Title of the recipe

##### (Contributors and affiliations) T. Tizio, C. Caio, University of Milano, Italy;

S. Sempronio, University of Paris, France.

**Short abstract** (2-4 lines)

This recipe describes how to produce monolithic colloidal probes for AFM made of silica micro-spheres attached to silicon cantilevers. Glues are avoided.

**Step-by-step description of procedure(s)** (with clear indication of amounts with proper units and all basic, practical, minute information required; a few figures/schemes can be inserted; safety notes can be inserted and highlighted).

1. Prepare a diluted solution of microspheres in DI water (provide suitable concentrations in suitable units etc.).
2. Clean an optical microscope glass slide by sonicating in piranha or solution (also look at [recipeXYZ]).
3. Spot XX l of microsphere solution on microscope glass slide and let it dry out.
4. …

**Special comments** example: This recipe allows fabricating silica probe mounted on silicon cantilevers; application of the protocol to other probe/cantilever combinations must be still experimented.

**Materials/chemicals/devices required** (provide clear indications of specific items and suppliers, as well as specifications for tools and devices etc.)

**You will also need (non standard items)** example: An XYZ micro-translation stage with optical access (like in many AFMs); an oven capable of heating up to 1000°C.

**References**

[recipeXYZ] “how to clean glass substrates for AFM”.

[tizio1920] T. Tizio, xxx yyy.

[caio2030] C. Caio et al., XXX ccc vvv.