

Supporting Information

Investigation of broadband optical nonlinear absorption and transient dynamics in Orange IV containing azobenzene

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Closed Aperture Z-scan results of solvent DMSO and Orange IV solution at 532 nm. The linear transmittance is 0.35, and the incident peak power density is 21.4 GW/cm²

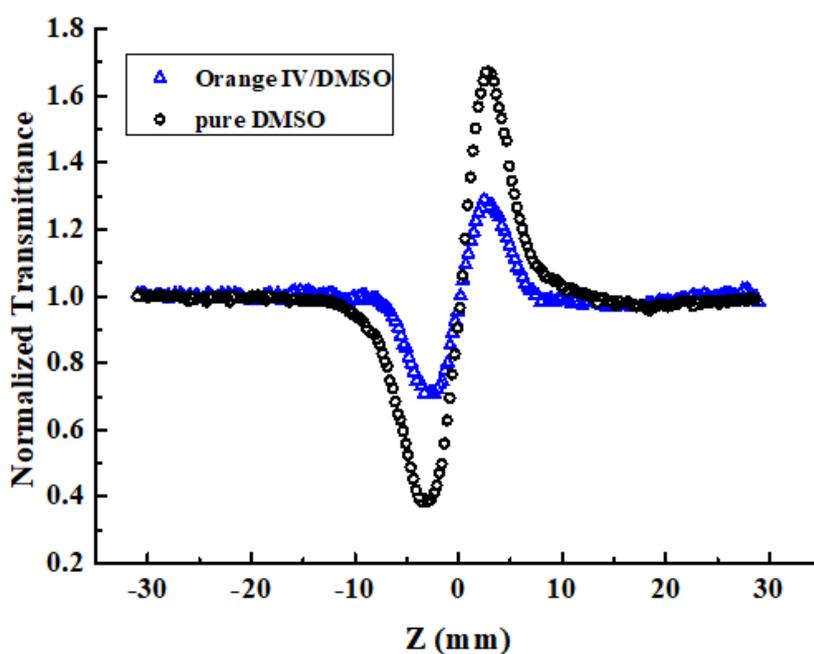


Figure S1. Closed Aperture Z-scan results of solvent DMSO and Orange IV solution at 532 nm.

The molecules studied in this paper were purchased from chemical reagent companies. Its ^1H NMR spectrum is as follows:

^1H NMR (400 MHz, DMSO- d_6) δ 8.89 (s, 1H), 7.82 (d, J = 8.9 Hz, 2H), 7.74 (s, 4H), 7.37 – 7.29 (m, 2H), 7.22 (d, J = 7.3 Hz, 2H), 7.17 (d, J = 9.0 Hz, 2H), 6.99 (t, J = 7.3 Hz, 1H).

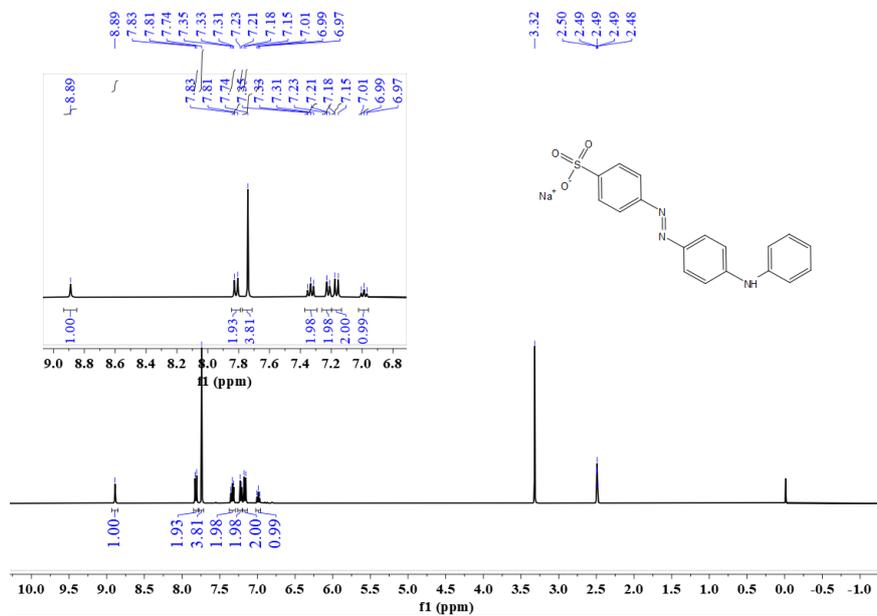


Figure S2. ^1H NMR spectrum of Orange IV in DMSO.