

Electronic Supporting Information

3D printable light-responsive polymers

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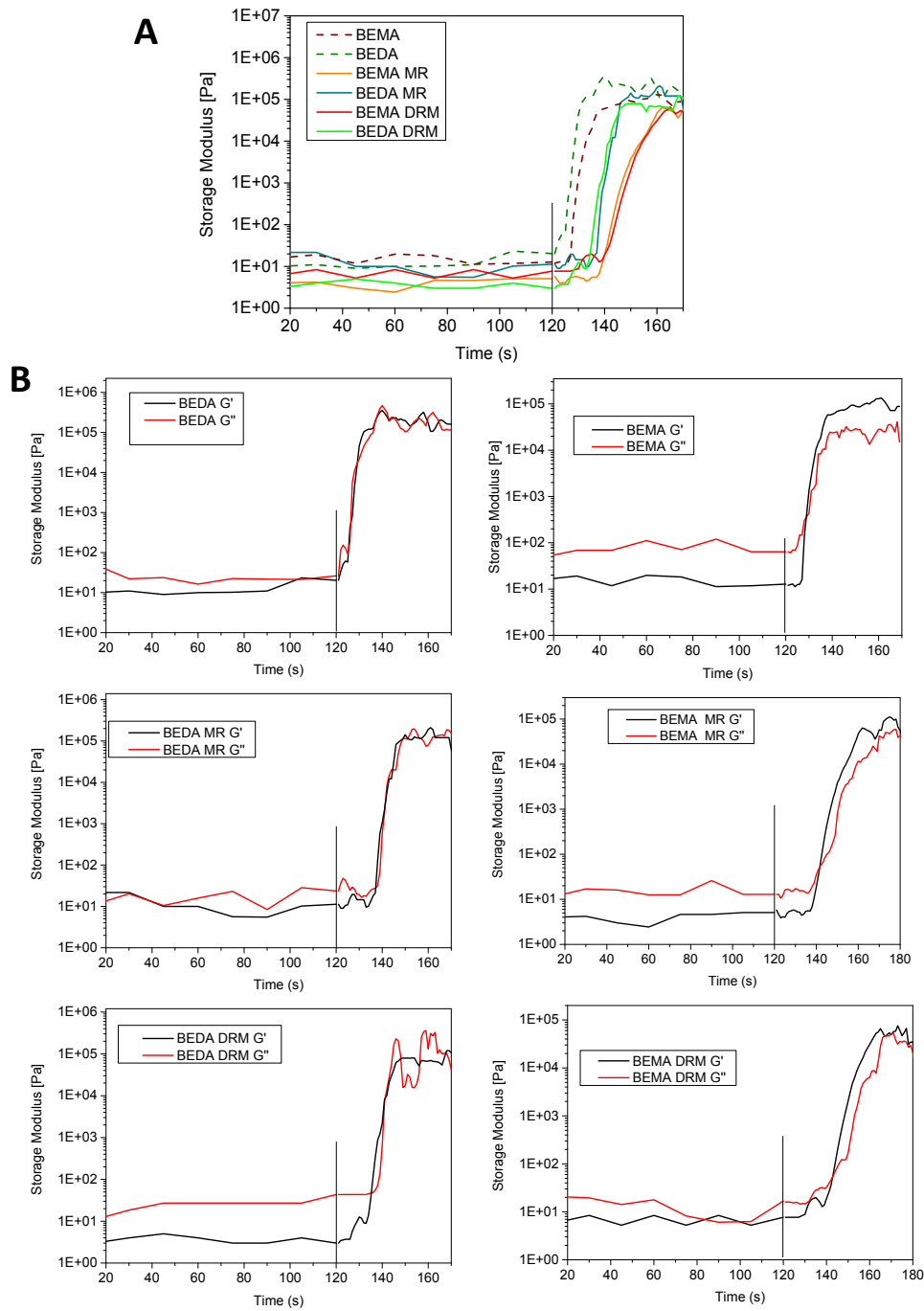


Figure S1. Photorheology tests. A) Comparison of the G' plots of the different formulations obtained with oscillatory tests at constant frequency (10 Hz) within the LVE (0,2%). Light was turned on after 2 minutes. B) $G'-G''$ plots for the different formulations.

