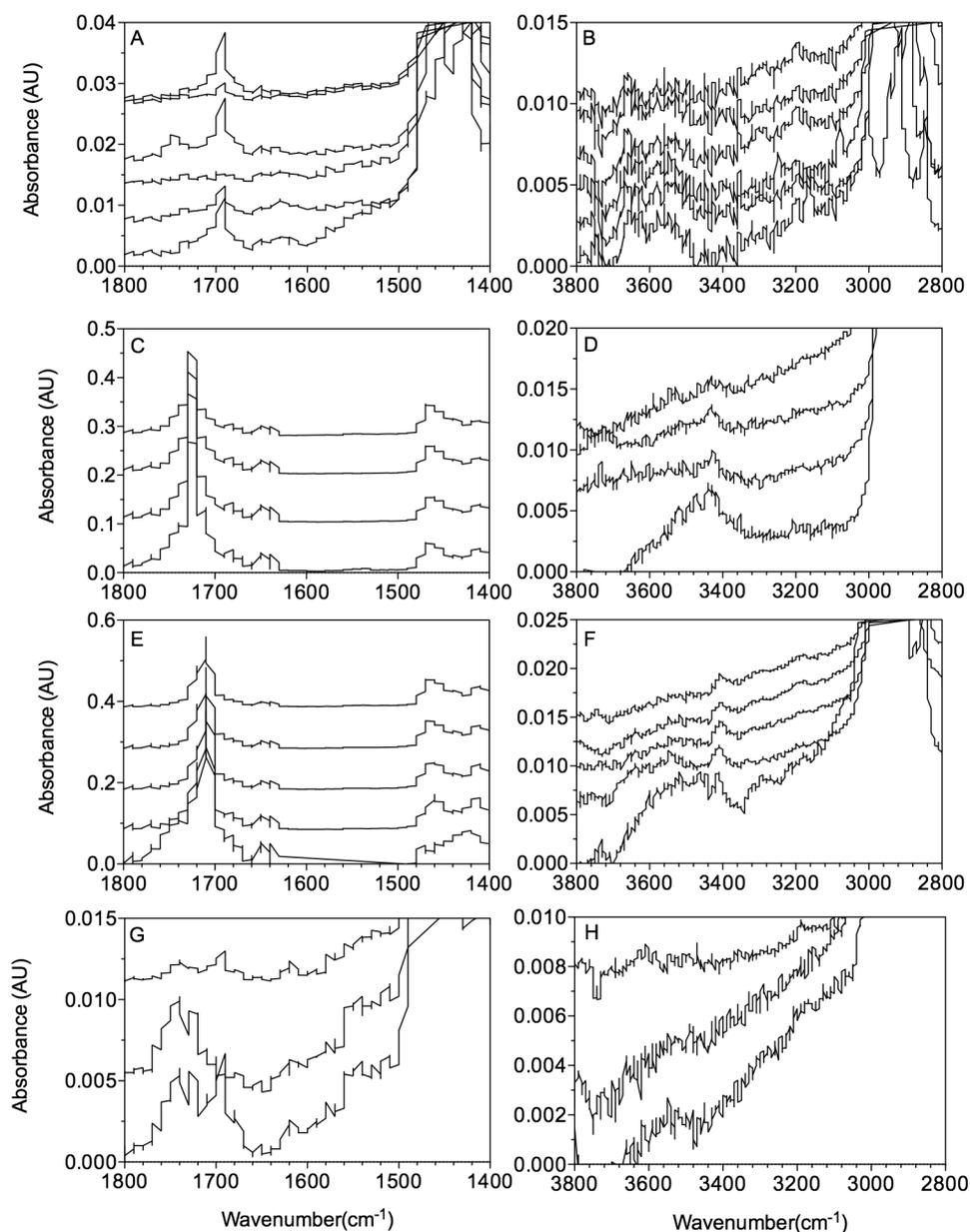
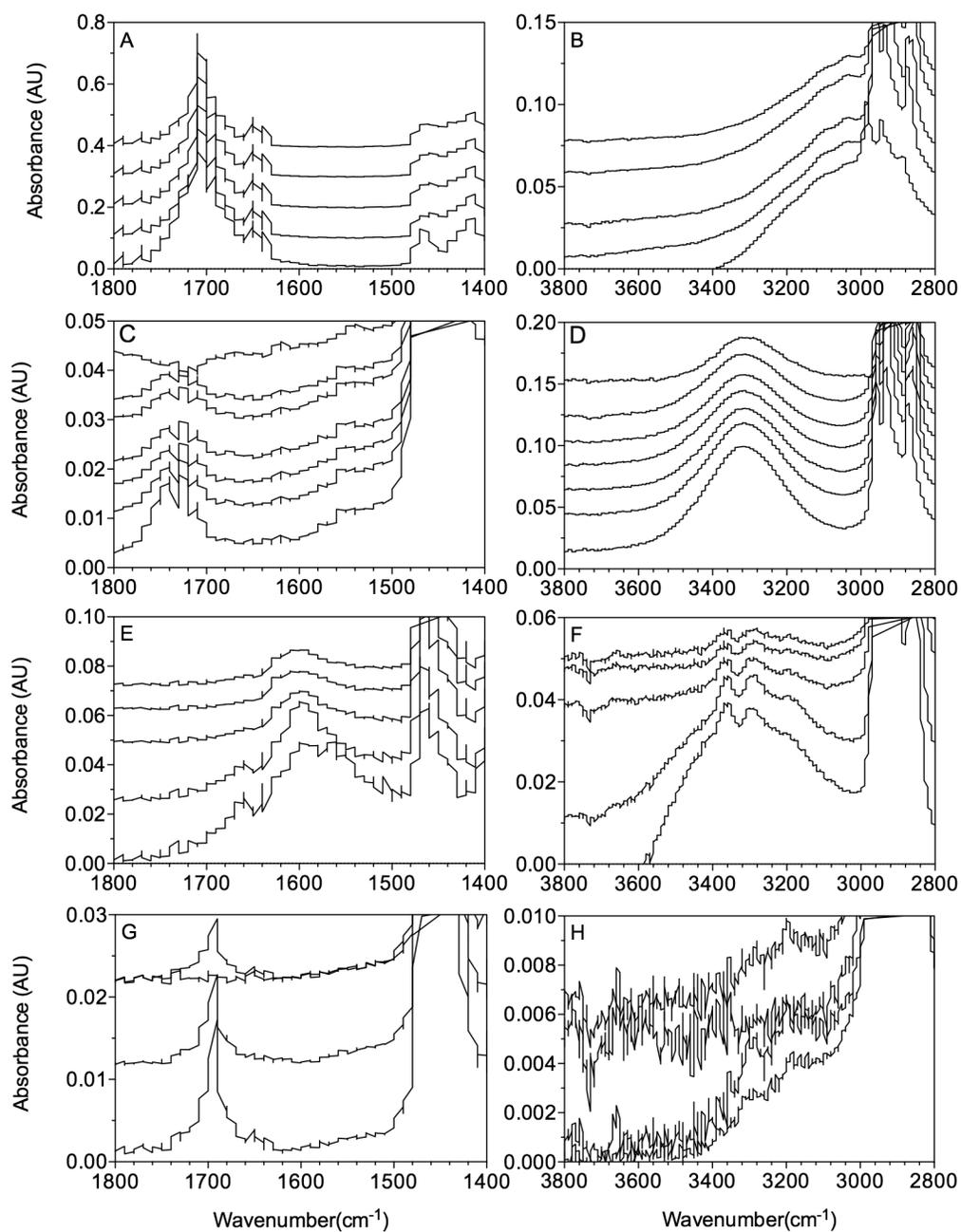


