

Supporting information for the manuscript:

Fullerenolates: Metallated Polyhydroxylated Fullerenes with Potent Anti-amyloid Activity

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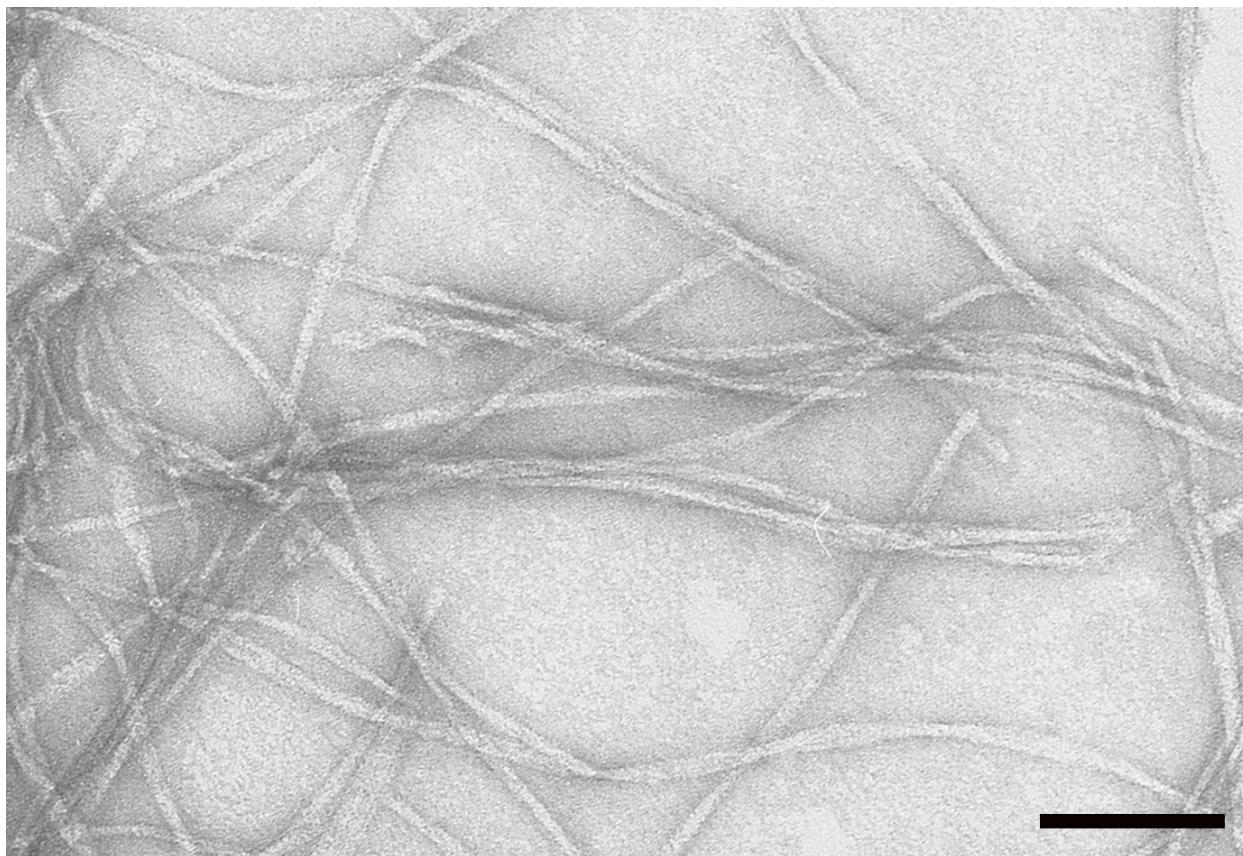


Figure S1. Electron micrograph of the amyloid fibrils of A β (1-42)-peptide formed in a solution containing 0.03 M KCl and 10 mM imidazole (pH 7.0) and incubated at 37°C for 24 h. Negative staining with 2% aqueous solution of uranyl acetate. Scale bar is 100 nm.

