Supporting Information

Surface Functionalization of Exposed Core Glass Optical Fiber for Metal Ion Sensing

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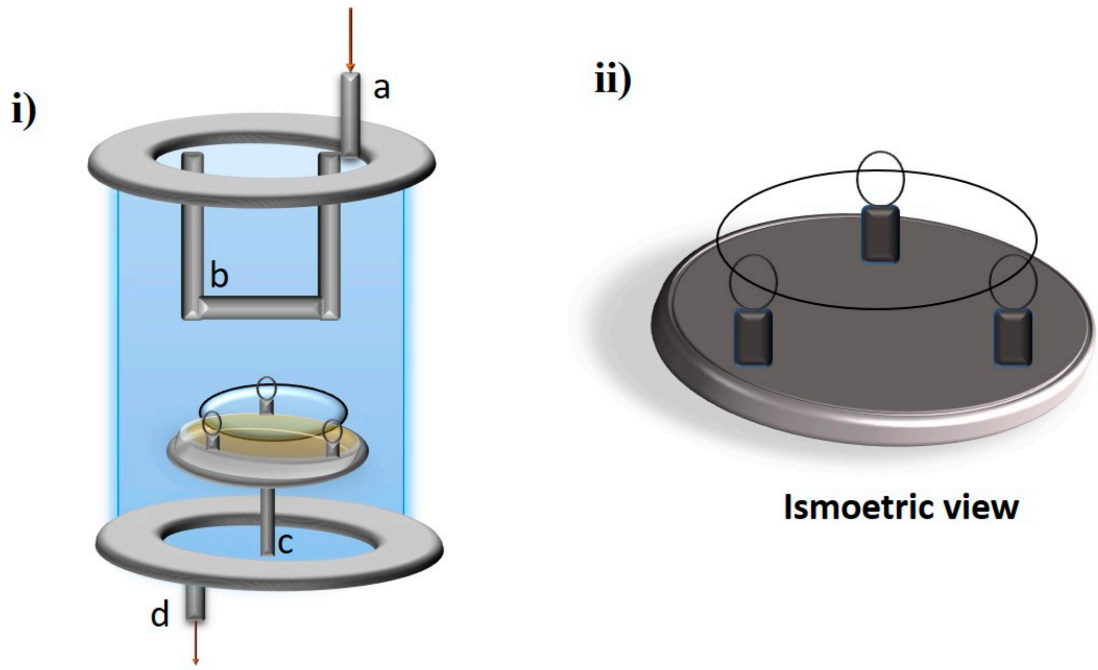

Figure S1. i) Schematic of plasma reactor with an additional holder for suspending fiber a) monomer inlet b) RF cathode c) RF anode with attached holder d) monomer outlet ii) Schematic of custom-built fiber holder (isometric view).

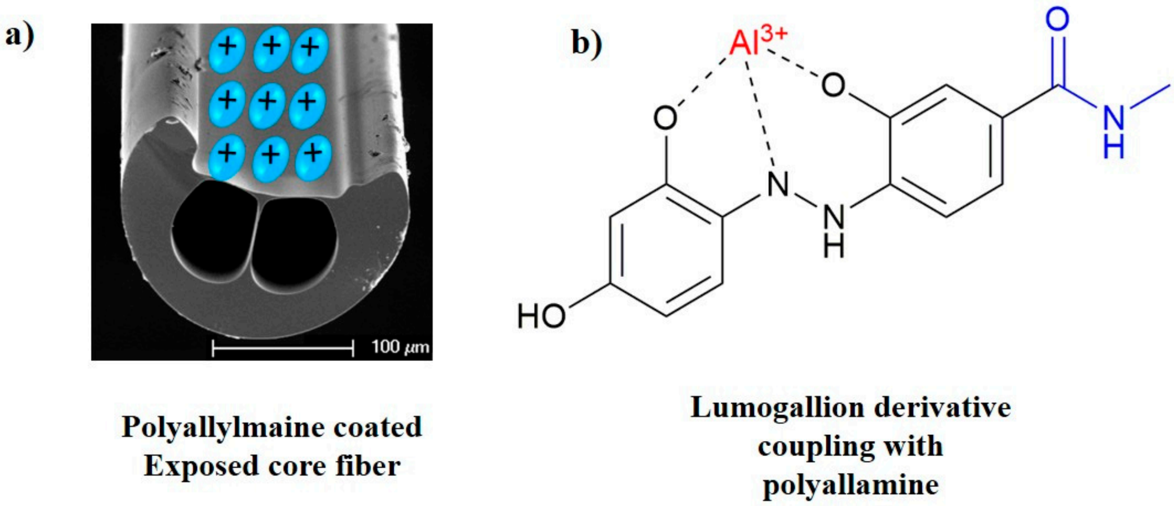

Figure S2. a) Schematic showing exposed core fiber (ECF) coated with plasma polymerized allylamine. b) Simplified version of lumogallion derivative coupling with plasma polymerized ECF. (Adapted from Reference 14)

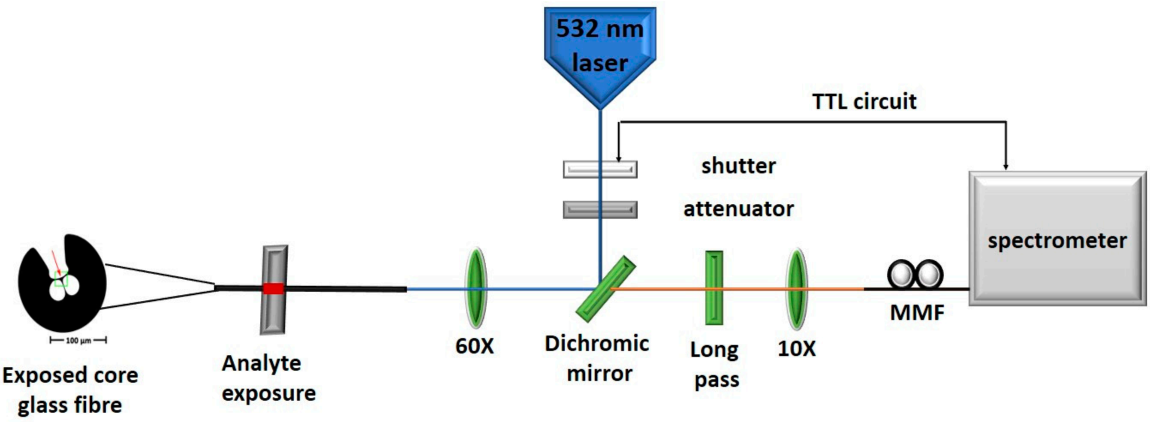

Figure S3. Schematic of the optical setup used to measure fluorescence from functionalized exposed core fiber (ECF) when exposed with the Al^{3+} ions. A 532 nm laser was used for alignment and for all measurements. The fibers were exposed to Al^{3+} ions by immersing a part of the fiber, as is demonstrated in the above figure.