

Particle

& Particle Systems Characterization

Supporting Information

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Biodegradable Passion Fruit-Like Nano-Architectures as Carriers for Cisplatin Prodrug

*Domenico Cassano, Melissa Santi, Valentina Cappello, Stefano Luin, Giovanni Signore, and Valerio Voliani**

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Figure S1

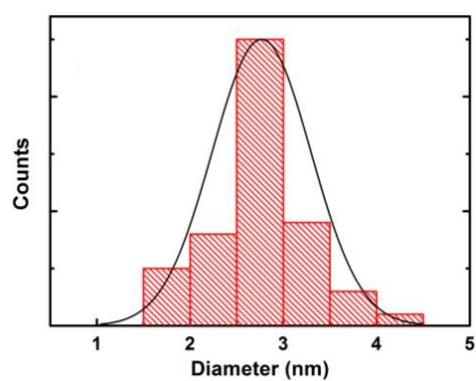


Figure S1: Size distribution histograms of gold nanoparticles made on diameter measurements of at least 100 nanoparticles observed by TEM.

Figure S2

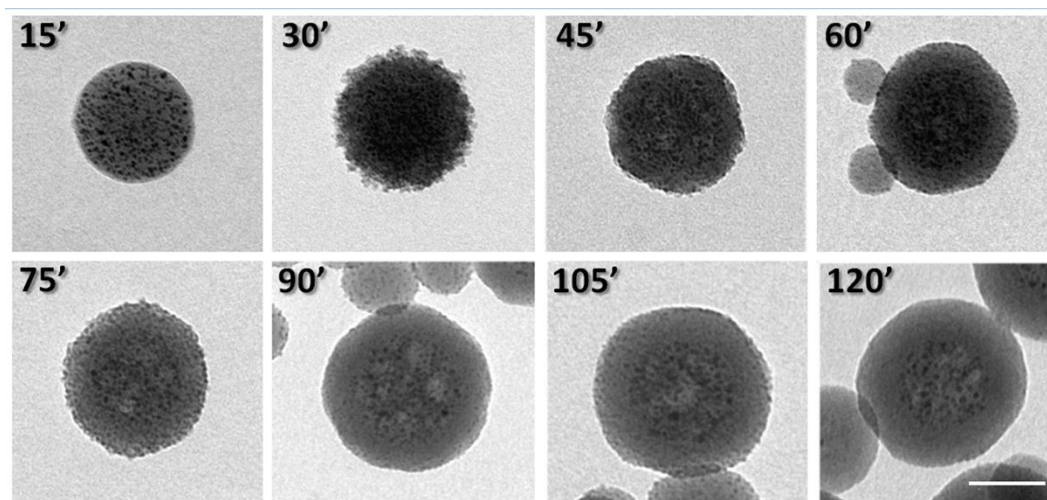


Figure S2: TEM images taken every 15' during AuSi formation. Scalebar 45 nm.

Figure S3

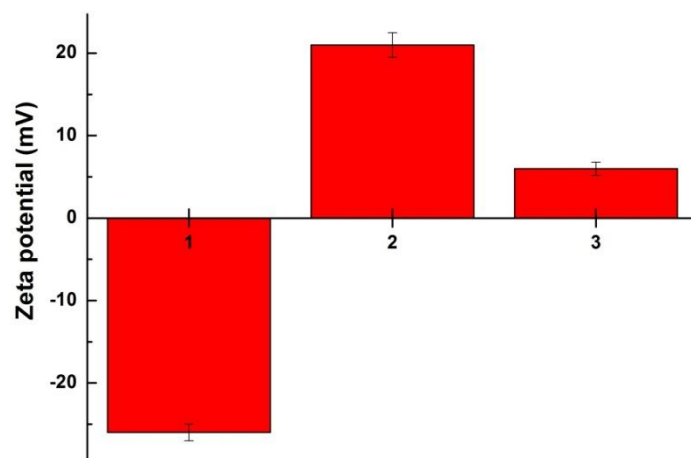


Figure S3: zeta-potential values for AuSiA (1), AuSiA_APTES (2), and AuSiAA (3)