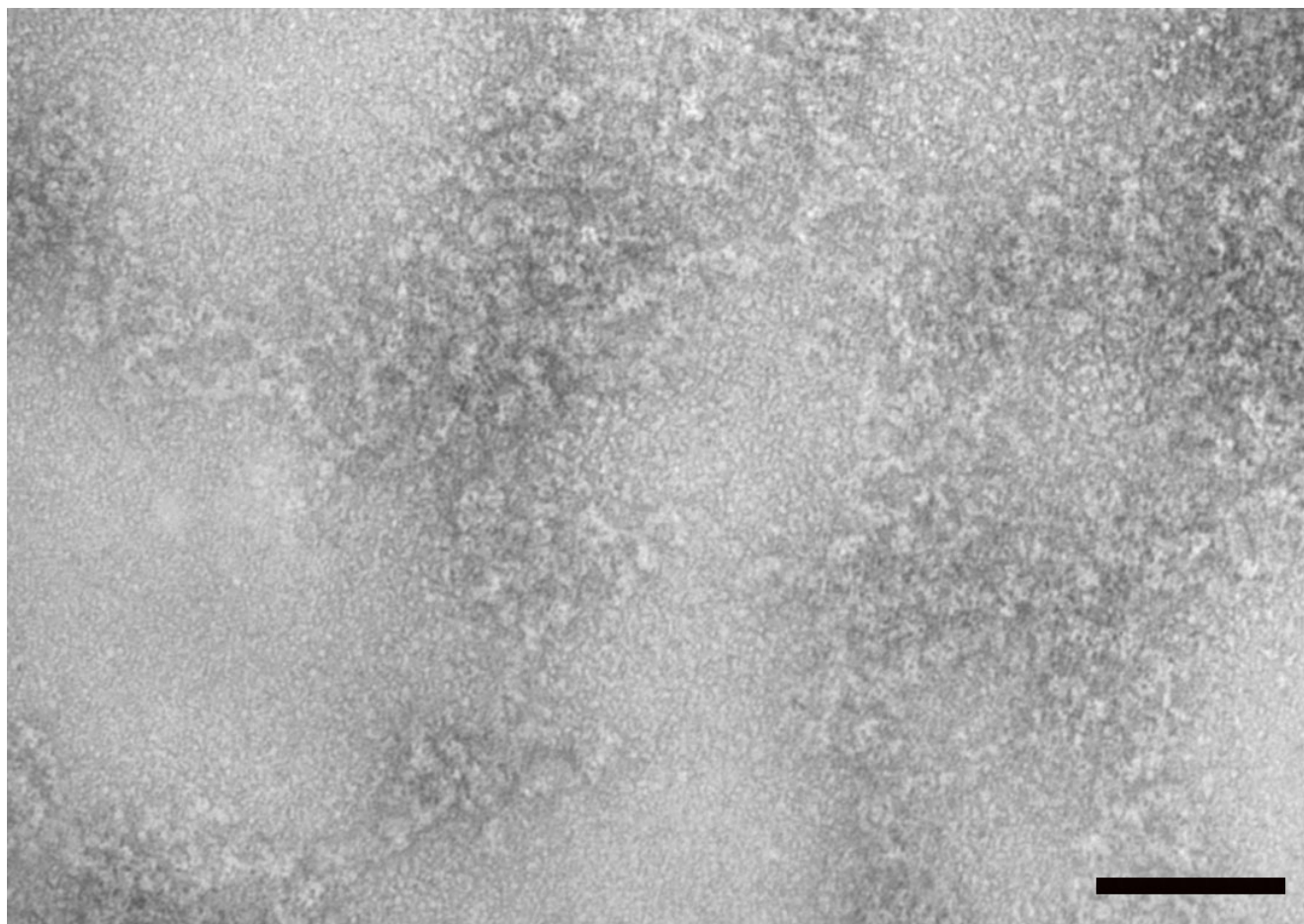


Figure S2. Electron micrograph of the NaFL dispersion in a solution containing 0.03 M KCl and 10 mM imidazole (pH 7.0) and incubated at 37°C for 24 h. Negative staining with 2% aqueous solution of uranyl acetate. Scale bar is 100 nm.

