

## Synthesis, Characterization, and Molecular Docking Against a Receptor Protein FimH of *Escherichia coli* (4XO8) of Thymidine Derivatives

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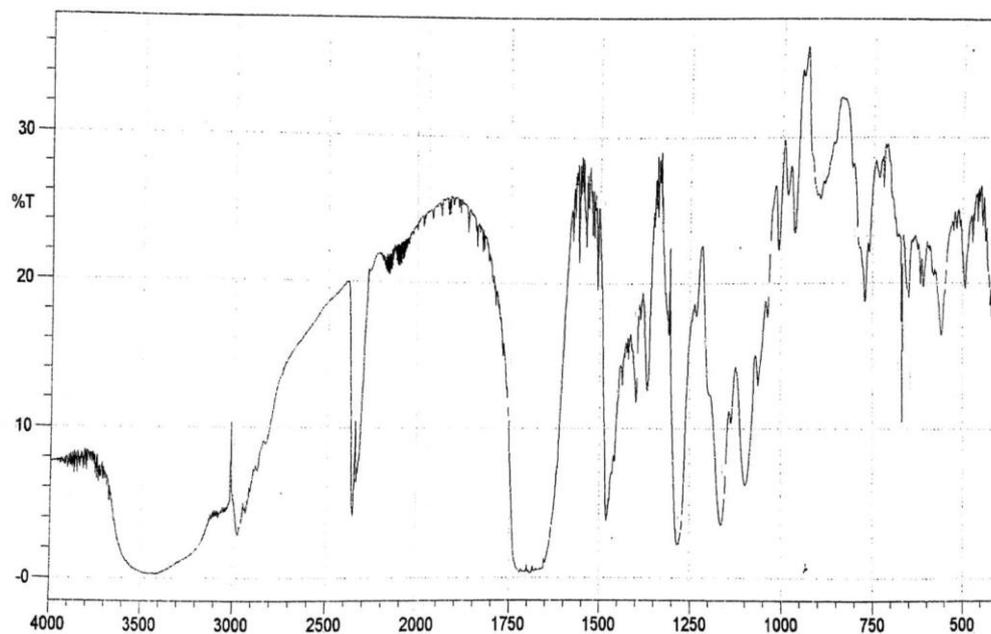
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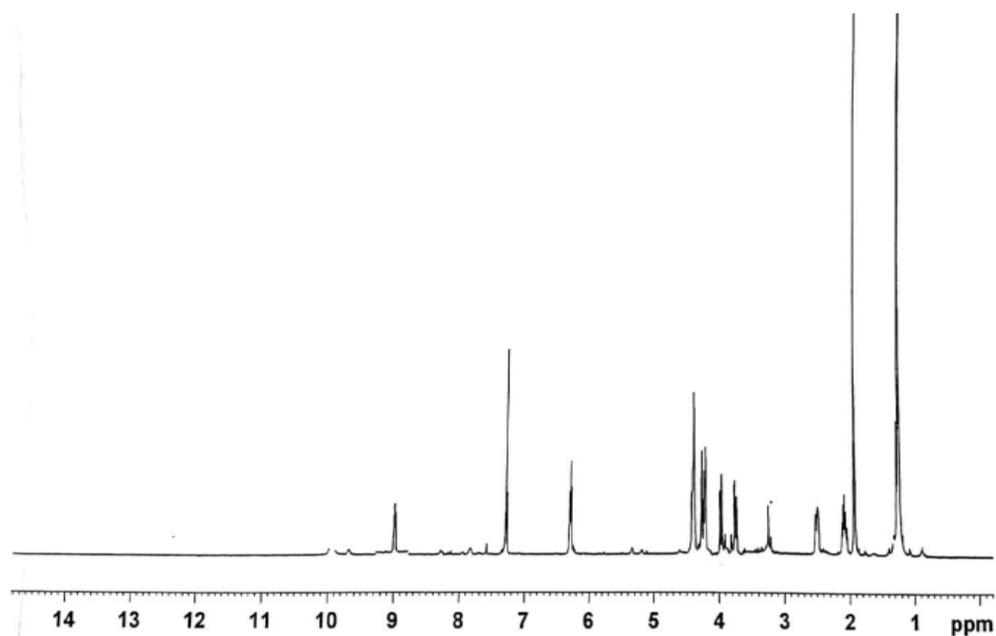
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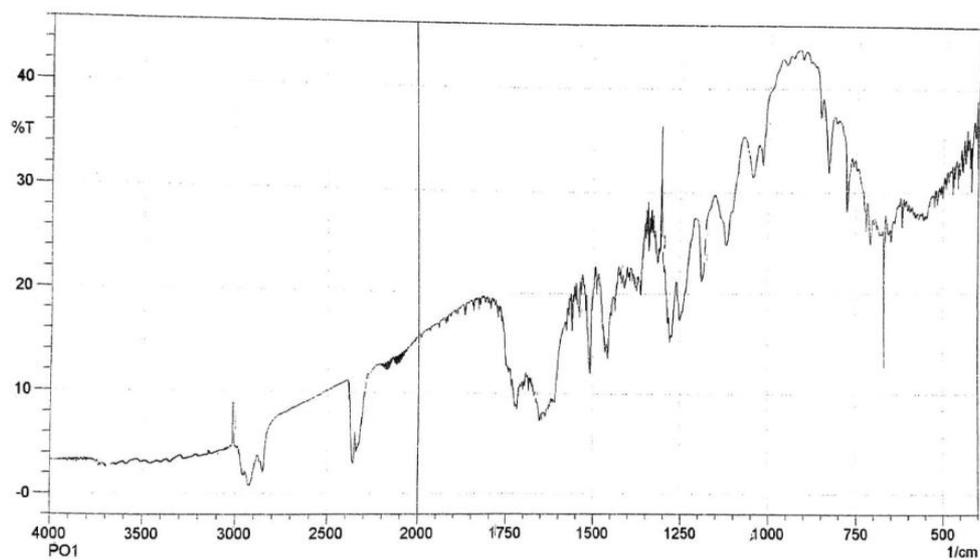
## Supplementary Information



