

SUPPLEMENTARY INFORMATION

Structural Colour Contact Lens Sensor for Point-of-Care Ophthalmic Health Monitoring

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Supplementary Table

Table 1 Average sizes and particle distribution index (PDI) of silica colloids used for the formation of structural color contact lens sensors with different colors

	Colloids for preparing red sensor	Colloids for preparing green sensor	Colloids for preparing blue sensor
Average size	356±18 nm	240±11 nm	180±9 nm
PDI	0.050	0.046	0.050

Supplementary Figures

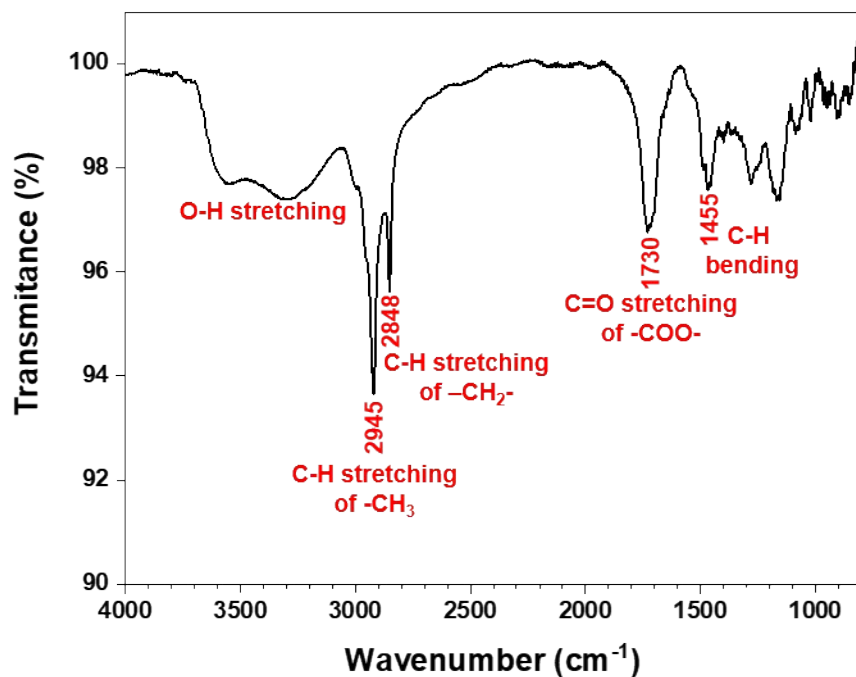


Figure S1 FTIR spectrum of the hydrogel contact lens sensor, demonstrating its pure composition of PHEMA only.

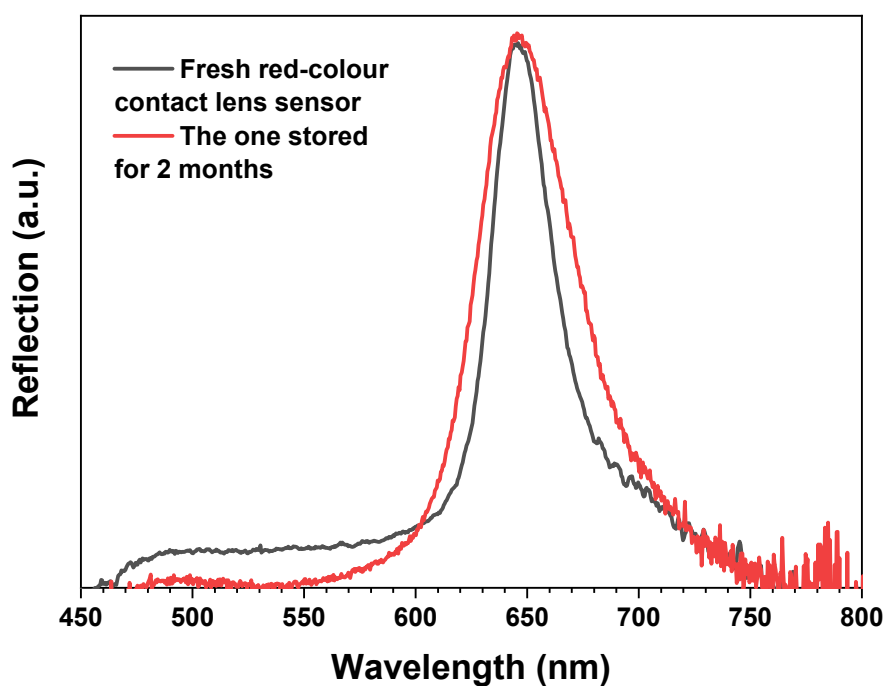


Figure S2 The reflection spectra of the fresh red-colour contact lens sensor and the one stored in water for 2 months, demonstrating that there is no significant difference in optical properties between them.