Figure S4

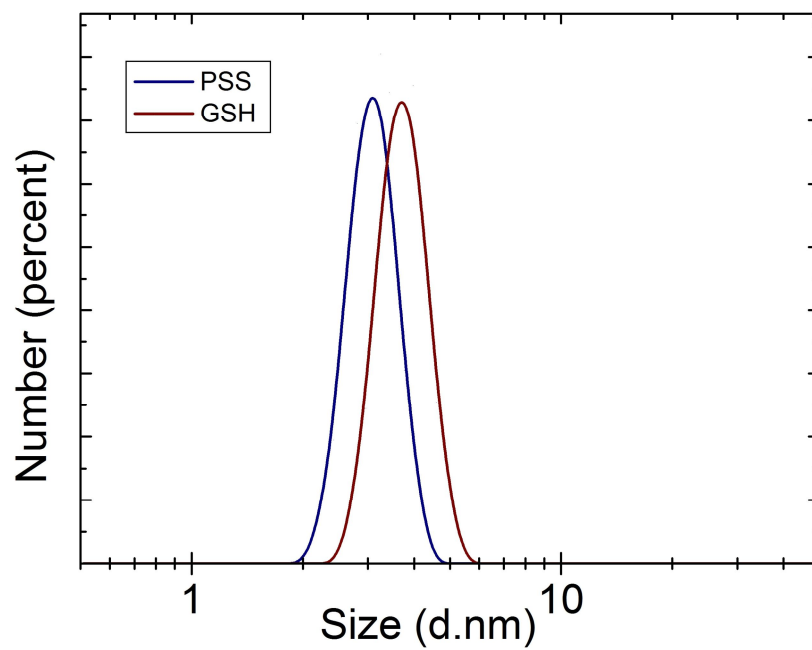


Figure S4: hydrodynamic diameter of gold nanoparticles coated by PSS (blue) and after 90 minutes incubation (37 °C) in 5 mM solution of GSH (red).