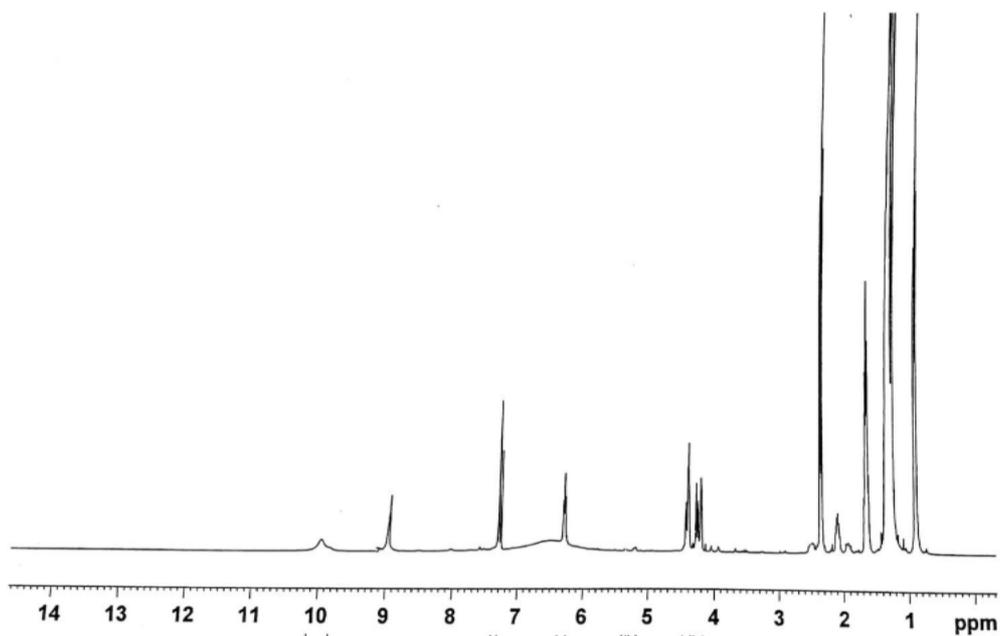
**Fig. S1.** The FTIR spectrum of the compound **2**.



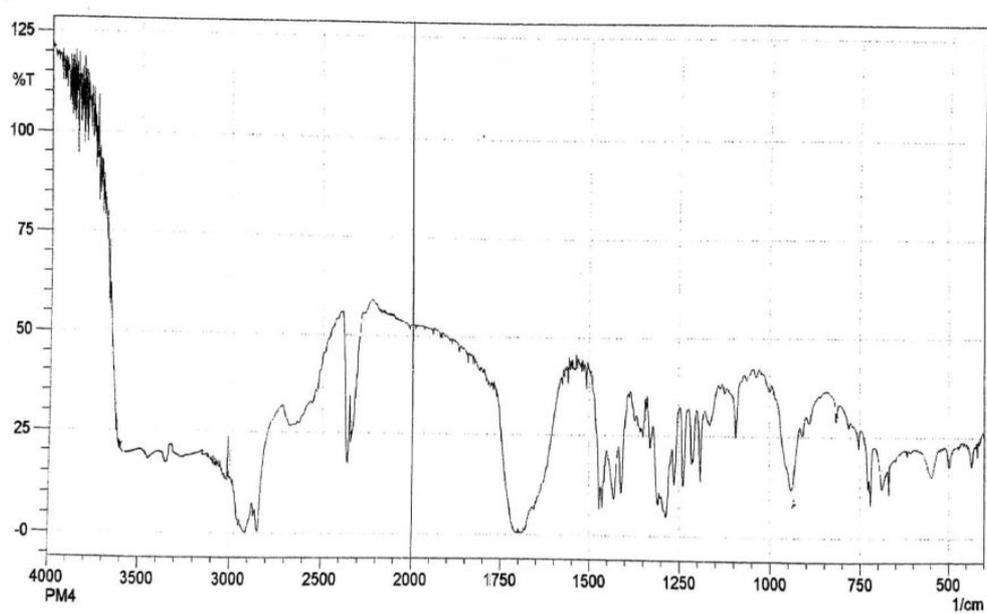
**Fig. S2.** The  $^1\text{H-NMR}$  spectrum of the compound **2**.



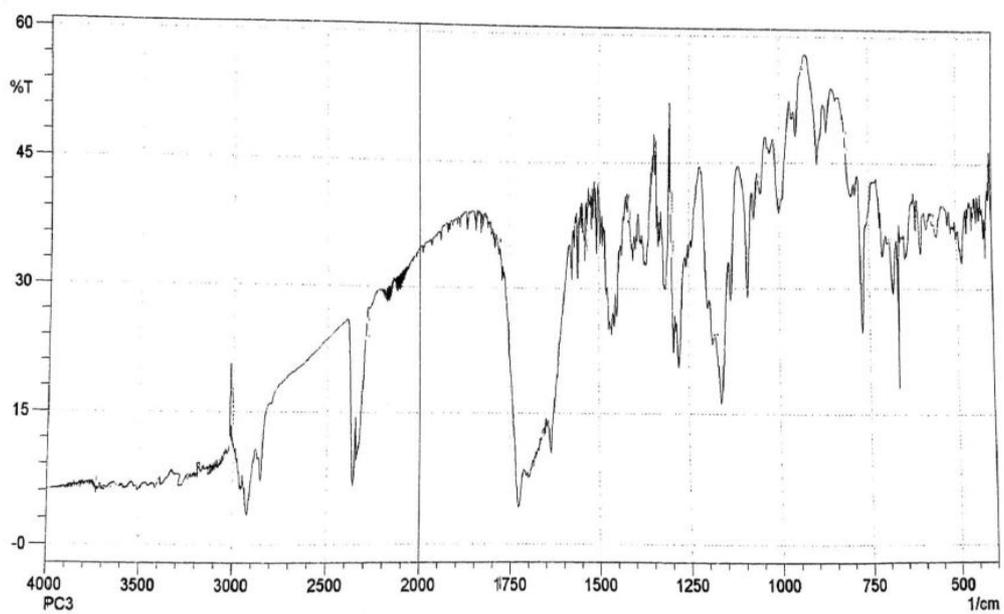
**Fig. S3.** The FTIR spectrum of the compound **3**.