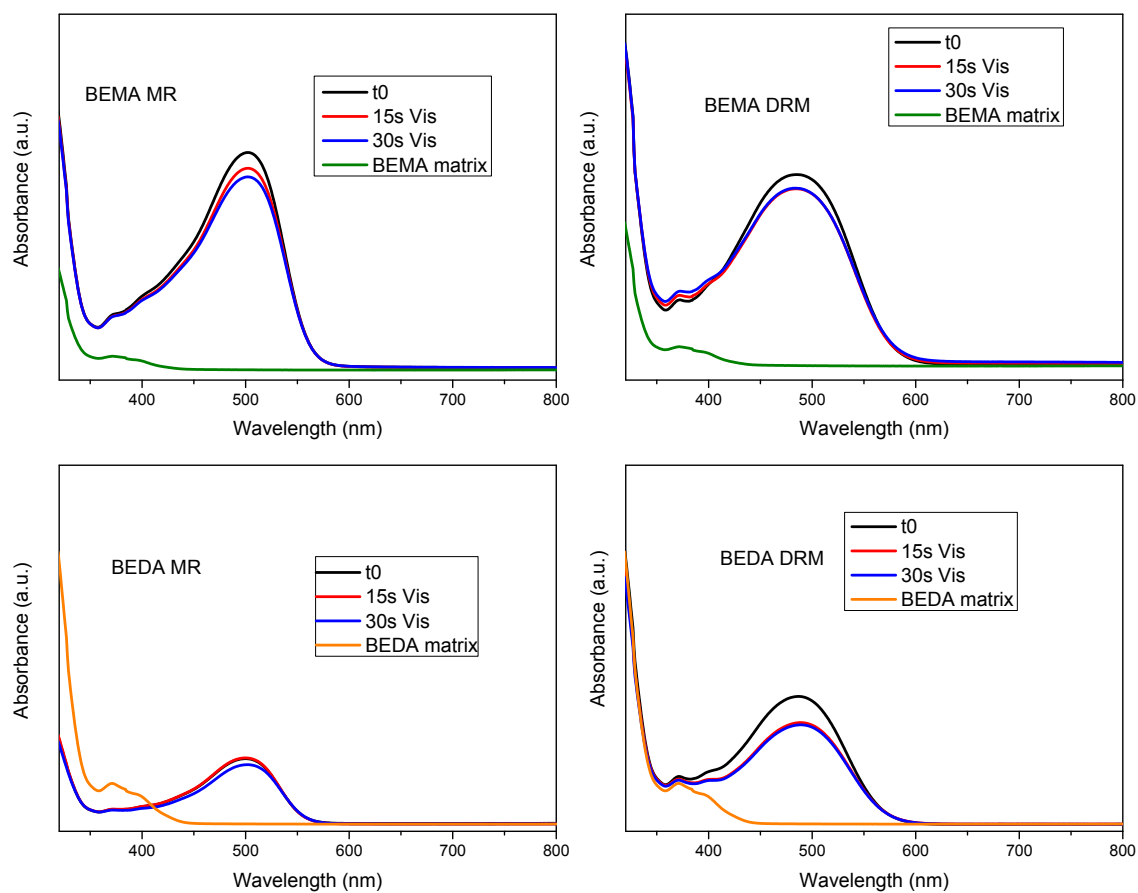


Figure S2. UV-Vis spectra of the different formulations after 0, 15 and 30 sec of visible light exposure.

