

Electronic Supporting Information

The headspace solid-phase microextraction of polycyclic aromatic hydrocarbons in environmental water samples using modified silica fiber by self assembled gold nanoparticles

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Table of contents in Supporting Information:

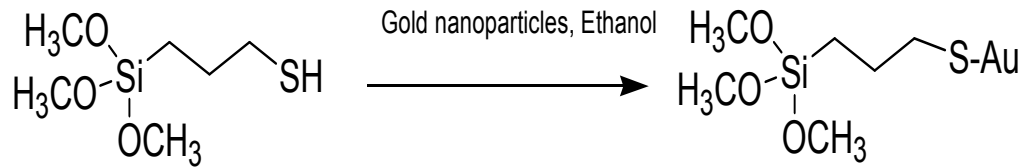
Fig. S1. All reaction steps for the preparation of fiber.

Fig. S2. Effect of eluent on extraction efficiency of PAHs.

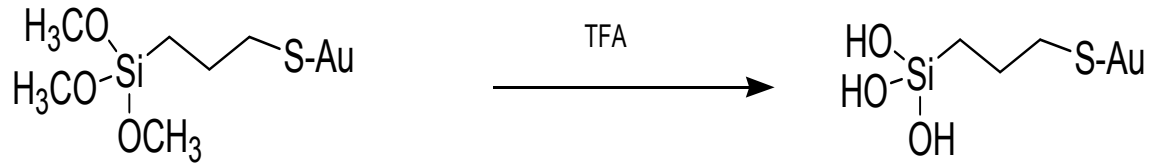
Fig. S3. Comparison of three kind of fibers; (fiber I): by application of gold nanoparticles, (fiber II): by application of palladium nanoparticles, (fiber III): by application of silver nanoparticles.

Fig.S1.

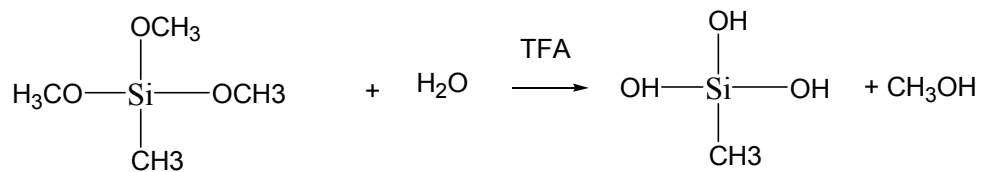
1) Self-assembled monolayer reaction of gold nanoparticles with 3-TMSPT



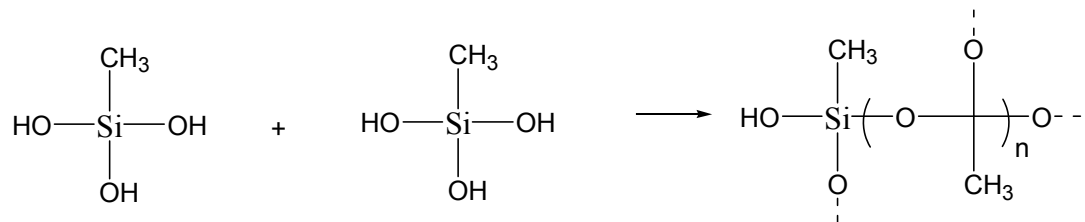
2) Catalysis of 3-TMSPT-Au



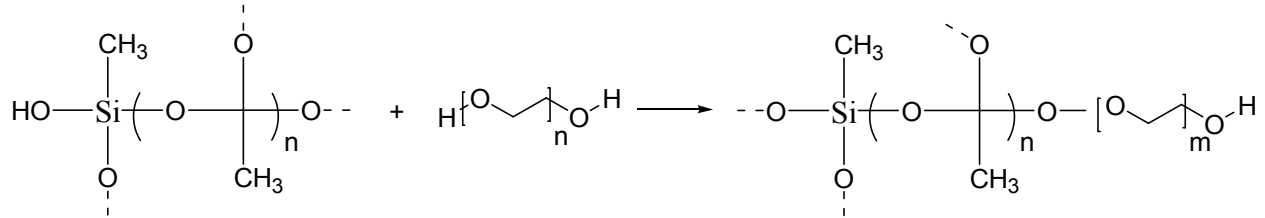
3) Hydrolysis of alkoxy silane precursor- MTMOS