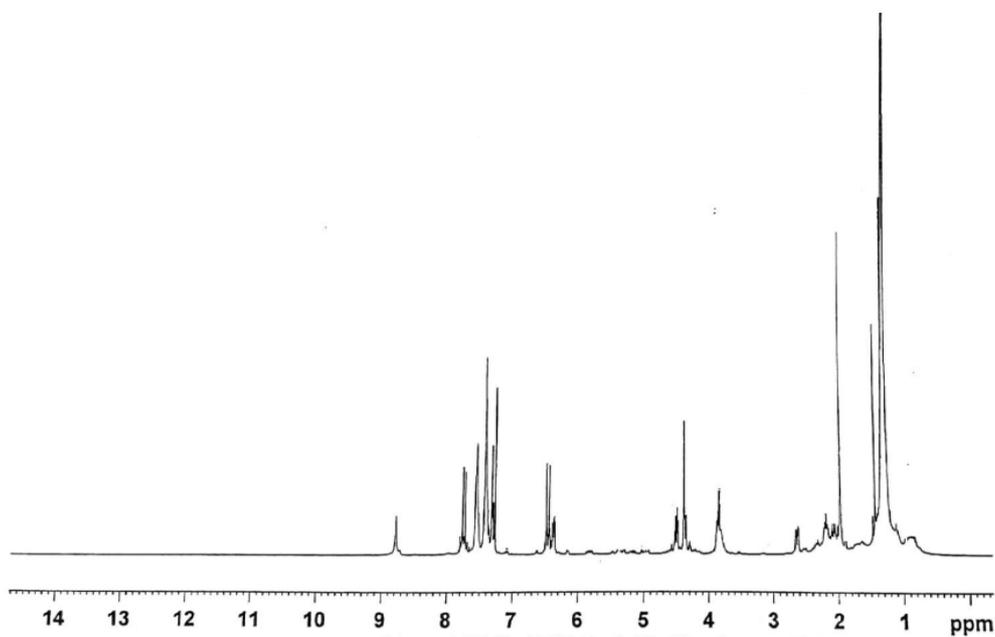
**Fig. S4.** The <sup>1</sup>H-NMR spectrum of the compound **3**.



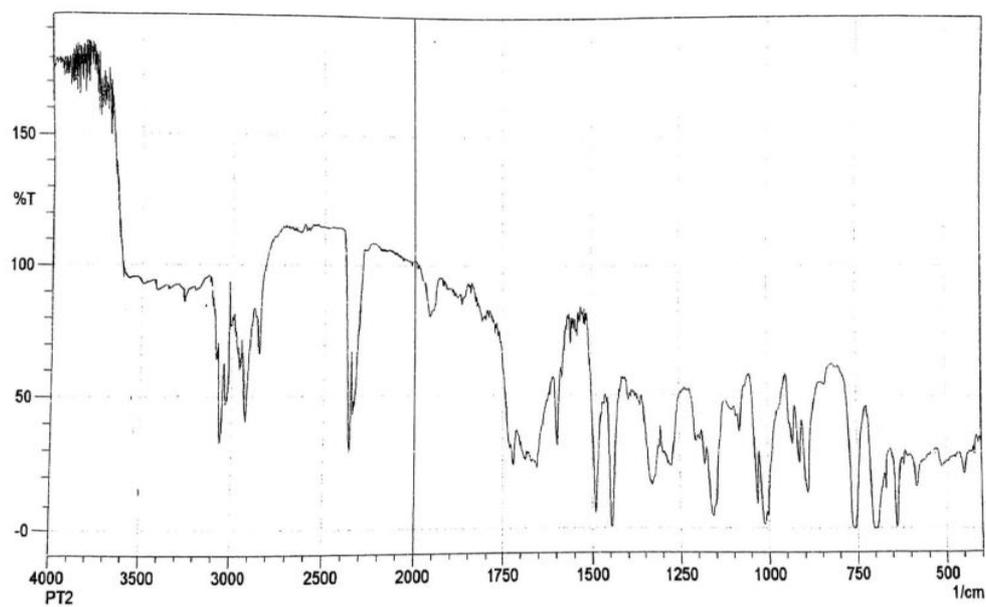
**Fig. S5.** The FTIR spectrum of the compound **4**.



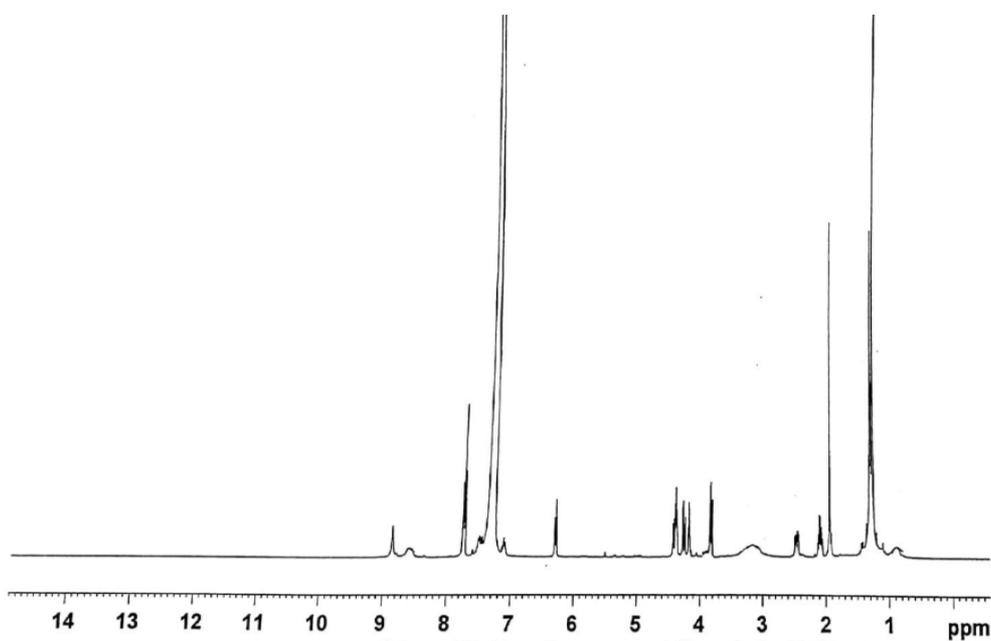
**Fig. S6.** The FTIR spectrum of the compound **5**.