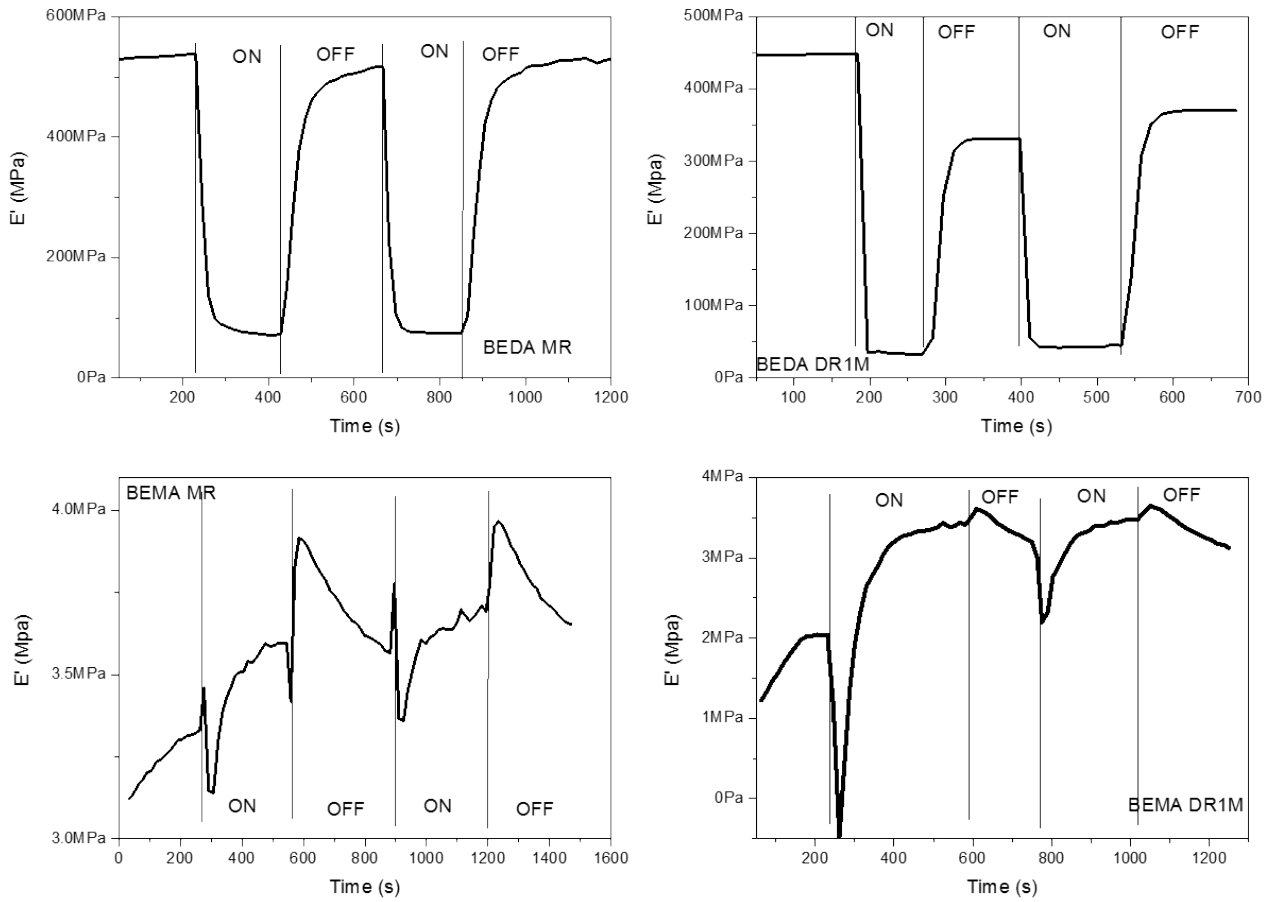


Figure S3 Storage Modulus (E') obtained by DMA experiments performed at 1Hz frequency on the tested samples at room temperature ($T=25^{\circ}\text{C}$) under(ON)/without (OFF) green laser irradiation.

