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Supporting Information

A two-step process for preparation of dodecanethiol-capped Au nanoparticles with room-temperature spontaneous magnetization

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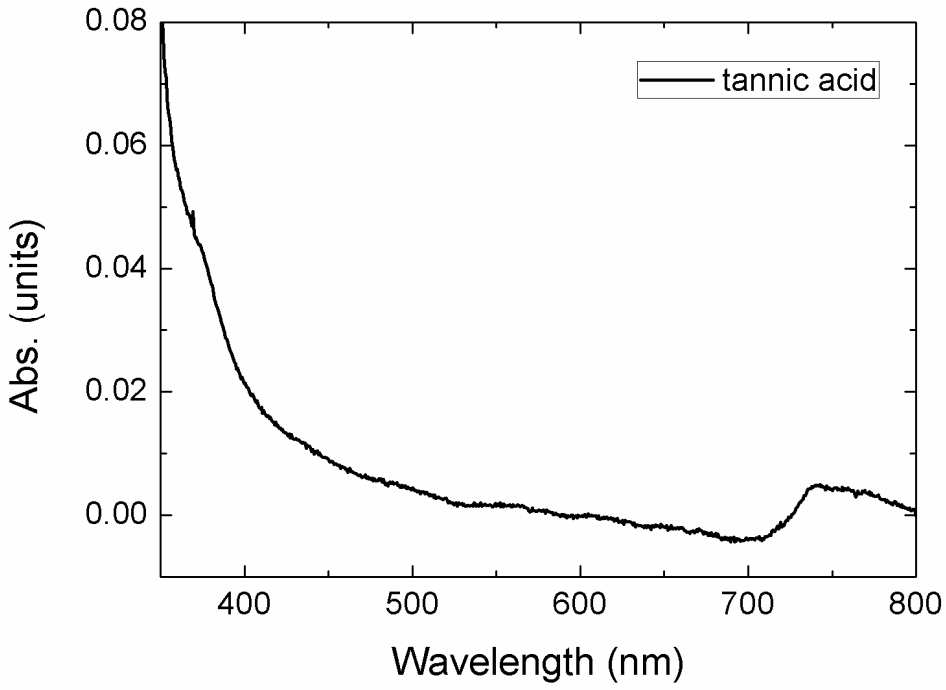

Figure S1. UV-vis spectrum for tannic acid aqueous solution.

The small Au nanoparticles (NPs) are prepared by 0.026 mM $HAuCl_4$ and 0.89 mM tannic acid with 20 minutes stirring. Figure S2 shows a bright-field transmission electron micrograph of the Au NPs. Small Au NPs with a mean particle size of 1.8 nm is seen. In Figure S3 we show the room-temperature M-H curve of these bare Au NPs. Although the susceptibility changes slightly in the low filed range, the M-H curve is governed heavily by the diamagnetism of nonmagnetic gold.

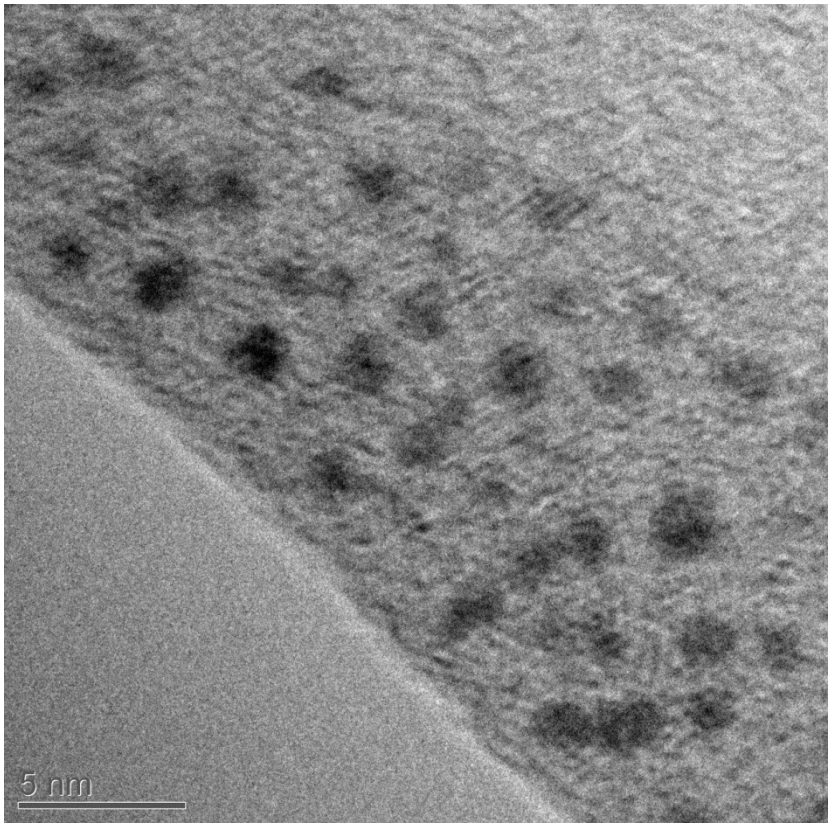

Figure S2. Bright-field transmission electron micrograph of Au NPs prepared by 0.026 mM $HAuCl_4$ and 0.89 mM tannic acid.

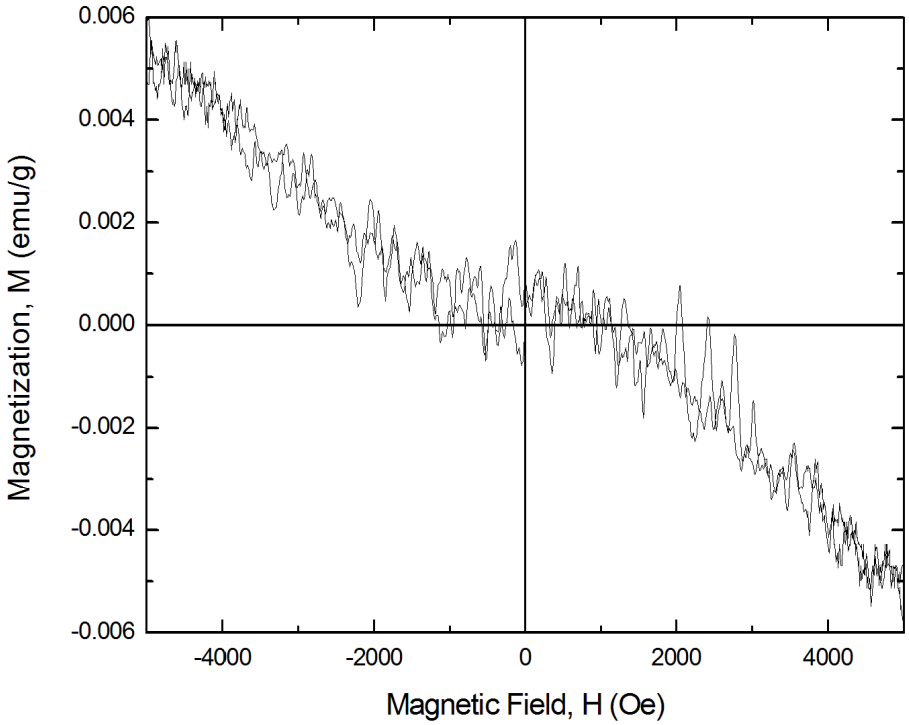

Figure S3. M-H curve of bare Au NPs at room temperature.