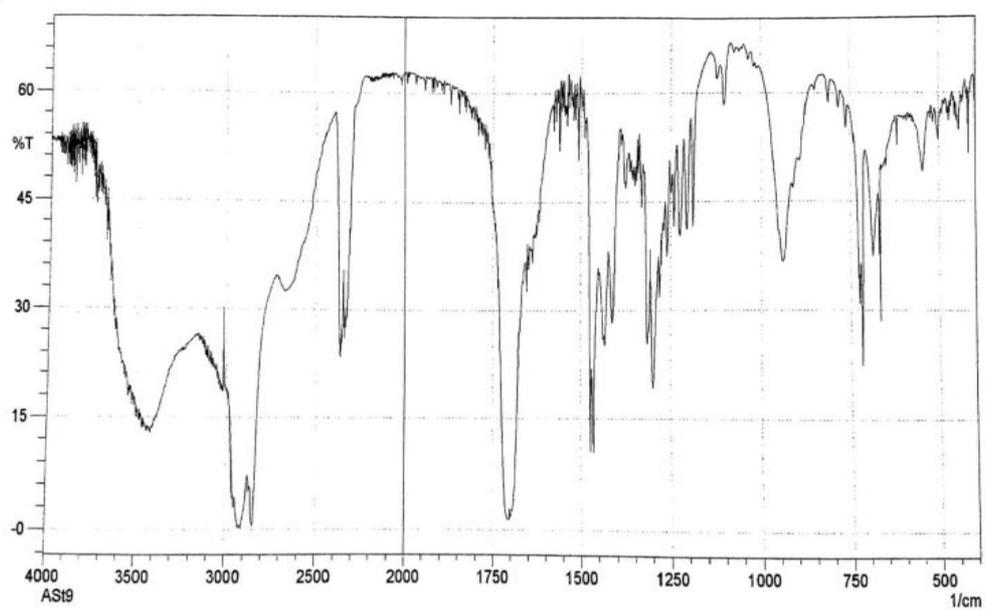
**Fig. S7.** The <sup>1</sup>H-NMR spectrum of the compound **5**.



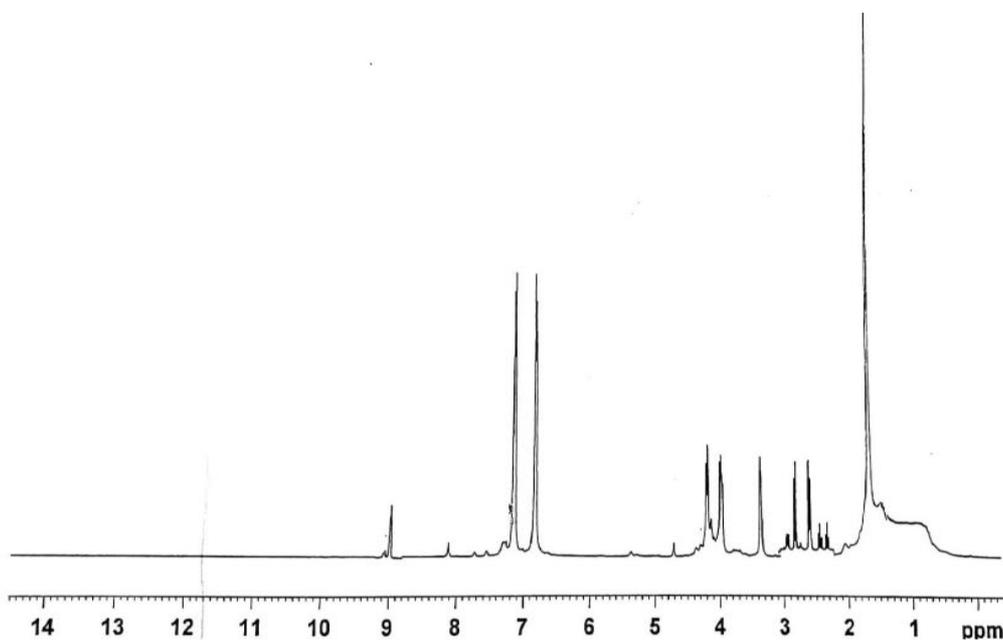
**Fig. S8.** The FTIR spectrum of the compound **6**.



