

Supplementary Information

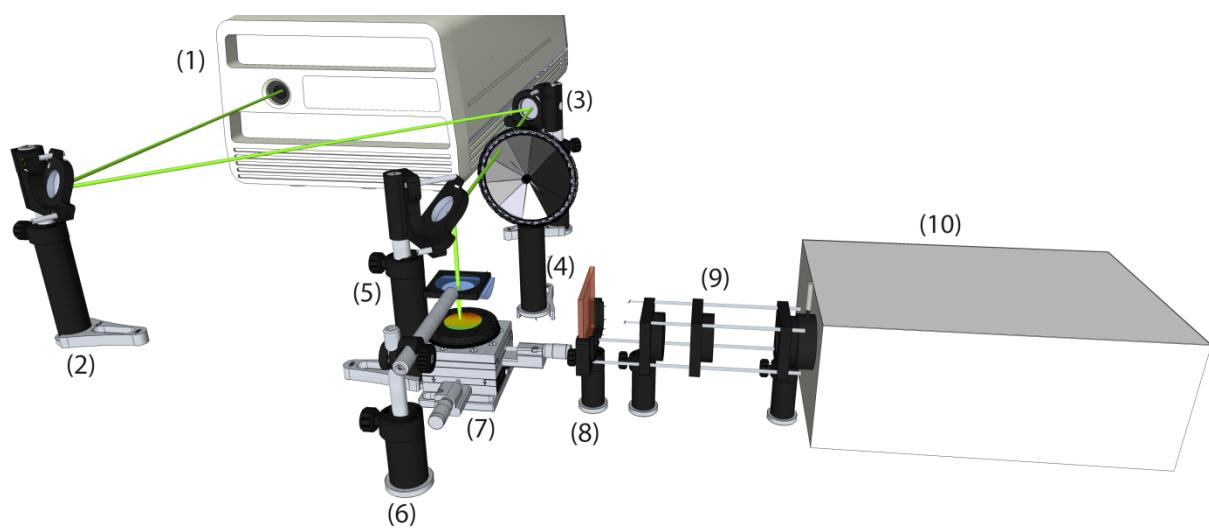


Figure S1. Experimental apparatus: (1) laser source; (2), (3), (5) mirrors, (4) circular stepped neutral density filter (6) cylindrical lens (7) rotational support for sample loading (8) optical low-pass filter (9) lens array and (10) detector