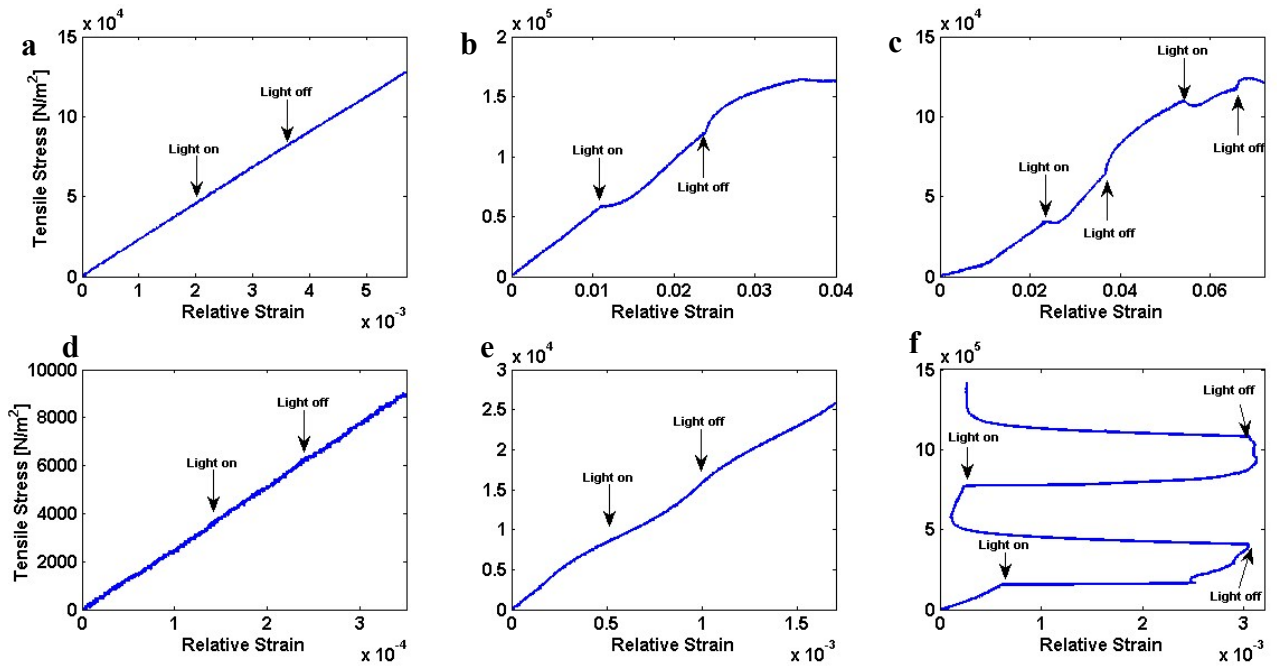


Figure S4. Quasi static stress/strain curve under dark and laser irradiation conditions for (a) BEMA, (b) BEMA-MR, (c) BEMA-DR1M, (d) BEDA, (e) BEDA at $T = 48^{\circ}\text{C}$ and (f) BEDA-MR. The curves have been obtained at room temperature ($T = 25^{\circ}\text{C}$) where not otherwise specified. Fitted values of the Young's Moduli are reported in Table 1.