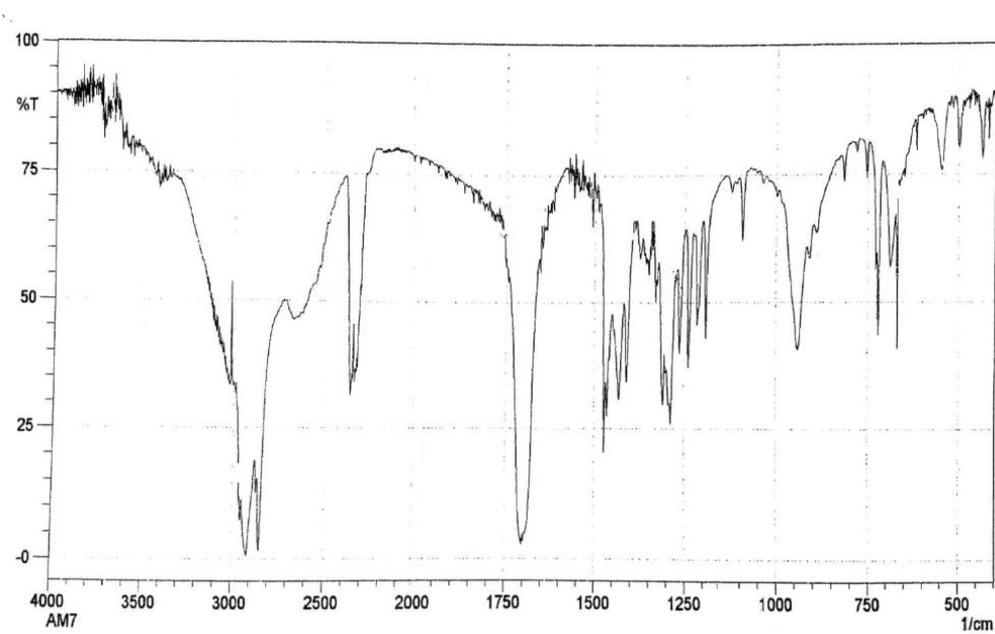
**Fig. S9.** The <sup>1</sup>H-NMR spectrum of the compound **6**.



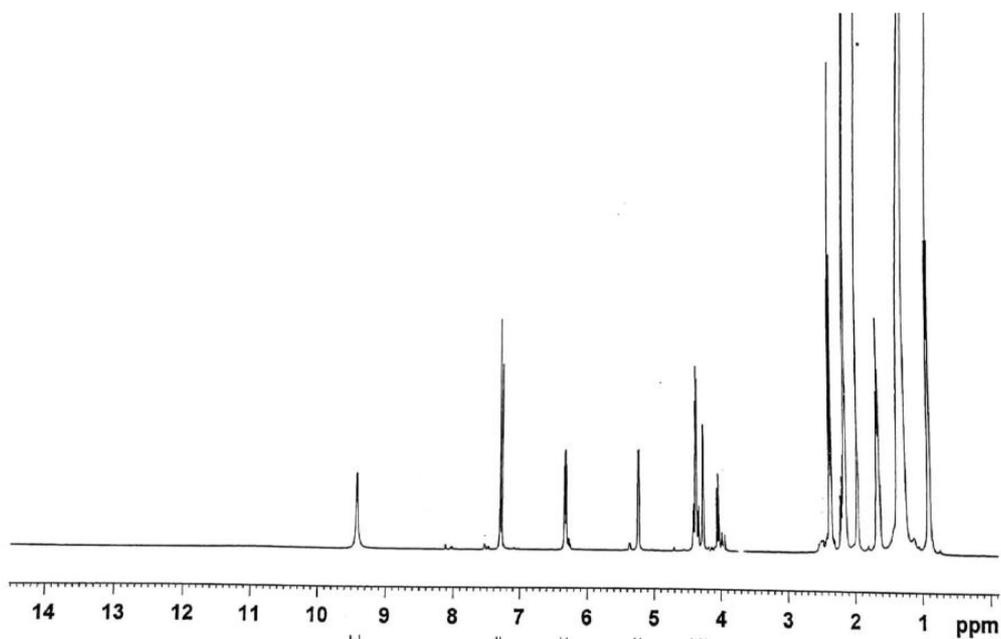
**Fig. S10.** The FTIR spectrum of the compound **7**.



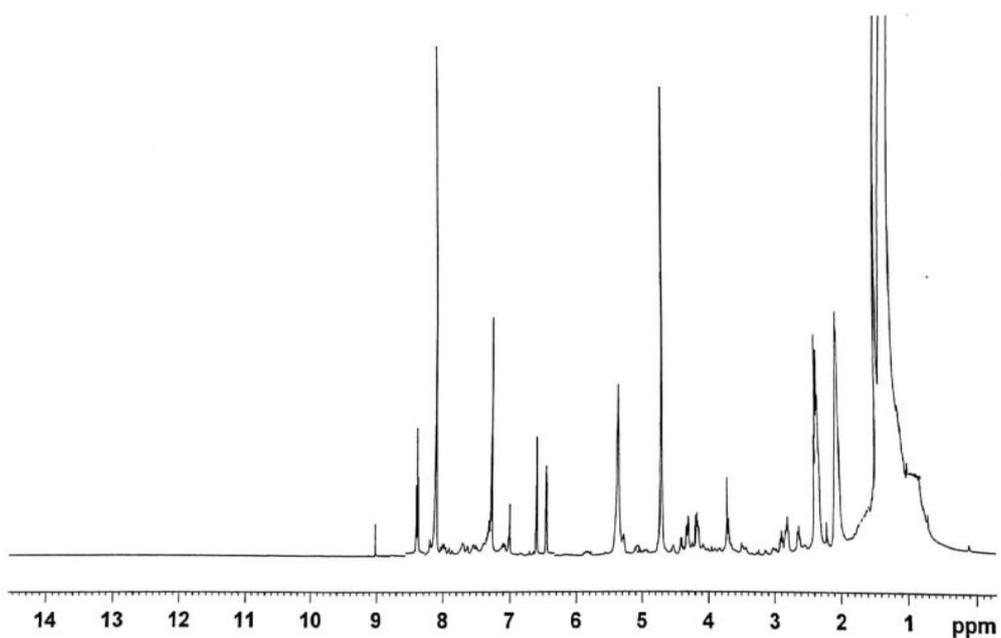
**Fig. S11.** The <sup>1</sup>H-NMR spectrum of the compound **7**.