Figure S5

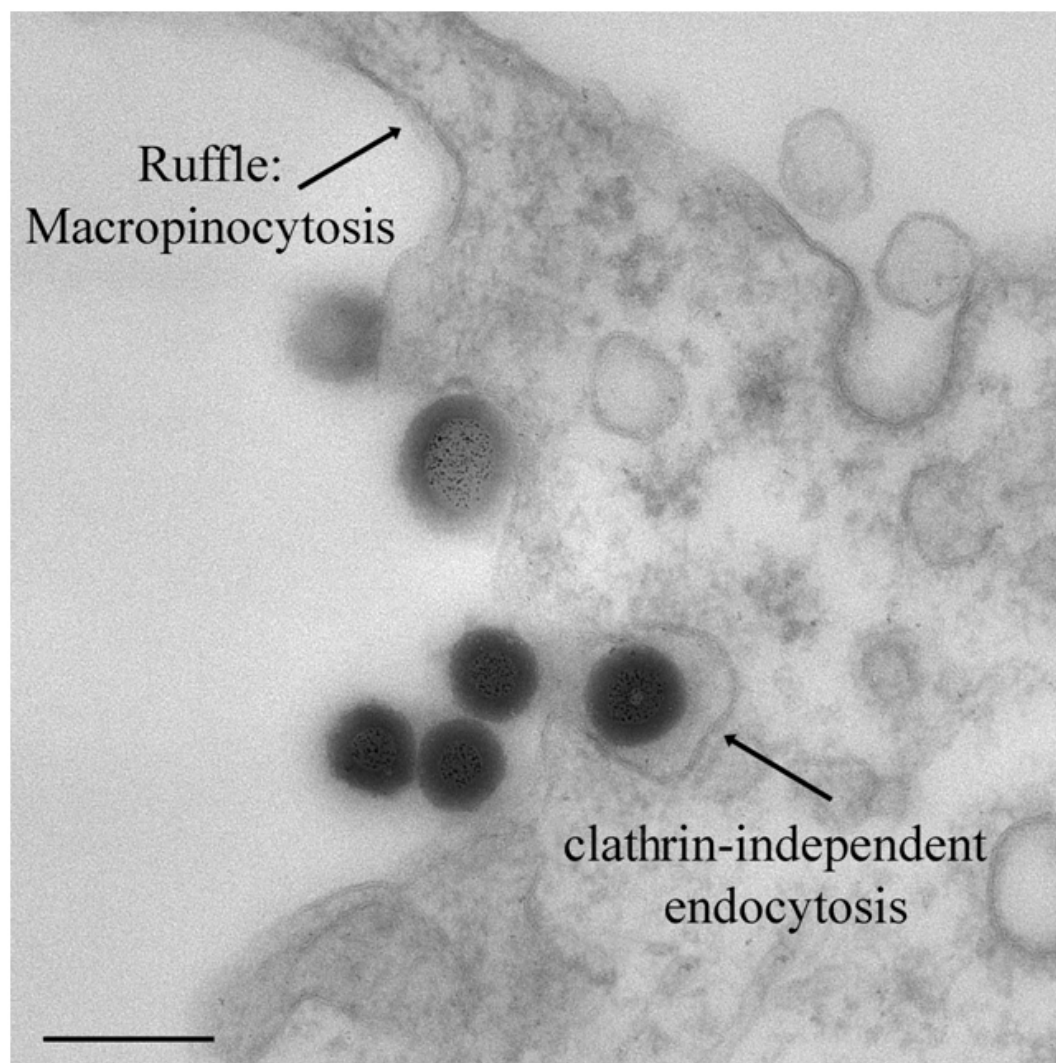


Figure S5: AuSiAA internalization in MIA PaCa-2 cells. The EM micrograph shows both possible internalization processes: i) macropinocytosis indicated by an evident membrane ruffle (in the upper part of the image), and ii) clathrin-independent endocytosis shown by the endosome formation (scale bar: 200 nm).

Figure S6

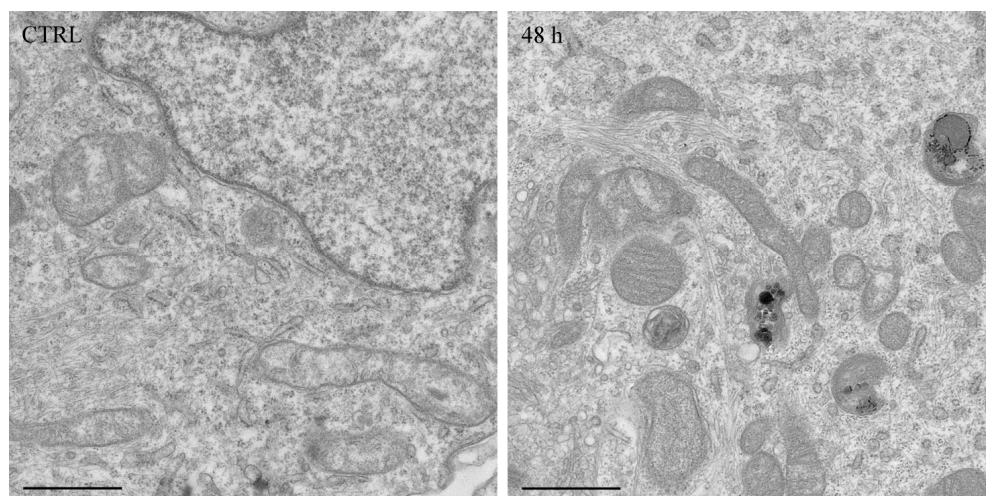


Figure S6: Ultrastructure analysis of MIA PaCa-2 cells without (left panel) and with (right panel) AuSiAA treatment. Representative images of cytosol and cytosolic organelles clearly indicate that there are no alterations of cell architecture due to the treatment (scale bars: 1 micron).