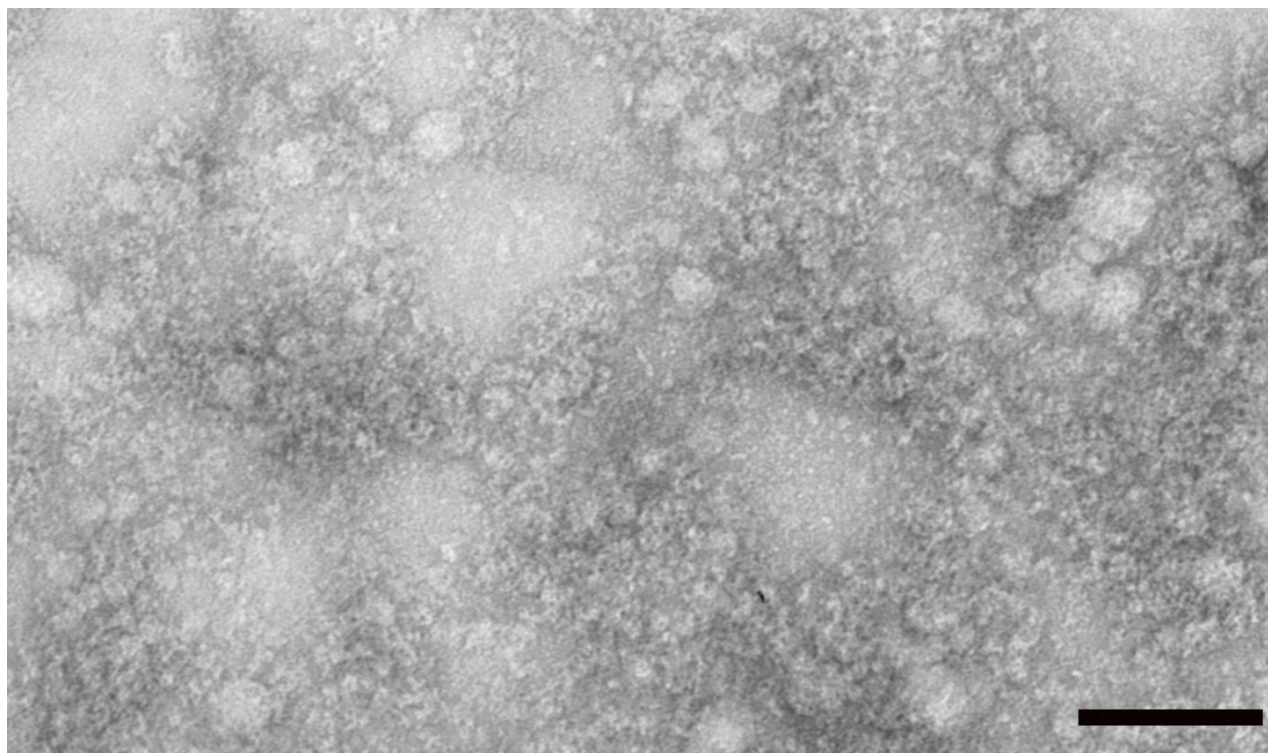


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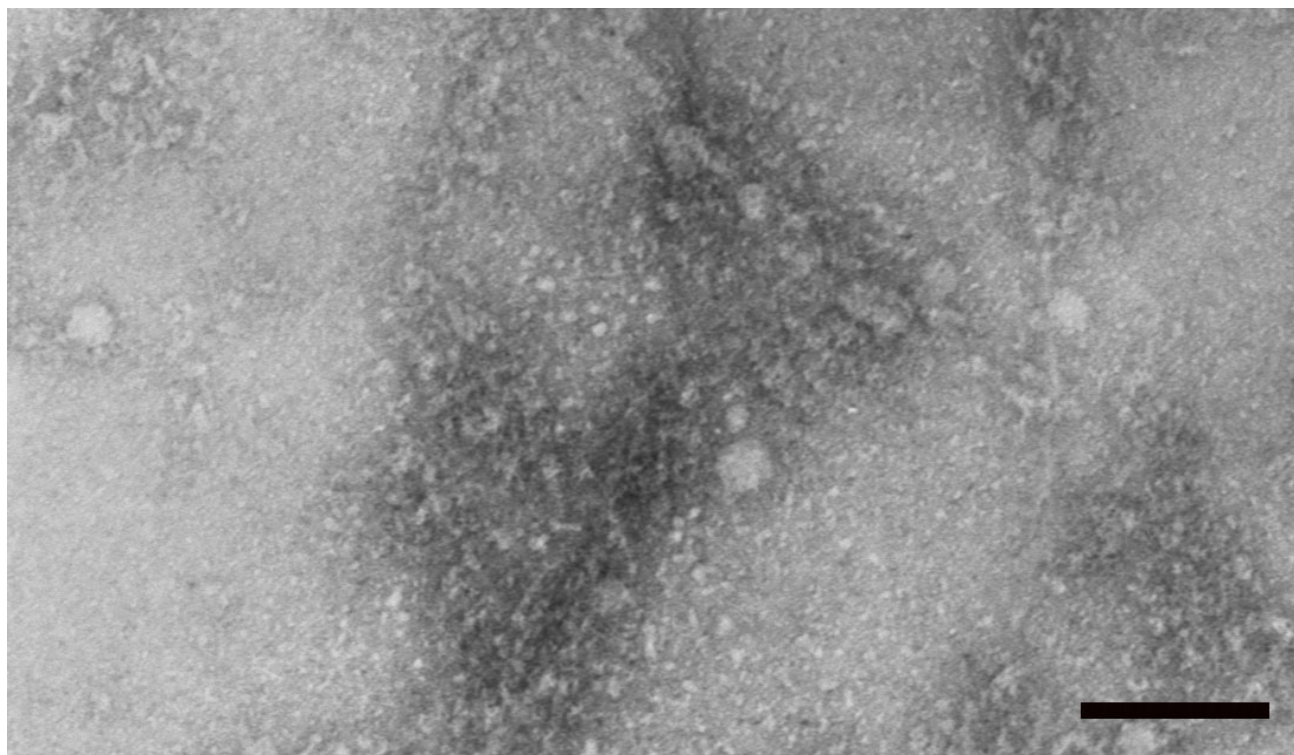