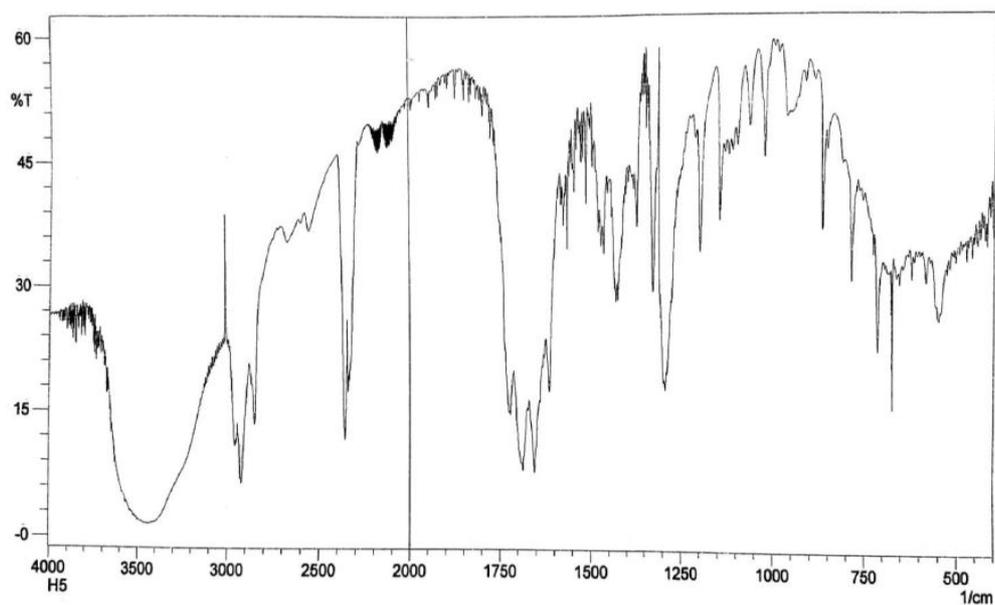
**Fig. S12.** The FTIR spectrum of the compound **8**.



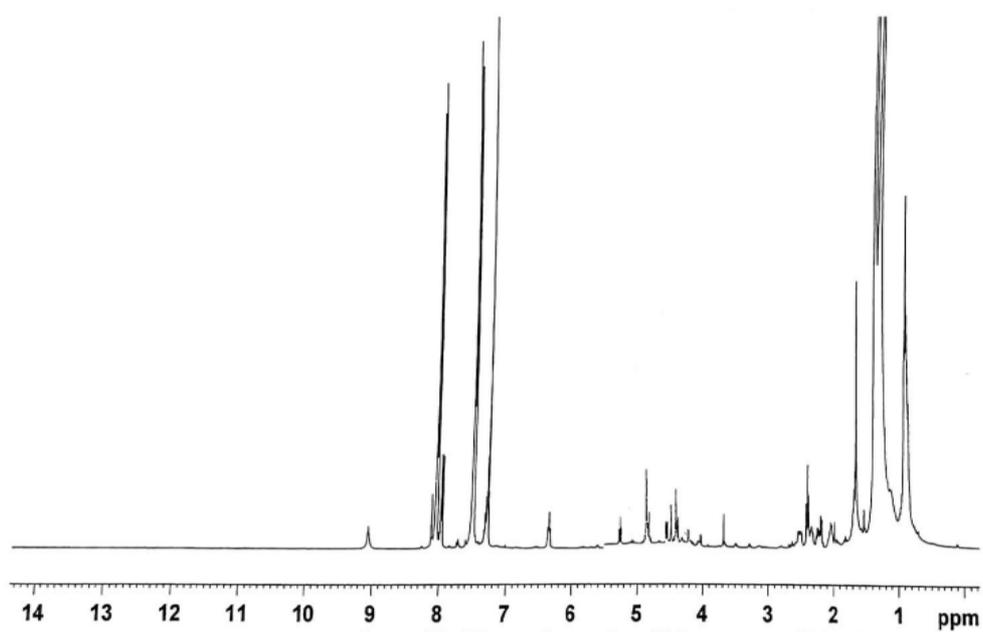
**Fig. S13.** The <sup>1</sup>H-NMR spectrum of the compound **9**.



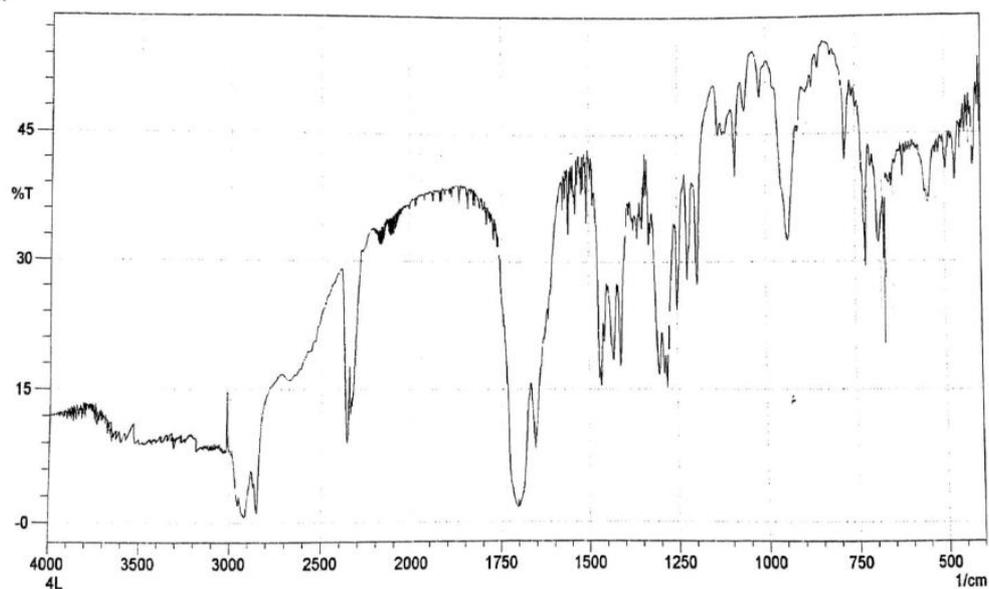
**Fig. S14.** The <sup>1</sup>H-NMR spectrum of the compound **11**.