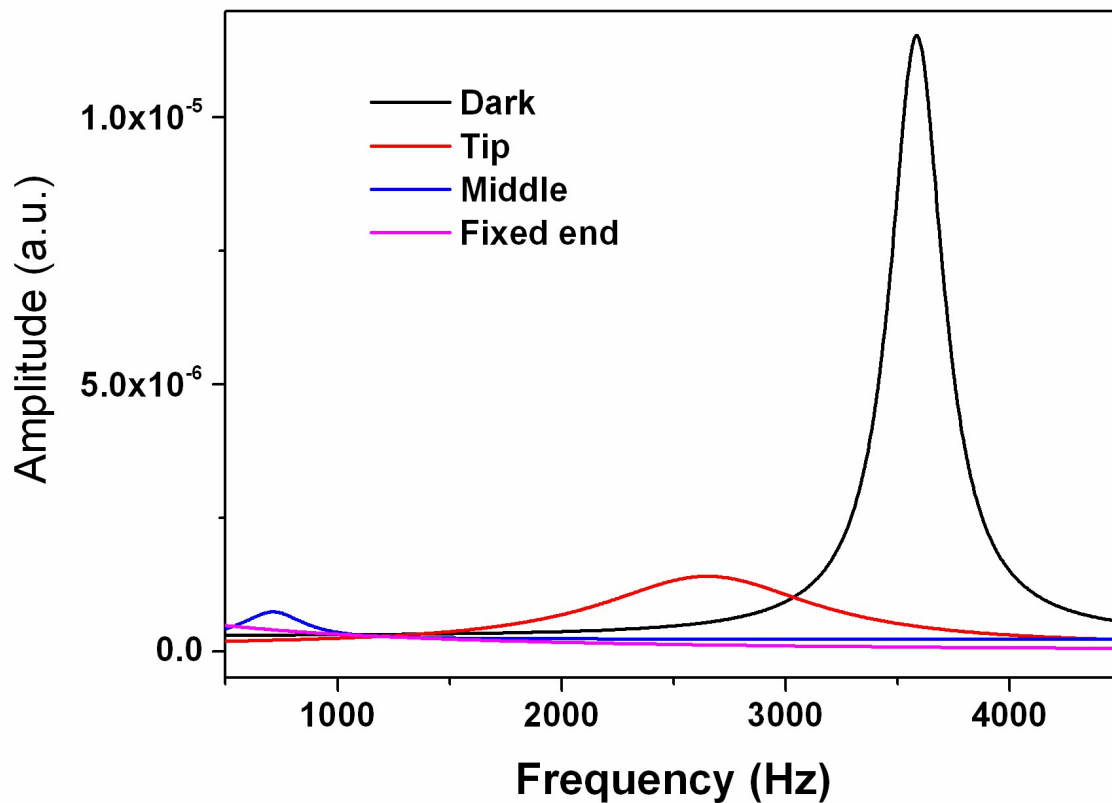


Figure S5. Comparison of the fundamental resonance frequency peak of a BEDA-DR1M printed cantilever at ambient temperature in dark conditions and when illuminated with a green laser focused on the tip, on the middle or on the fixed end of the suspended structure.

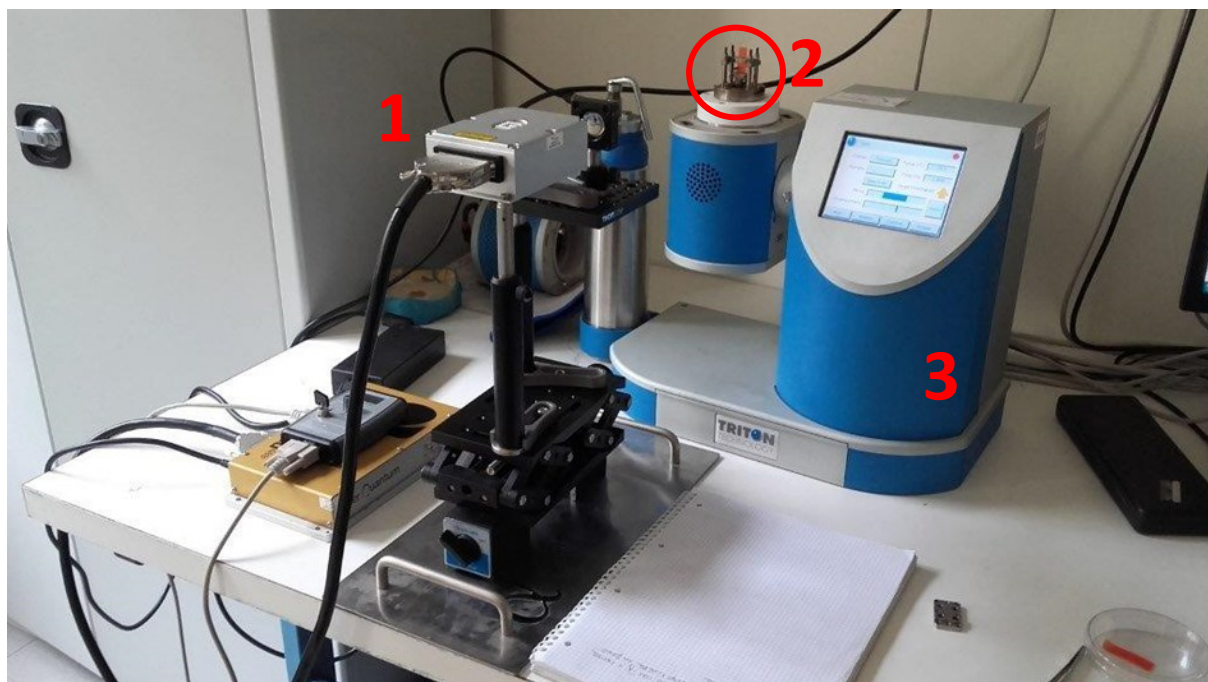


Figure S6 Setup used for stress-strain and DMA measurement. Operating with an open chamber it was possible to expose to laser radiation the different samples. In detail: 1 CW green laser; 2 mounted sample; 3 DMA equipment.