



Colorado School of Mines Office for Technology Transfer

Novel Imaging and Therapeutic Nanoparticles

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Description: This invention involves the modification of the surface of gold and gadolinium particles for targeted imaging and therapies. The invention has four parts:

- Method(s) for the preparation of hybrid nanoparticles consisting of gold nanorods or gadolinium nanoparticles coated with a metal organic framework structure for the purpose of multimodal diagnostic imaging
- Modified nanoparticles for targeted imaging and treatment of disease
- Use of the hybrid nanoparticles and chemical modification of the nanoparticles to image and treat disease
- Composition of the chemical constitution of the hybrid nanoparticles.

Potential Areas of Application

- Drug delivery
- Medical imaging
- Personalized medicine

Main Advantages of this Invention

- Can be used to treat a wide variety of diseases (Cancer, AIDS, Infectious diseases)
- Flexible construct
- Improved nanoparticle design and versatility over current ones.

Intellectual Property Status:

- 1) PCT 2009/026540/US 12/197061; Provisional patent: 8/22/07; PCT & US patent: 8/22/08
- 2) US 12/197044; Provisional patent: 8/22/07; US patent: 8/22/08
- 3) PCT 2010/024450; Provisional patent: 2/18/09; PCT: 2/17/2010

Opportunity: We are seeking an investor or strategic partner to help develop this portfolio

Contact

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