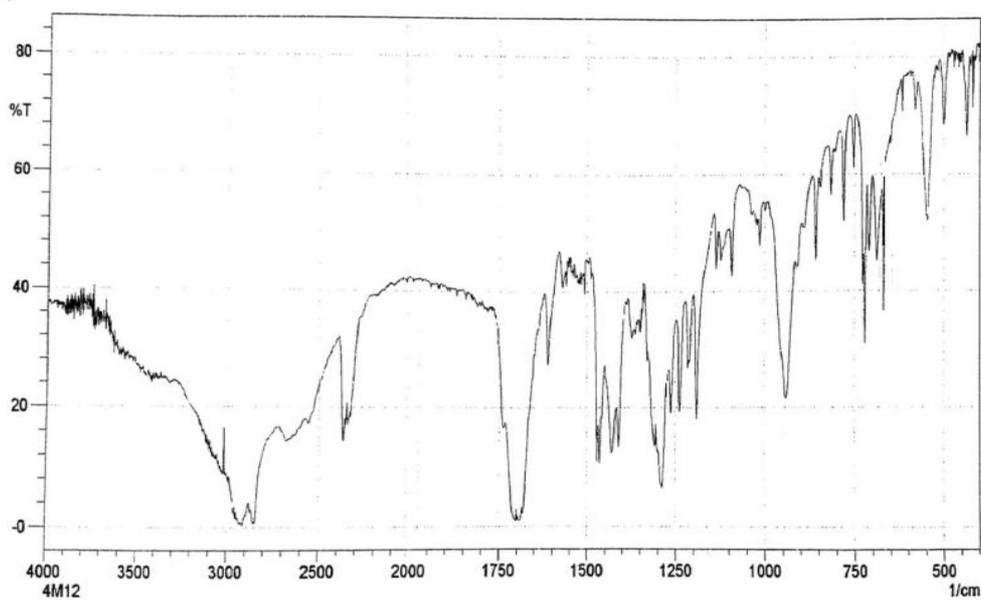
**Fig. S15.** The FTIR spectrum of the compound 12.



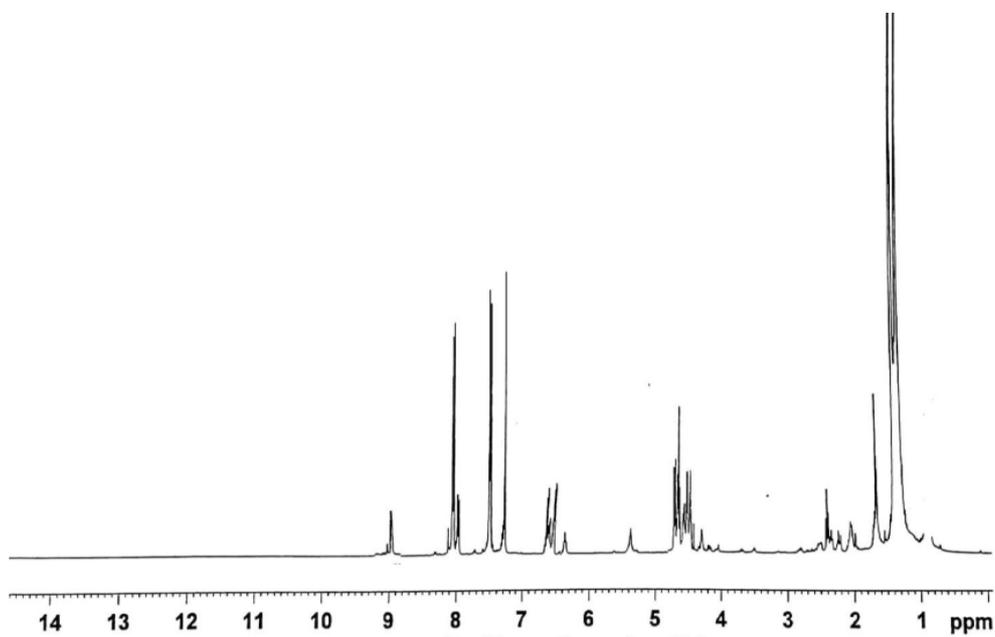
**Fig. S16.** The <sup>1</sup>H-NMR spectrum of the compound 13.



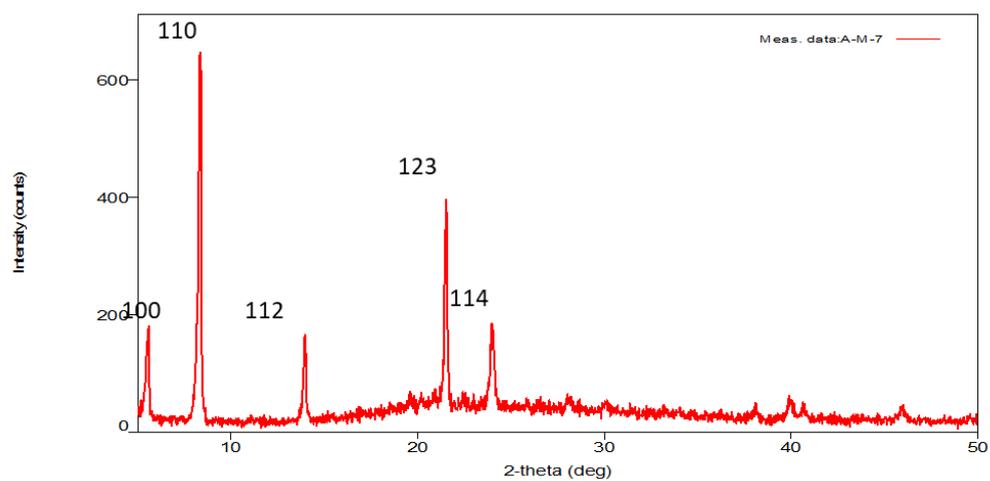
**Fig. S17.** The FTIR spectrum of the compound **14**.