Figure S4. Electron micrograph of the 1:1 (w/w) mixture of the preformed fibrils of A β (1-42)-peptide and NaFL co-incubated in a solution containing 0.03 M KCl and 10 mM imidazole (pH 7.0) at 37°C for 24 h. Negative staining with 2% aqueous solution of uranyl acetate. Scale bar is 100 nm.

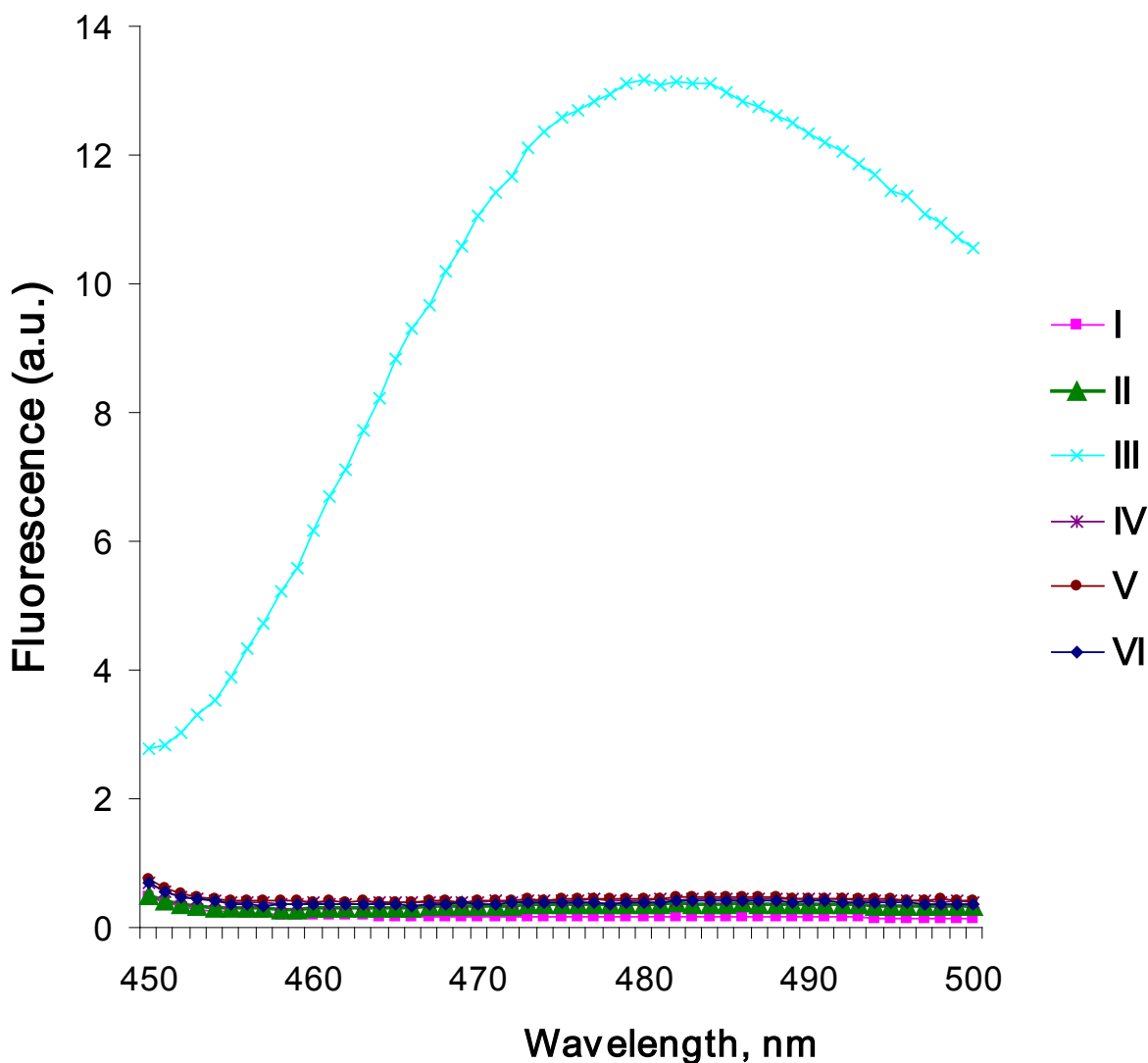


Figure S5. The fluorescence spectra of:

- I. the reference solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the absence of thioflavin T;
- II. the reference solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the presence of thioflavin T;
- III. A β (1-42)-peptide fibrils in solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the presence of thioflavin T;
- IV. incubated 1:1 mixture of A β (1-42)-peptide and NaFL in solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the presence of thioflavin T;
- V. incubated 1:1 mixture of the preformed fibrils of A β (1-42)-peptide and NaFL in solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the presence of thioflavin T;
- VI. NaFL in solution containing 30 mM KCl, 10 mM imidazole, pH 7.0 in the presence of thioflavin T;

