Supplementary Materials

On the Possibility of Fluorescent Capture Immunoassays on a Contact Lens

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Table S1 Technical data for contact lenses.

Polymer	Trade Name	Manufacture	Wear Days	Water %	Dk (at -3.00D)
Comfilcon A (SiHG)	Biofinity	Cooper Vision	30	48	160
Lotrafilcon A (SiHG)	Air Optix	Alcon	30	24	175
Nelfilcon (HG)	Dailies	Ciba Vision	1	69	26

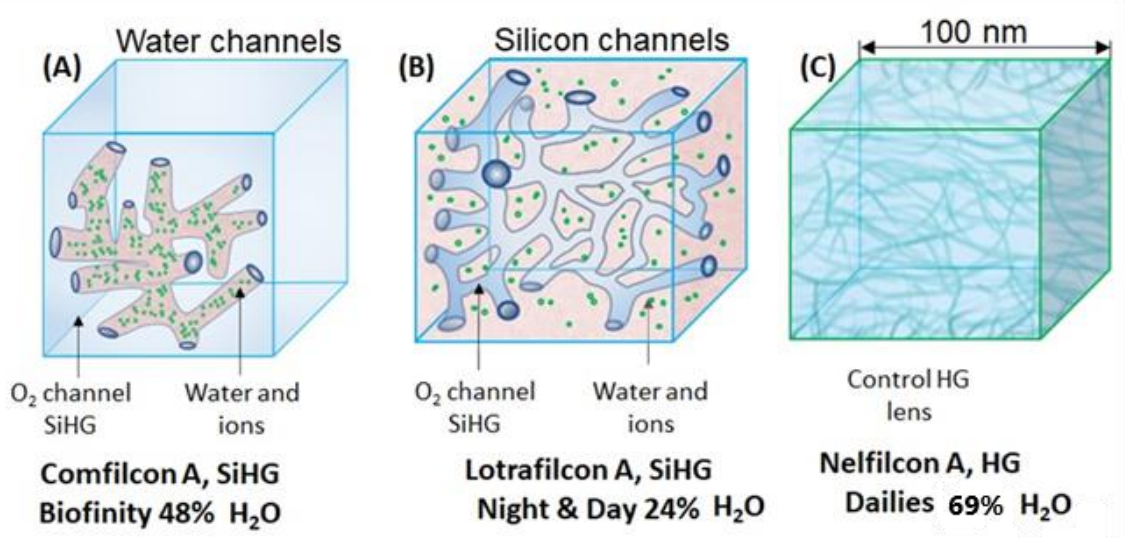

Figure S1. Schematic for two silicone hydrogel (SiHG) (A and B) and for standard HG contact lenses.

