Highly Broadband NLO Response of Acceptor-Donor-Acceptor Material

with Planar Conformation

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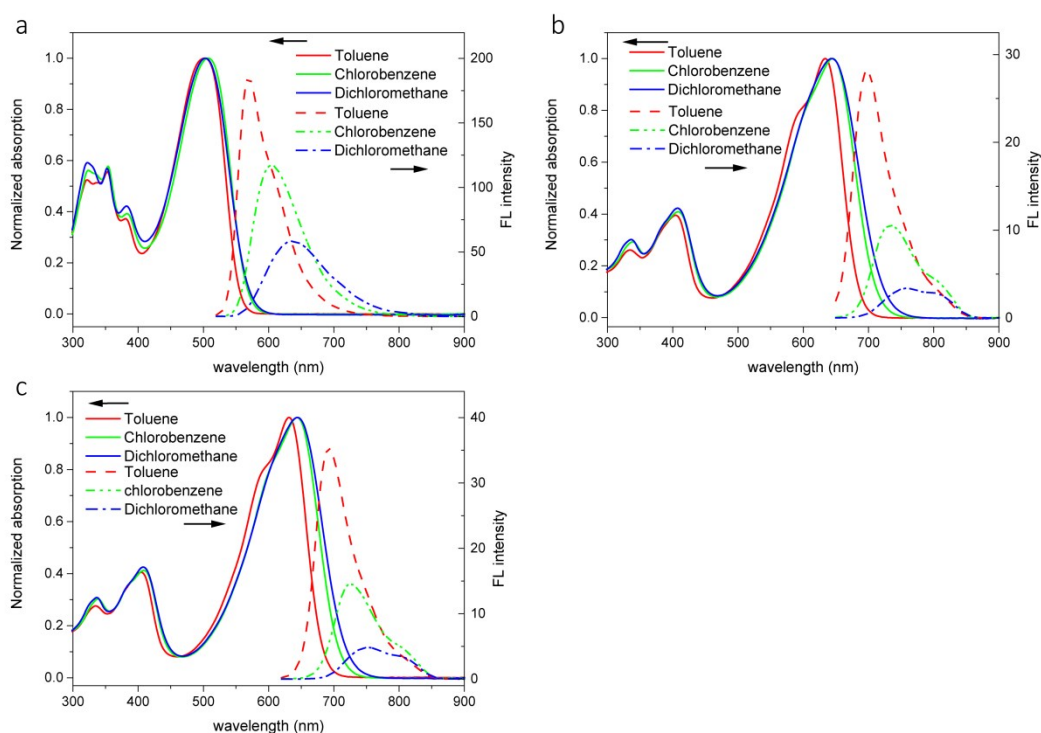