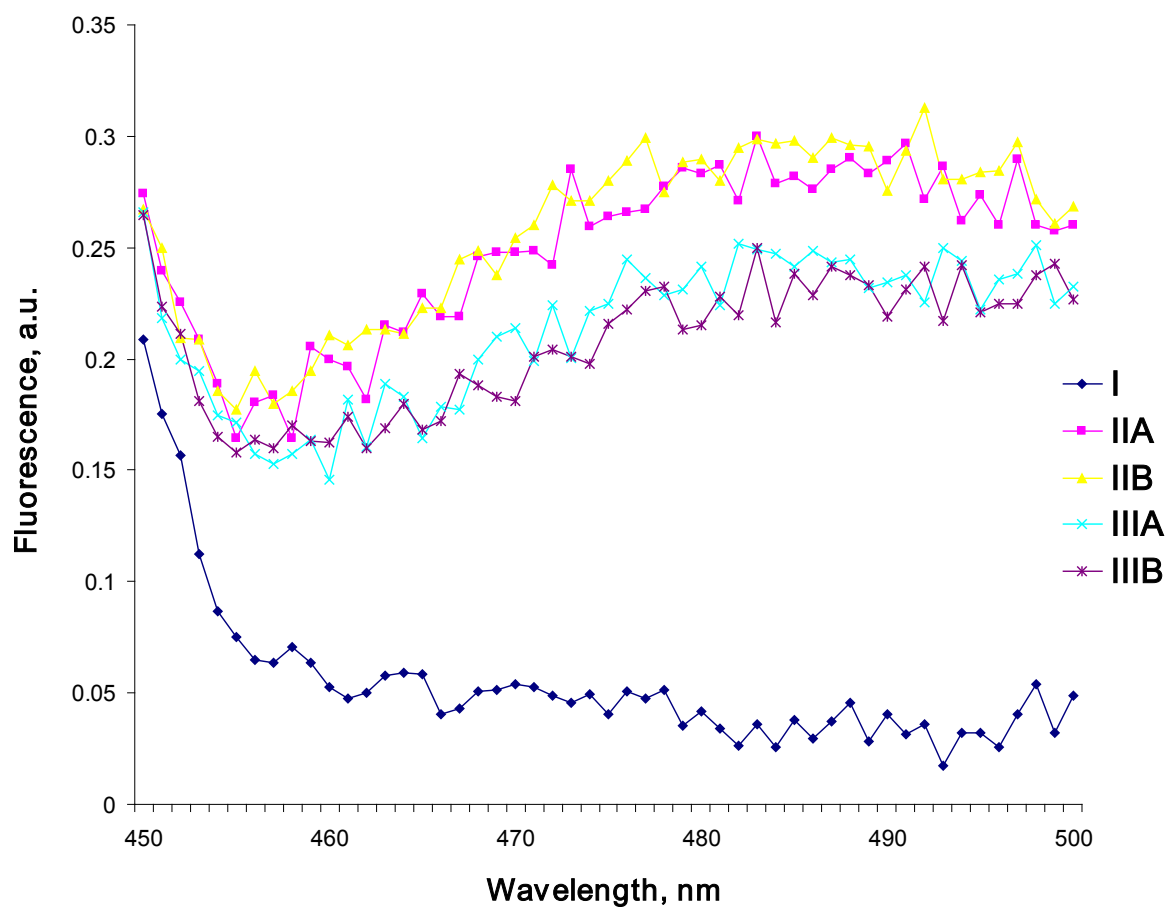


Figure S6. The fluorescence spectra of:

I - Bidistilled water

IIA and IIB (two independent experiments) – Thioflavine T in bidistilled water

