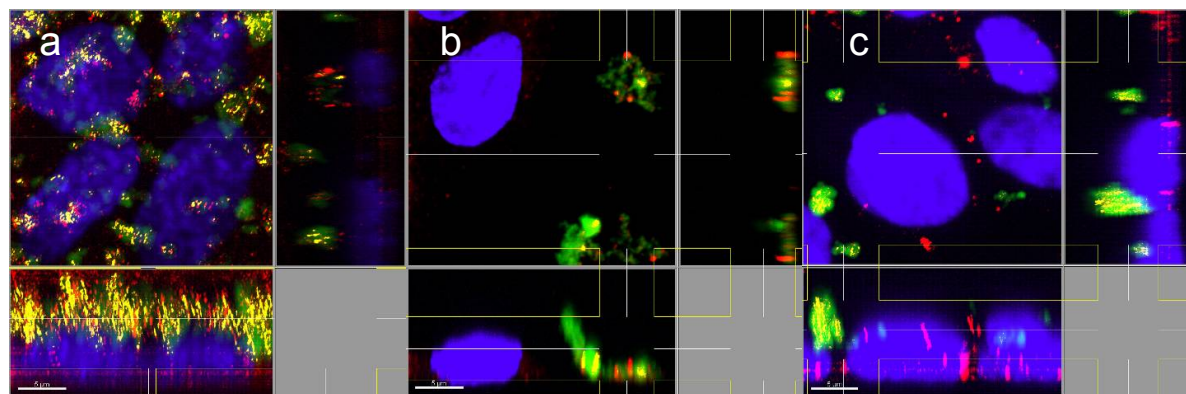


Controlling silica nanoparticle properties for biomedical application through surface modification

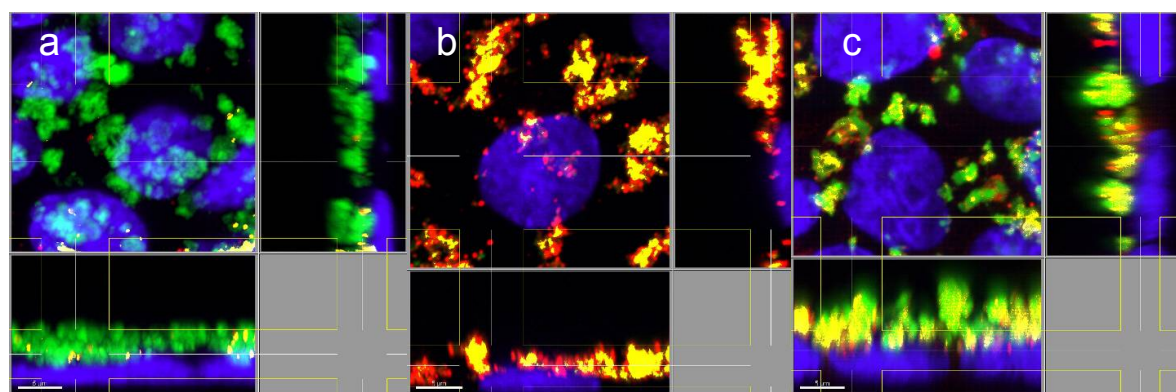
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 Catherine E. Housecroft, Lukas Landmann, Petra Banse, Uwe Pieleles and
 Amina Wirth-Heller*

Electronic supporting information

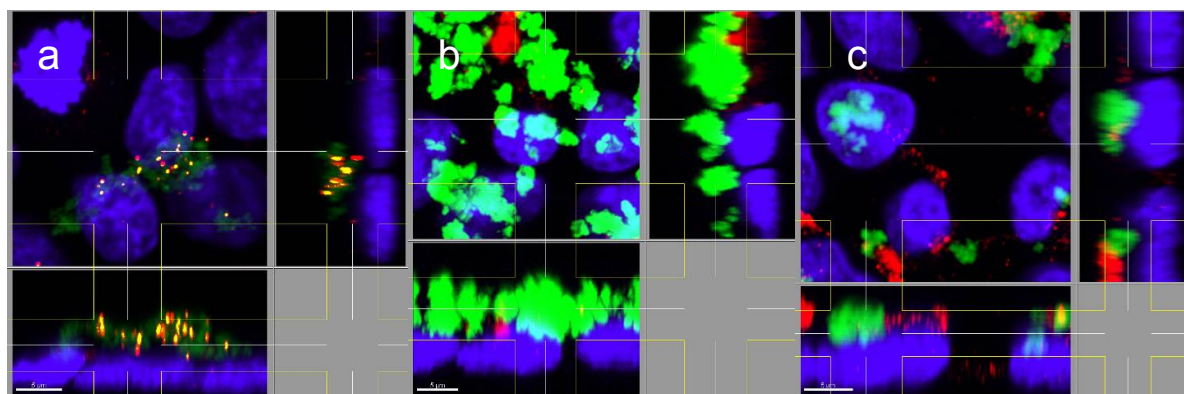
Xz and yz optical sections of the cells incubated with Ru@SiO₂ nanoparticles:



S1: Colocalisation of red fluorescence emitted by Cy5-labeled antibody against the early endosomal protein EEA1 and green fluorescence of Ru@SiO₂ nanoparticles. Single optical sections of the cells incubated for 5 min with (a) unmodified (b) aminopropylated and (c) pegylated Ru@SiO₂ nanoparticles. Scale bar is 5 μm.



S2: Colocalization of Ru@SiO₂ nanoparticles with Cy5-labeled rabbit polyclonal antibodies against the late endosomal protein rab7 cell organelles. Single optical sections of the cells visualized after 10 min with (a) unmodified, and for 30 min with both (b) aminopropylated and (c) pegylated Ru@SiO₂ nanoparticles. Scale bar is 5 μm.



S3: Colocalization of Ru@SiO₂ nanoparticles with Cy5-labeled rabbit polyclonal antibodies against the lysosomal marker protein lamp3. Single optical sections of the cells visualized after 60 min incubation with (a) unmodified, (b) aminopropylated and (c) pegylated Ru@SiO₂ nanoparticles. Scale bar is 5 μm.