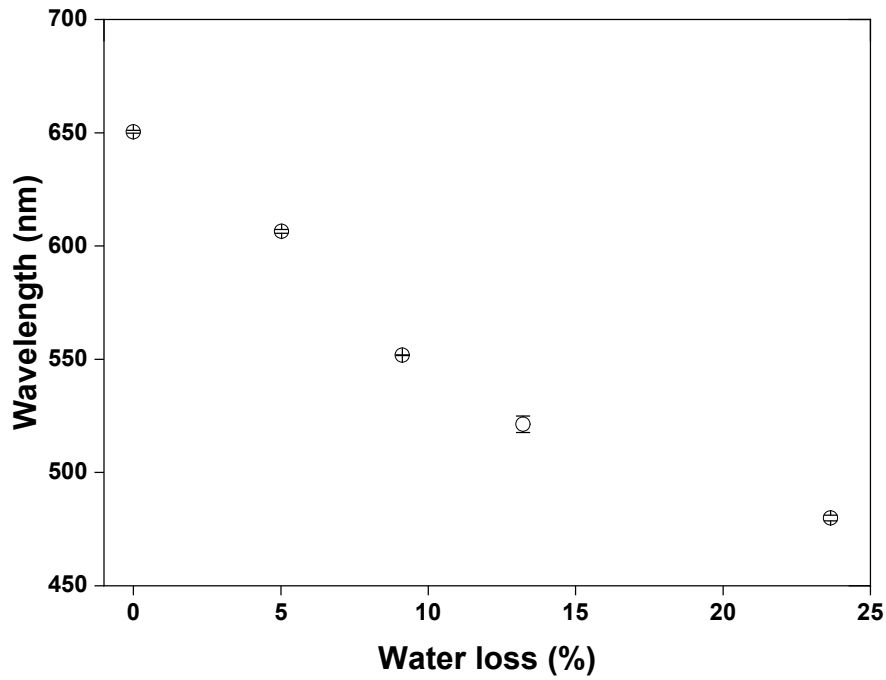


Figure S3 The plot demonstrating the change of the wavelength of reflectance peak with respect to the water loss percentage.

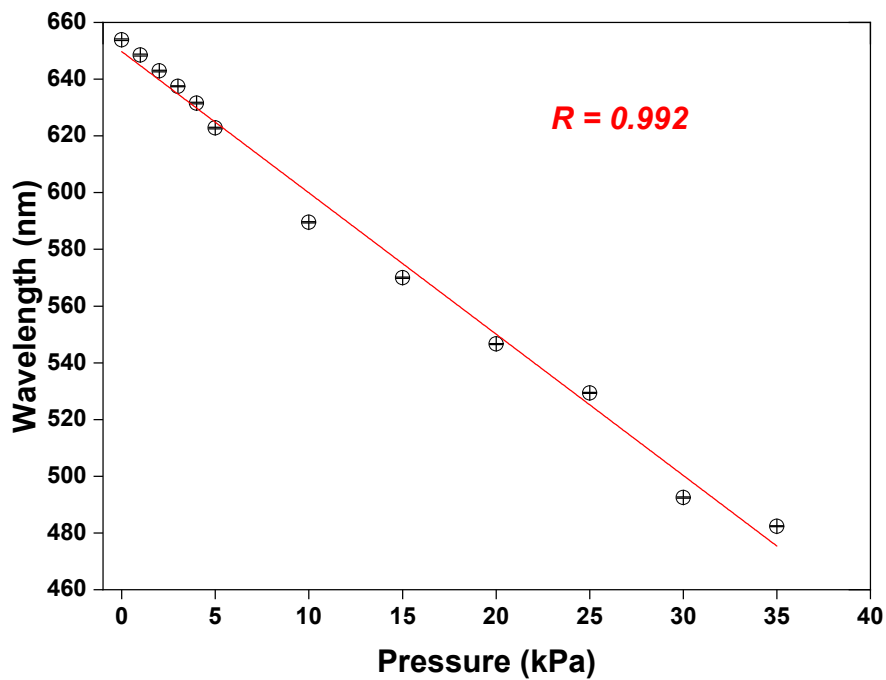


Figure S4 The plot demonstrating the change of the wavelength of reflectance peak with respect to the pressure within the range of 0-40 kPa.