Differentiation of Col I and Col III isoforms in stromal models of ovarian cancer by analysis of Second Harmonic Generation polarization and emission directionality

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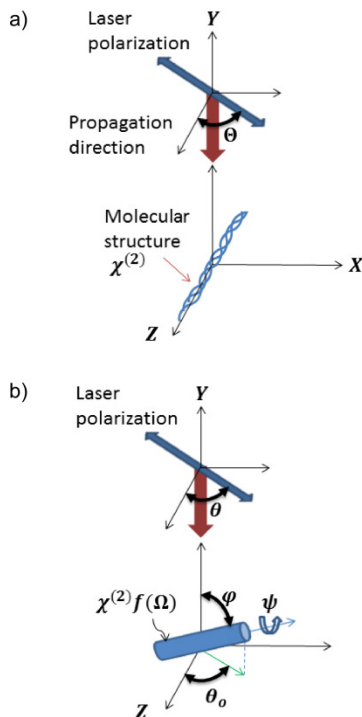**Supplemental Information:**

Figure S1. Definitions of coordinate systems used in the single axis molecular model (a) and the generic model (b). Y is the axis of propagation of the laser in both cases. For the former, $\chi^{(2)}$ is the nonlinear susceptibility tensor from hyperpolarizability of the molecular structure and Θ is the angle between the laser polarization and Z axis on the incident plane. In the latter, the Euler angles are set to $\Omega = (\theta, \varphi, \psi)$, where ψ is the angle between the major axis of the distribution of dipoles moments with the PSF and its higher cylindrical symmetry axis, i.e. the distribution along the major fibril axis as an equivalent fiber axis, φ is the angle between this axis and the Y axis, and θ is the angle relative to the Z axis between the laser polarization and distribution of dipole moments along the major fibril axis projected onto the incident plane (XZ).