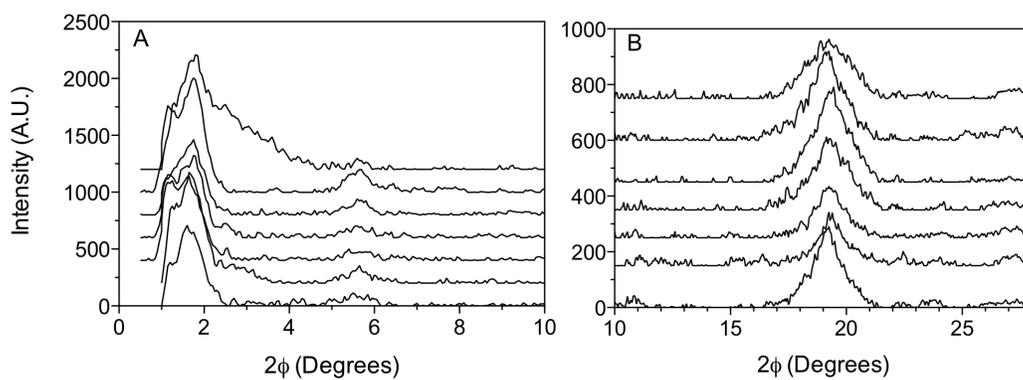
Supplemental Figure 1: Offset FT-IR spectra of 12HSA molecular gels in alkanes. Solvent chain length increases from bottom to top.



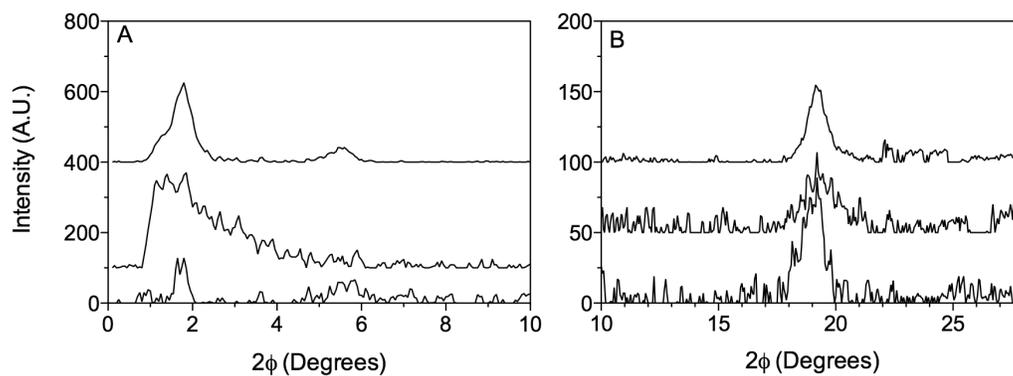
Supplemental Figure 2: Offset FT-IR spectra of 12HSA molecular gels in (A,B) nitriles, (C,D) aldehydes, (E,F) ketones, and (G,H) ethers. Solvent chain length increases from bottom to top.