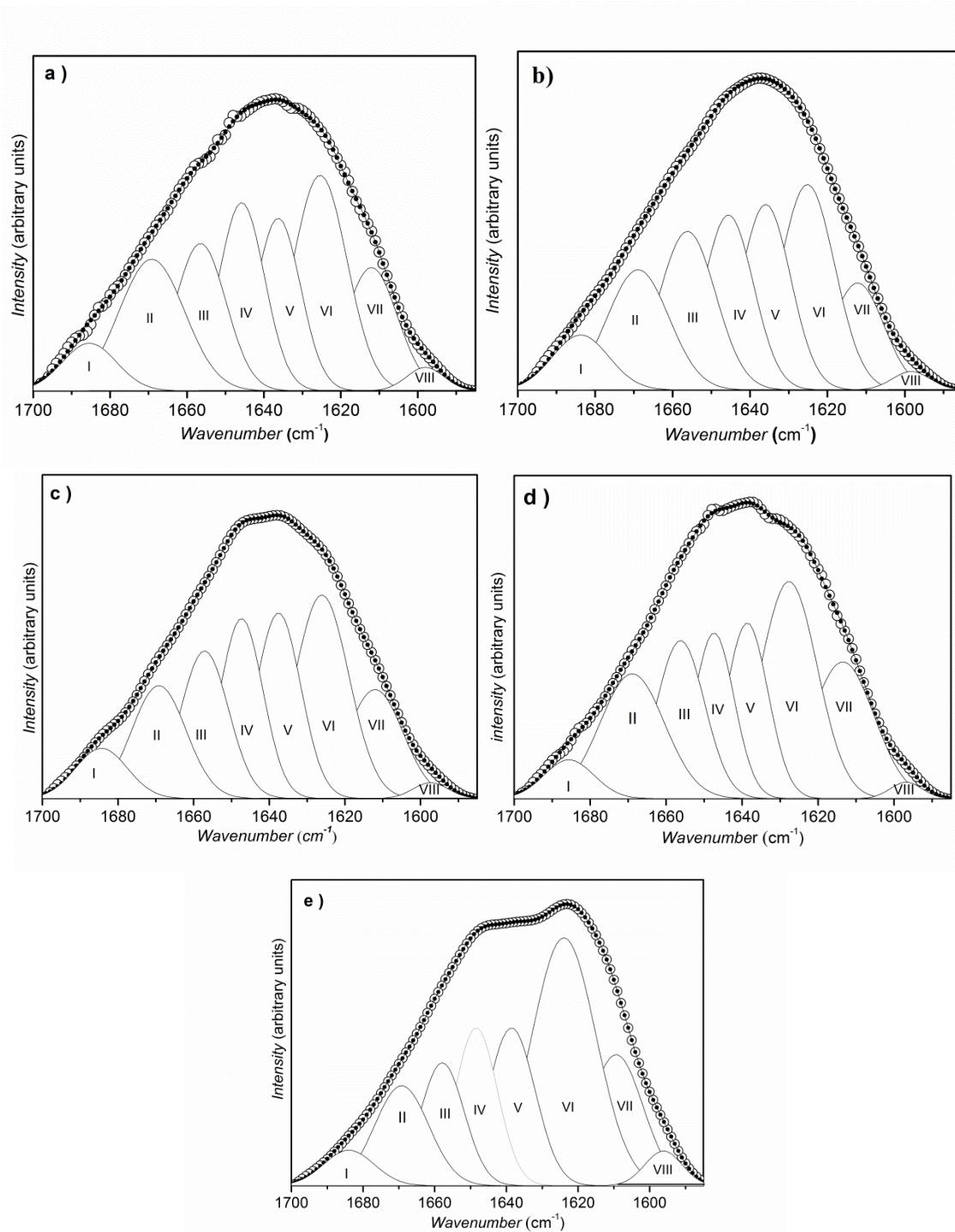


Figure S2. Curve fitting of the amide I band observed in the ATR-FTIR spectrum: a) Pure SF b) Dye Doped SF c) SFSi1 d) SFSi2 and e) SFSi3

Table S1. Relative Area (%) corresponding the curve fitting of amide I ATR-FTIR spectra of SFfilms.

	I	II	III	IV	V	VI	VII	VIII
Pure SF	4.70	16.0	13.9	16.0	14.3	21.6	11.9	1.63
Doped SF	5.58	13.5	16.2	15.9	16.8	20.5	10.3	1.27
SFSi1	5.22	12.4	14.3	15.6	16.8	22.3	12.3	1.13
SFSi2	3.66	15.2	14.3	12.6	13.9	23.3	16.2	0.99
SFSi3	3.48	10.6	10.5	13.1	14.6	31.3	13.9	2.54

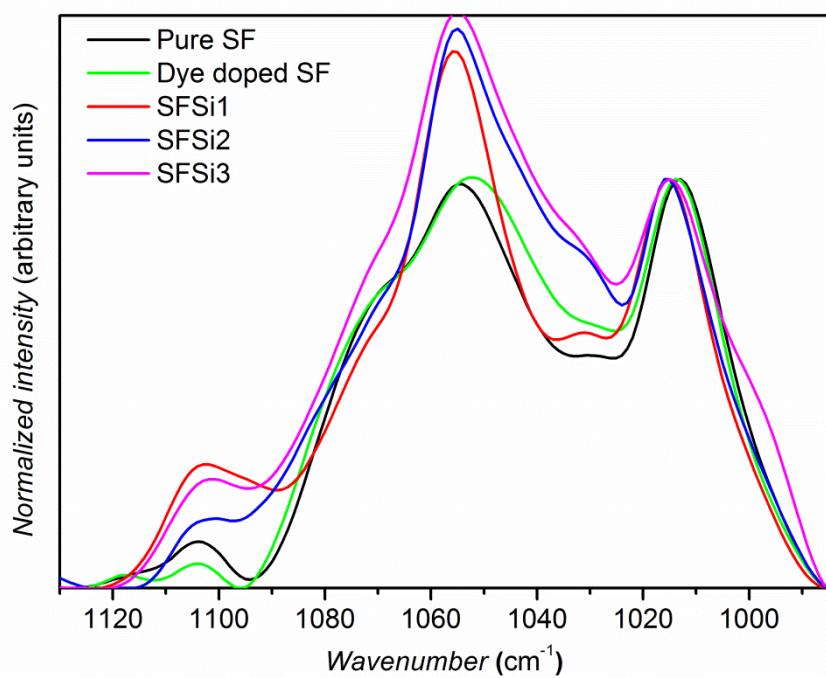


Figure S3. ATR-FTIR spectra of SF films: pure film, dye doped SF film, SFSi1, SFSi2 and SFSi3.