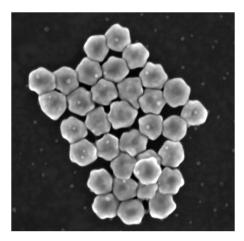
Oct. 3, 2024

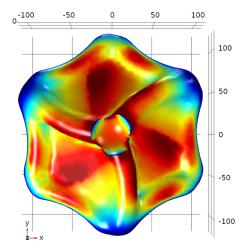
Contact: Patricia DeLacey, 734-647-8213, <u>pdelacey@umich.edu</u> Katherine McAlpine, 734-647-7087, <u>kmca@umich.edu</u>

Captions: Gold nanoparticles detect lung cancer signatures in blood samples



■ Gold-Nanoparticles-SEM.jps scanning electron microscope image of chiral gold nanoparticles developed for a new microfluidic chip capable of detecting signatures of lung cancer from blood plasma samples. Image dimensions are 2 x 2 micrometers (2000 x 2000 nanometers).

Alt: A cluster of gray, hexagonal shapes with rounded corners cluster together on a black background.



■ Gold-Nanoparticle-Graphic.jp ghe twisted disk shape of the gold nanoparticle creates chirality, or asymmetry, ensuring strong interaction with light. The less than 100 nanometer-wide cavity in the center helps the nanoparticle capture exosomes.

Alt: Graphic of a 200 nanometer hexagon with rounded corners. Every other corner has a channel from the edge to the center where a cavity recesses into the shape. The channels are slightly twisted clockwise, resembling a pinwheel.