

# Effect of strong coupling on photodegradation of semiconducting polymer P3HT: supplementary material

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This document provides supplementary information to "Effect of strong coupling on photodegradation of semiconducting polymer P3HT," <https://doi.org/10.1364/OPTICA.6.000318>, including action integrals at Xe lamp photoexposure and calculated and experimental positions of the minima in the reflection spectra of the cavities.

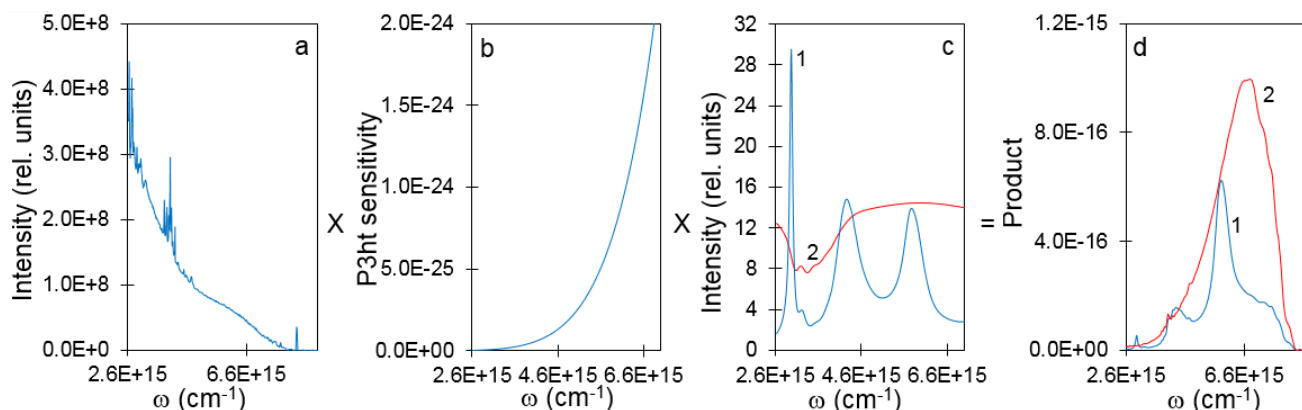


Fig. S1. Spectra of (a) the Xenon lamp emissivity, (b) the sensitivity of P3HT to photoexposure, and (c) the value  $|E|^2$  integrated over the thickness of the P3HT layer in the cavity (trace 1) and on top of glass (trace 2). (d) The product of the three spectra depicted in Figures S1a, S1b, and S1c was used to calculate the "action" integrals  $\int_c$  (trace 1) and  $\int_g$  (trace 2).

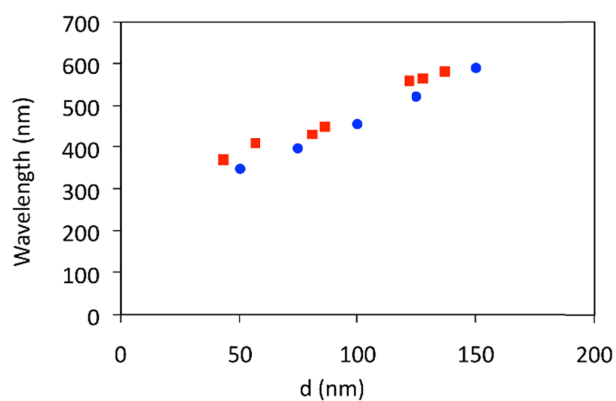


Fig. S2. Wavelength positions of reflectance minima in Fabry-Perot cavities of different sizes filled with PMMA polymer; red squares – experiment, blue circles – calculation.