

Green, facile and fast synthesis of silver nanoparticles by using solution plasma technique and their antibacterial and anticancer activities

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Supporting information

Fig. S1 shows the optical pictures of the synthesis process of AgNPs during the solution plasma generation without *P. trimera* extract. As can be seen, the AgNP still may be formed during the solution plasma process. However, the aggregation of AgNPs could be easily observed after 24 hours (Fig. S2 and Fig. S3). This indicated the stability of the AgNP solution without *P. trimera* extract is quite low. Besides, the XRD pattern of prepared AgNP exhibited some typical peaks of Ag₂O. This demonstrated that the Ag₂O was formed during the solution plasma process (Fig.S4).

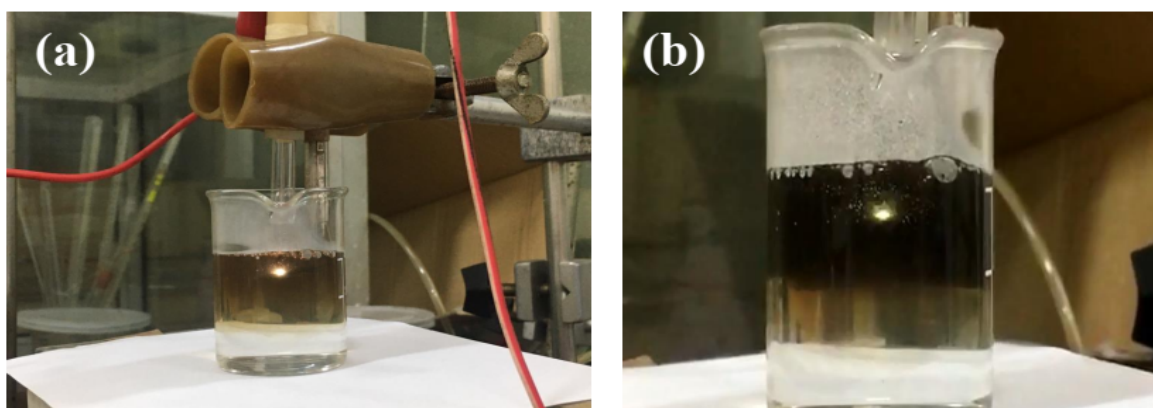


Fig. S1. Optical pictures of the synthesis process of AgNPs during the solution plasma generation without *P. trimera* extract for (a) as-started and (b) after 90 seconds

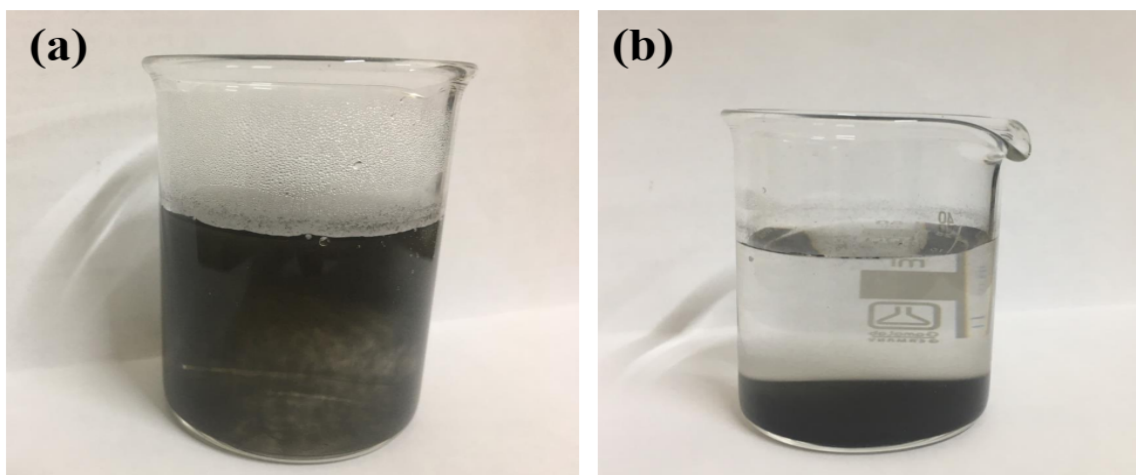


Fig. S2. Optical pictures of AgNPs prepared by using the solution plasma process without *P. trimera* extract (a) as-prepared and (b) after 24 hours

