



Universal Multi-Functional GSH-Responsive Silica Nanoparticles For Delivery Of Biomolecules Into Cells

WARF: P200169W001

Inventors: Shaoqin Gong, Yuyuan Wang

The Invention

The present technology provides a nanoparticle comprising: a silica network comprising crosslinked polysiloxanes, wherein the crosslinks between polysiloxanes comprise disulfide linkages, the polysiloxanes optionally bear weakly basic functional groups, the nanoparticle comprises an exterior surface comprising surface-modifying groups attached to and surrounding the silica network, wherein the surface-modifying groups comprising polyethylene glycol (PEG), polysarcosine, polyzwitterion or combinations of two or more of thereof; and the nanoparticle has an average diameter of 15 nm to 500 nm. The nanoparticles herein may include biomolecules such as polynucleic acids, proteins, and complexes thereof, e.g., Cas9 RNP.

Additional Information

For More Information About the Inventors

- [Shaoqin Gong](#)

Tech Fields

- [Drug Delivery : Other drug delivery technologies](#)

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847