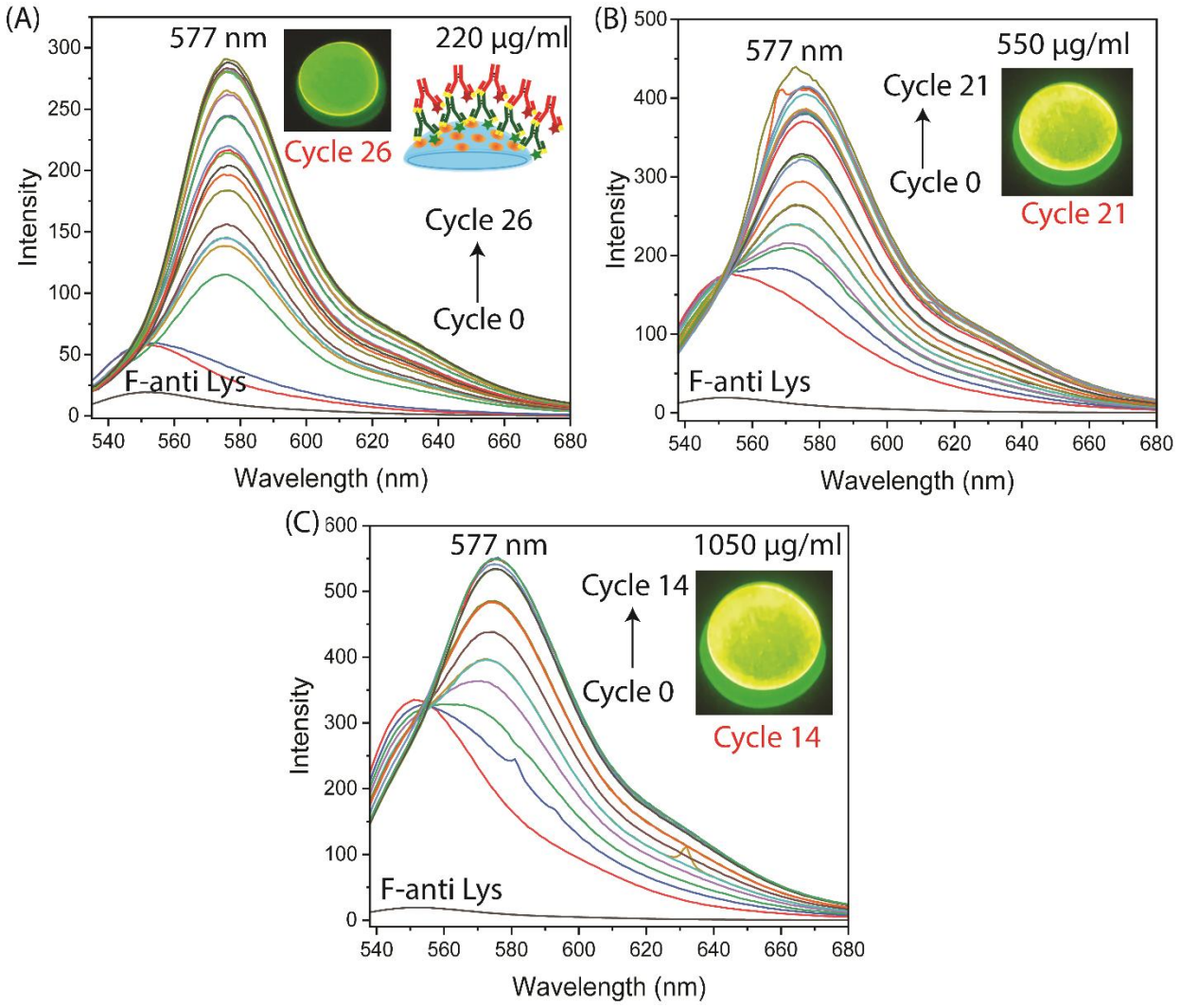

Figure S2. Time-dependent measurements of detection Ab (Rh-Anti IgG) binding to a F-Anti-Lys coated lens. The measurements stopped after reaching a constant of emission intensity, (A-C) emission spectra of the lens at various concentrations (220, 550, and 1050 µg/ml) of the detection Ab. The insert shows the emission images of the lenses after incubation with Rh-Anti IgG.

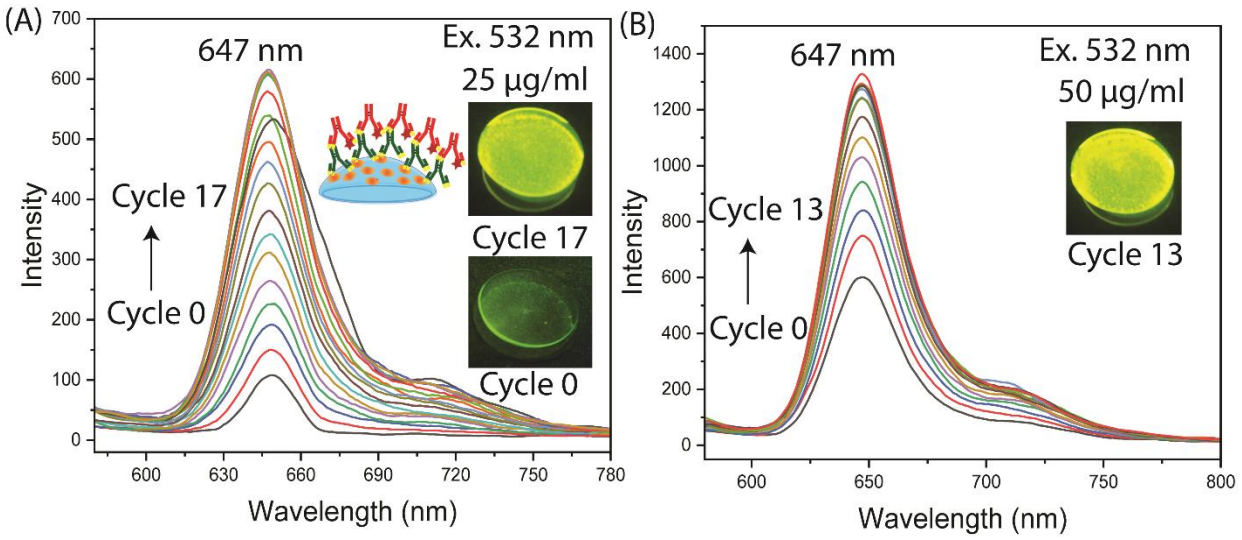

Figure S3. Time-dependent measurements of AF-Anti IgG binding with Anti-Lys on the contact lens. The measurements stopped at reaching constant of emission intensity (A-B). The image shows the AF-Anti IgG emission from the lens at the indicated cycle and AF-Anti IgG. The insert shows the emission image of the lens at after incubated cycle and AF-Anti IgG concentrations.

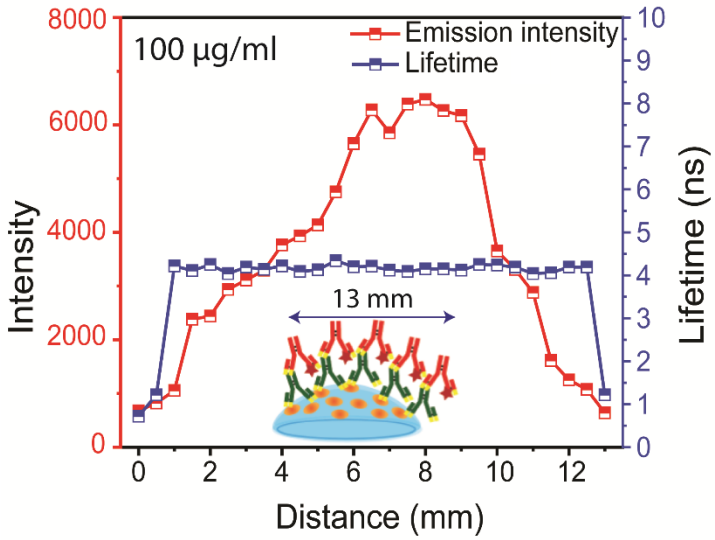

Figure S4. Confocal microscopy and FILM were used to measure of emission intensities and lifetimes for detecting AF-Anti IgG bound to Anti Lys coated on a lens (final incubated sample). The lens sample was placed to a glass substrate and scanned along the X axis at intervals of 0.5 mm until 13 mm to gather the emission intensity and lifetime. The focus of the objective lens was adjusted based on the location of contact lens.