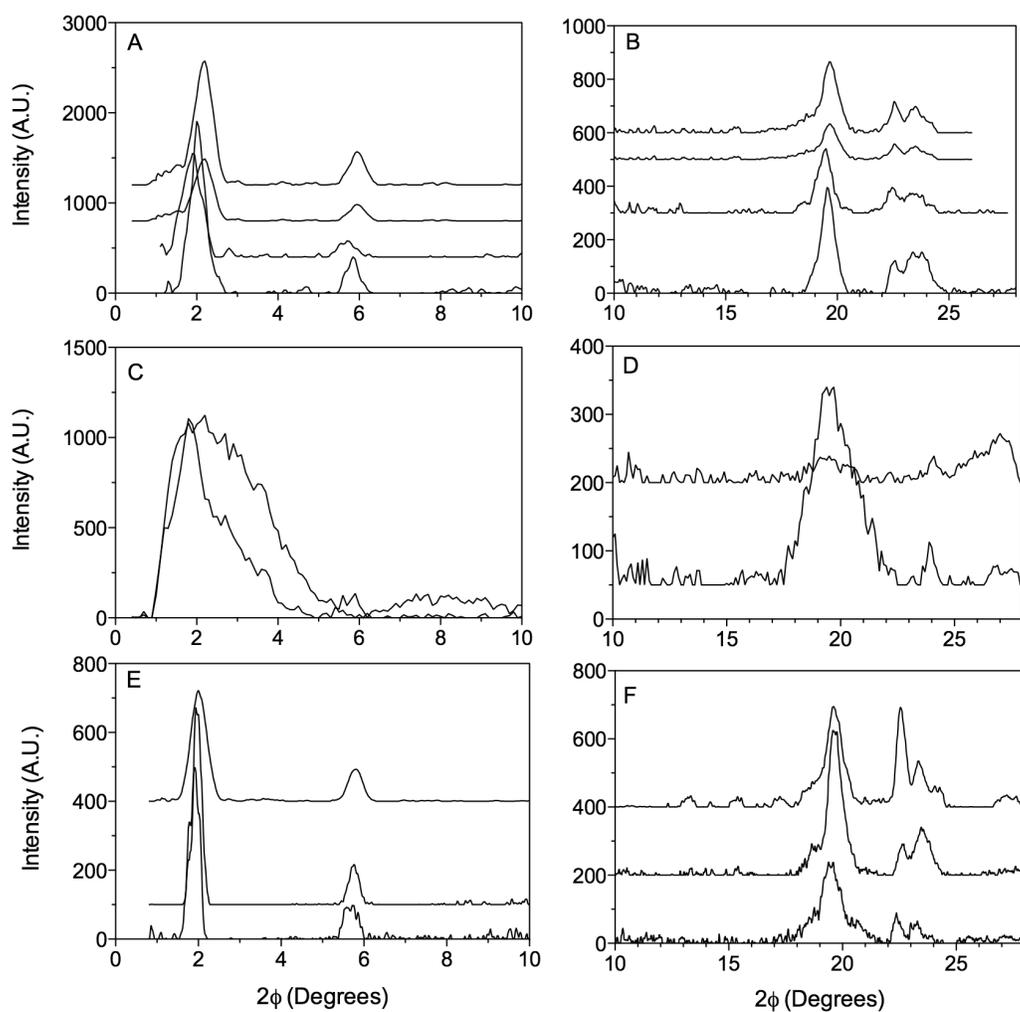
Supplemental Figure 3: Offset FT-IR spectra of 12HSA molecular gels in (A,B) carboxylic acids, (C,D) alcohols, (E,F) amines, and (G,H) thiols. Solvent chain length increases from bottom to top.



Supplemental Figure 4: Offset short-angle (A) and wide-angle (B) X-ray diffraction spectra of 12HSA molecular gels in alkanes. Solvent chain length increases from bottom to top.



Supplemental Figure 5: Offset short-angle (A) and wide-angle (B) X-ray diffraction spectra of 12HSA molecular gels in thiols. Solvent chain length increases from bottom to top.



Supplemental Figure 6: Offset short-angle (A,C,D) and wide-angle (B) X-ray diffraction spectra of 12HSA molecular gels in (A,B) nitriles, (C,D) aldehydes, and (E,F) ketones. Solvent chain length increases from bottom to top.