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**Potential Application of the Enhanced Absorption and the Enhanced Scattering Processes of Plasmonic (Gold and Silver) Nanoparticles of Different Shapes**

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The crosssections of absorption and scattering of plasmonic nanoparticles are orders of magnitude larger than those of molecular dyes. Their strong scattering properties make them much better contrast agents in biological and medical applications than fluorescent dyes. Their strong absorption makes them useful in photothermal therapy and in changing their shape or their location in assembled arrays. These applications will be illustrated.