



**Supporting Information** 

## Tuning the size of gold nanoparticles produced by multiple filamentation of femtosecond laser pulses in aqueous solution.

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**Representative Transmission Electron Microscopy images of gold nanoparticles** 

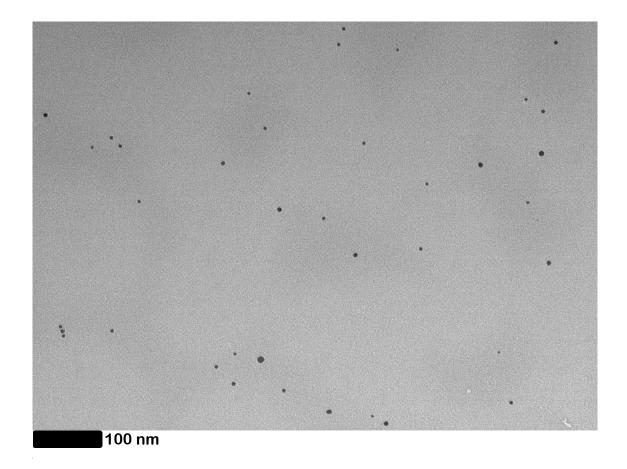


Fig. S1 Representative TEM images of laser-induced gold nanoparticles after 26 min of irradiation at  $I \sim 2.4 \times 10^{11}$  W.cm<sup>-2</sup> of 0.1 M PVA, 1 mM gold chloride (HAuCl<sub>4</sub>) solutions

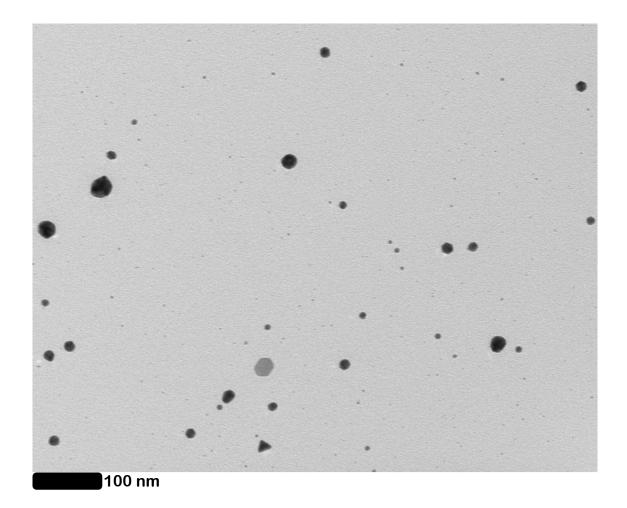


Fig. S2 Representative TEM images of radiation-induced gold nanoparticles after 180 min of irradiation at I  $\sim$  10 Gy.min<sup>-1</sup> of 0.1 M PVA, 1 mM gold chloride (HAuCl<sub>4</sub>) solutions

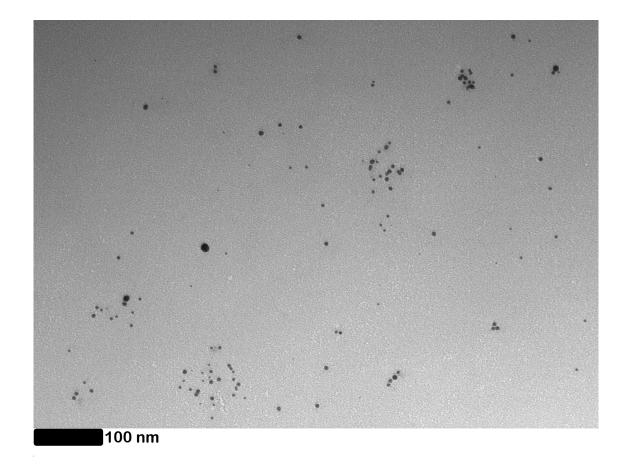


Fig. S3 Representative TEM images of laser-induced gold nanoparticles after 59 min of irradiation at I  $\sim$  1.9 $\times$ 10<sup>11</sup> W.cm<sup>-2</sup> of 0.1 M PVA, 1 mM gold chloride (HAuCl<sub>4</sub>) solutions

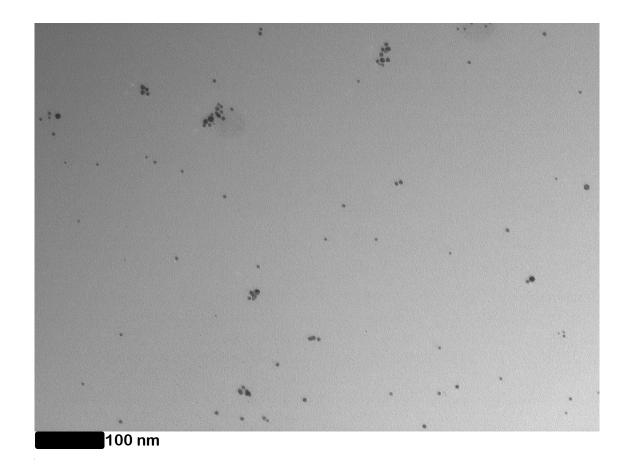


Fig. S4 Representative TEM images of laser-induced gold nanoparticles after 142 min of irradiation at  $I \sim 1.6 \times 10^{11}$  W.cm<sup>-2</sup> of 0.1 M PVA, 1 mM gold chloride (HAuCl<sub>4</sub>) solutions