IIIA and IIIB (two independent experiments) – Thioflavine T + NaFL in bidistilled water

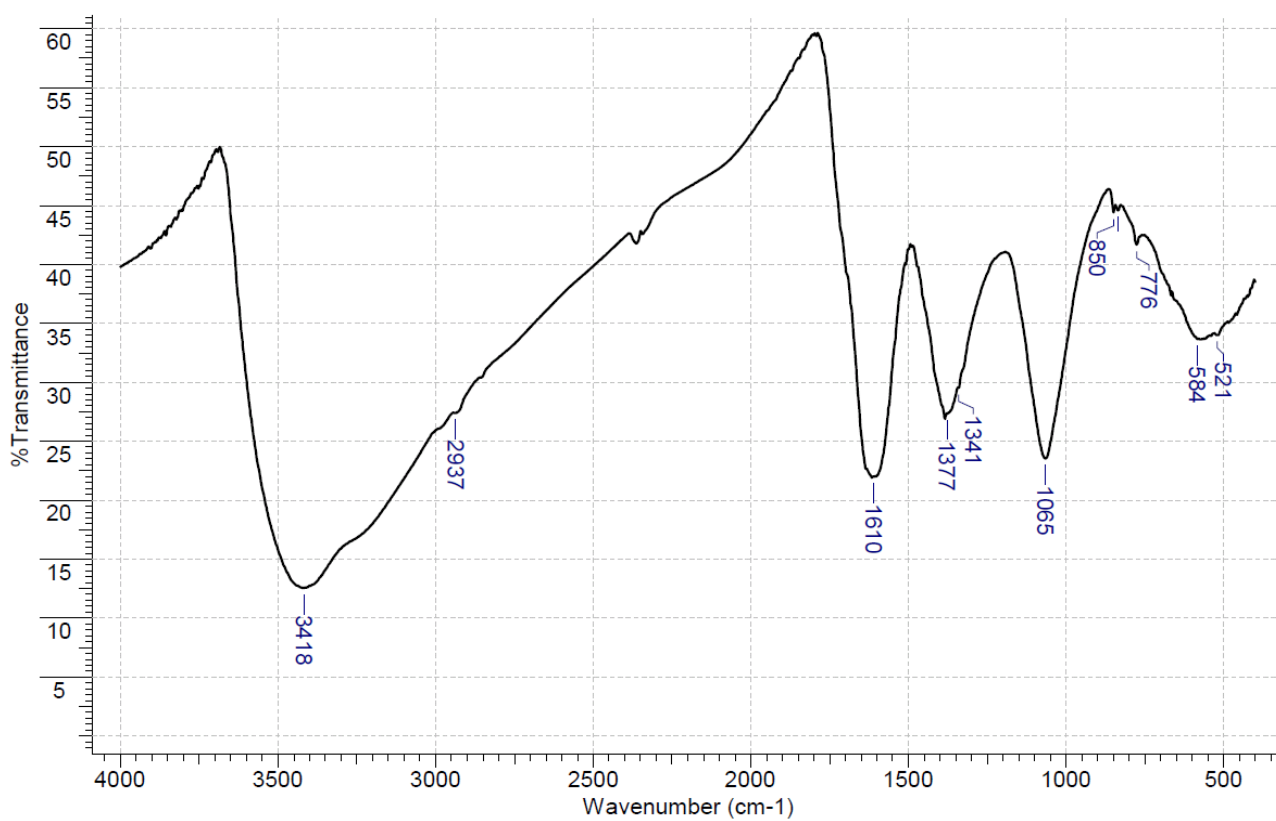


Figure S7. The FTIR spectrum of NaFL (KBr pellet).