Figure S1. UV-Vis absorption (solid lines) and emission spectra (dash line) in dilute different polarity solvents (Toluene < Chlorobenzene < Dichloromethane). a is IDFBR; b is O-IDTBR; c is EH-IDTBR.
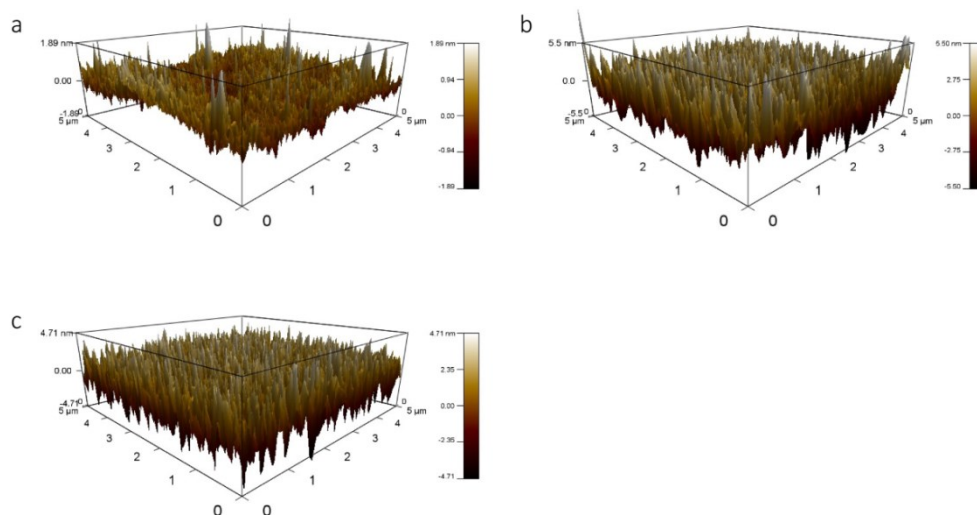
Figure S2. AFM 3D images of (a) IDFBR, (b) O-IDTBR and (c) EH-IDTBR on silicon wafer in the 5μm × 5μm region.
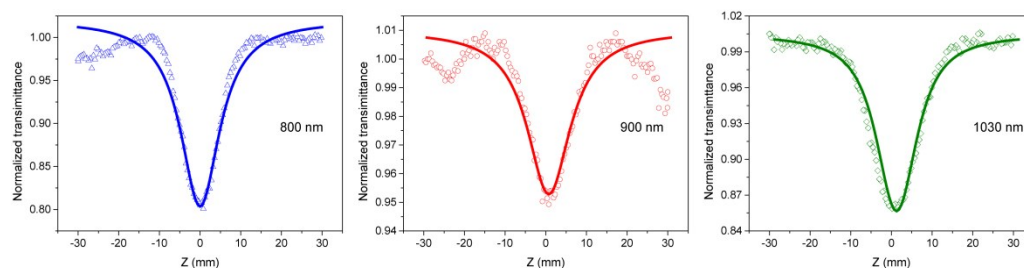

Figure S3. Femtosecond open aperture Z-scan curves of EH-IDTBR at 800 nm, 900 nm and 1030 nm in toluene solvent.
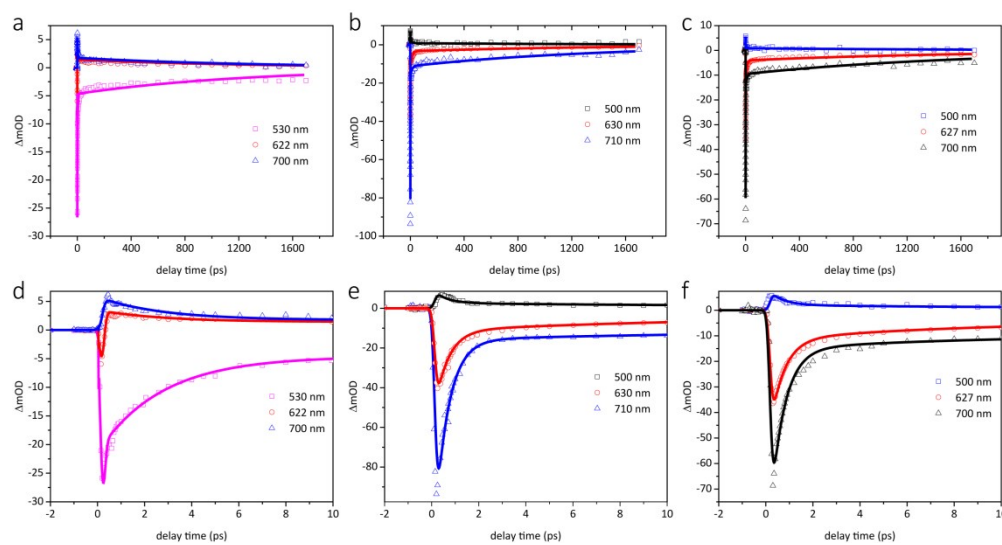