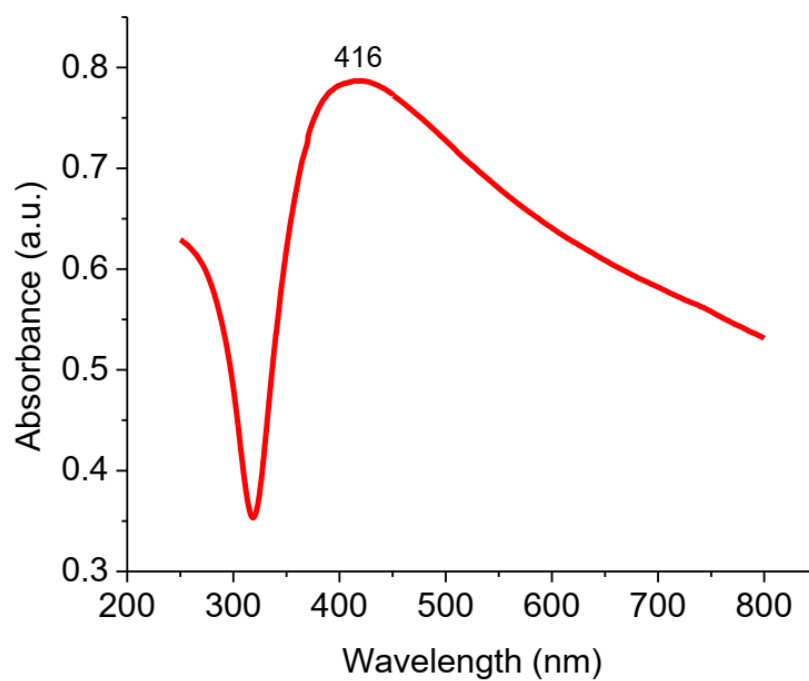


Fig. S3. UV-Vis spectra of AgNPs prepared by using the solution plasma process without *P. trimera* extract.

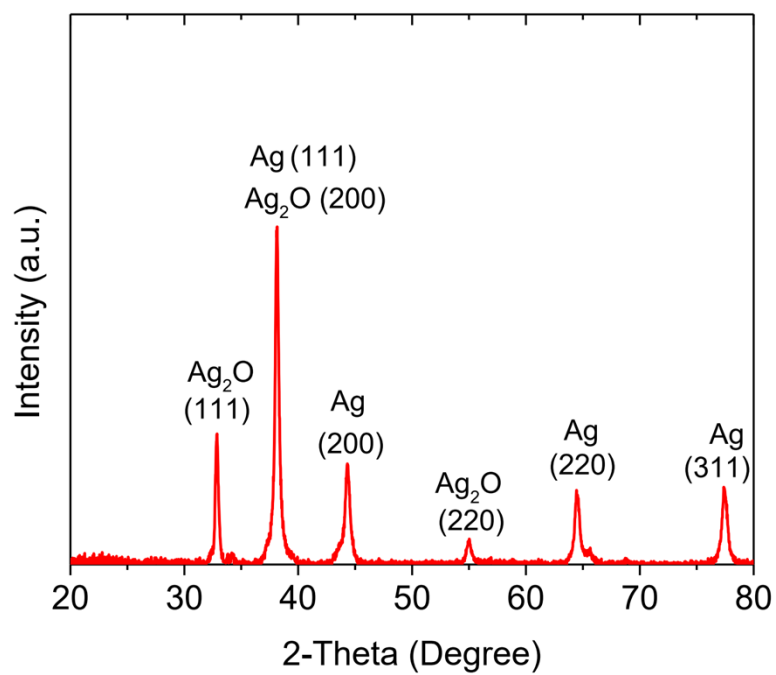


Fig. S4. XRD pattern of AgNPs prepared by using the solution plasma process without *P. trimera* extract