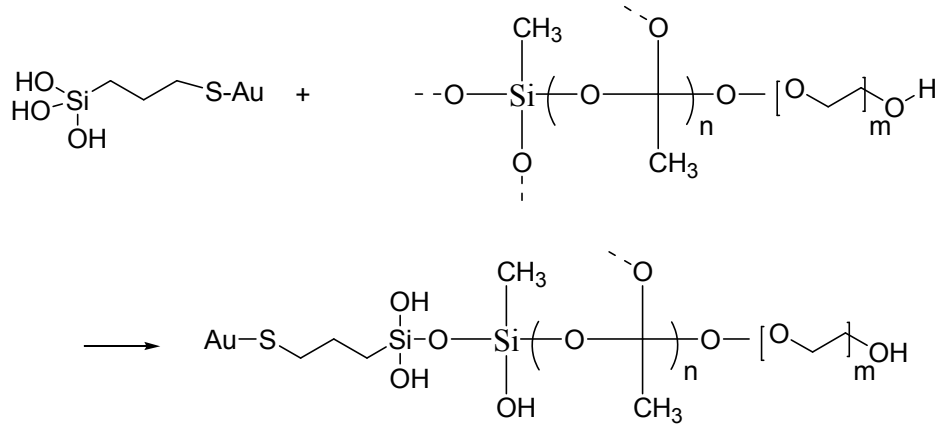
4) Polycondensation of MTMOS



5) Polycondensation of MTMOS with PEG



6) Polycondensation the product of previous step with hydrolyzed 3-TMSPT-Au



7) Chemical bonding the formed sol-gel silica substrate to the outer surface of the fused-silica fiber

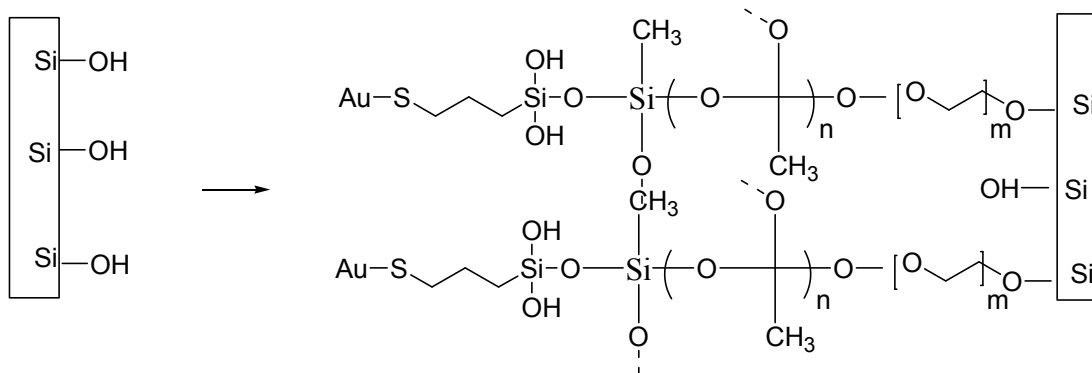


Fig. S2.

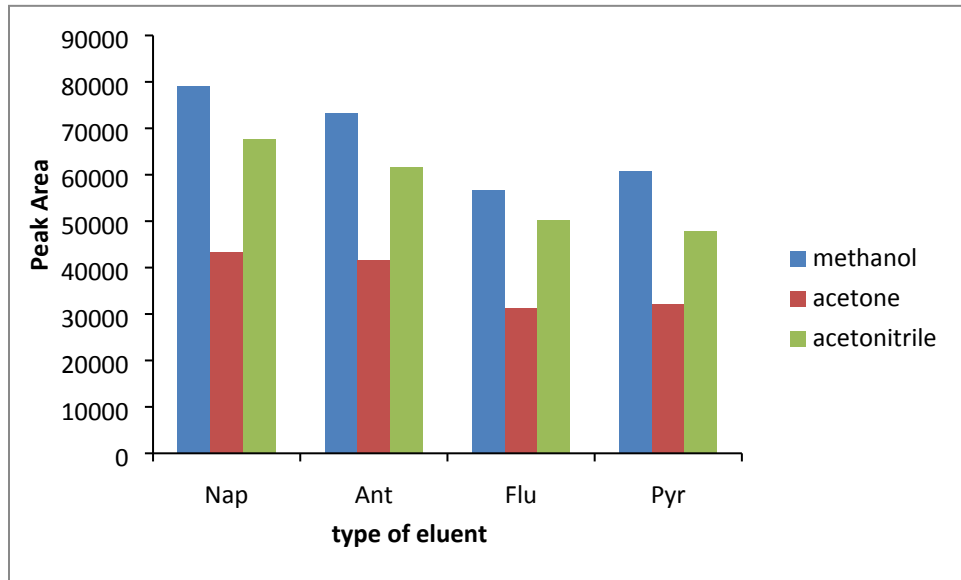


Fig. S3.