Figure S4. Dynamic traces of IDFBR (a, d), O-IDTBR (b, e) and EH-IDTBR (c, f) at long delay time and short delay time. Solid lines are theoretical fitting and circles are experimental data..
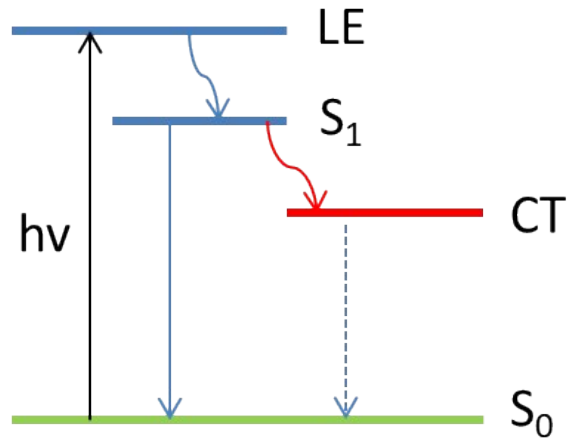
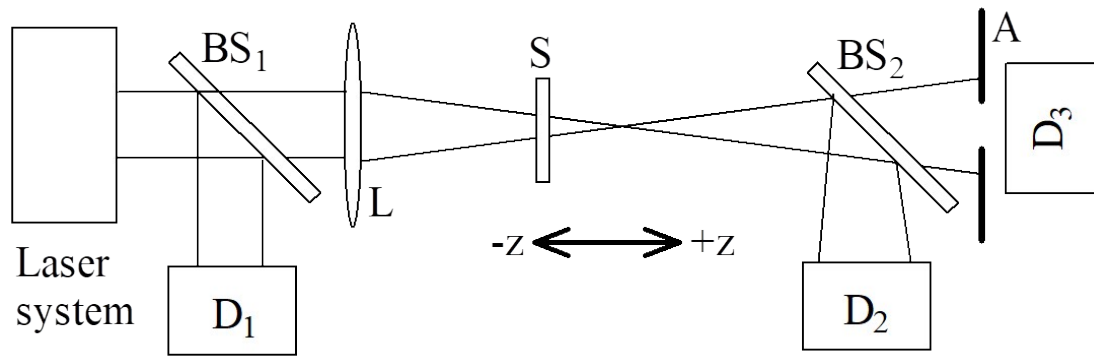Figure S5. The proposed target model diagram of samples after photoexcitation

Figure S6. The Z-scan measured apparatus. BS_1, BS_2，beam splitter; L, lens; S, sample; A, aperture；D_1-D_3, energy detectors
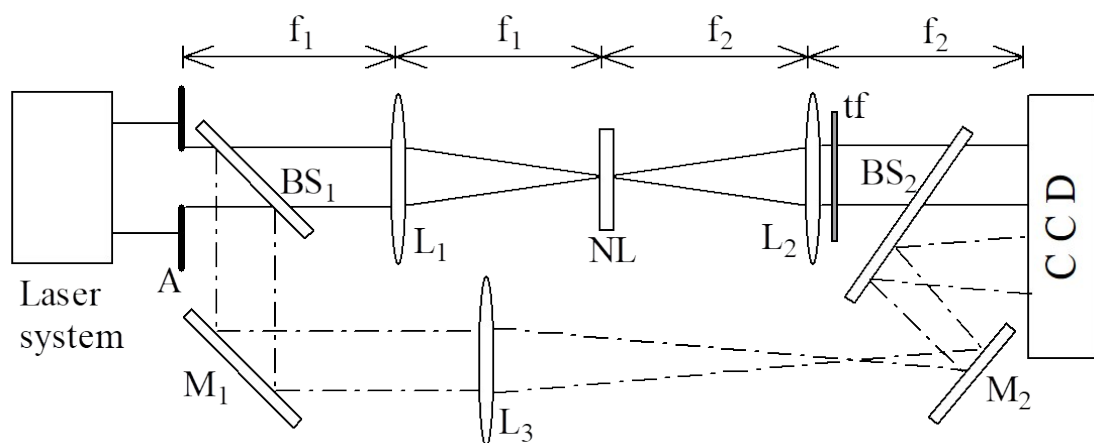

Figure S7. Schematic of *4f* coherent imaging technique. A is the aperture with PO; NL, the nonlinear sample; L_1-L_3, lenses; M_1-M_2, mirrors; BS_1-BS_2, beam splitters; tf, neutral filter.