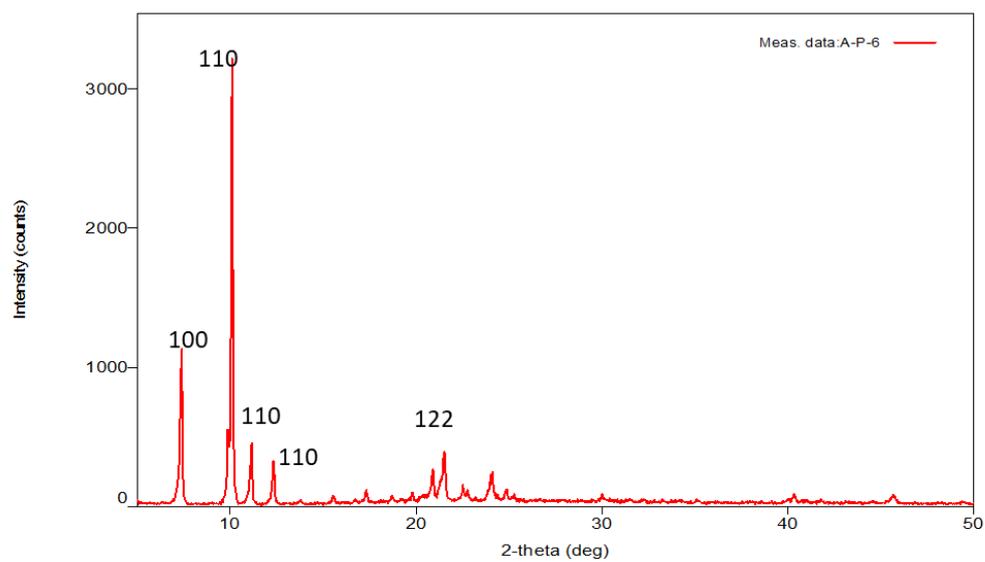
**Fig. S18.** The FTIR spectrum of the compound **15**.



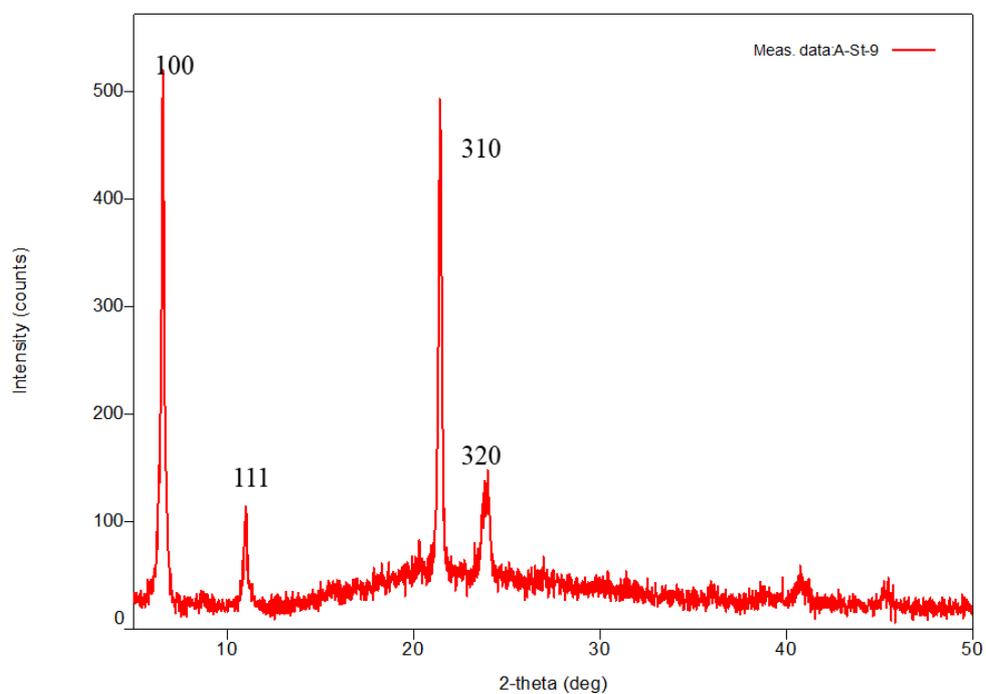
**Fig. S19.** The <sup>1</sup>H-NMR spectrum of the compound **16**.



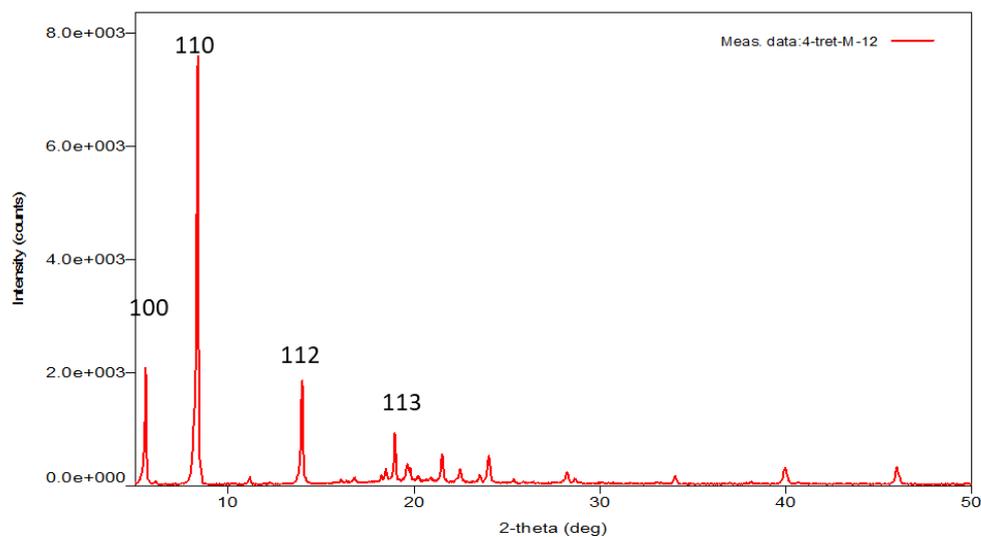
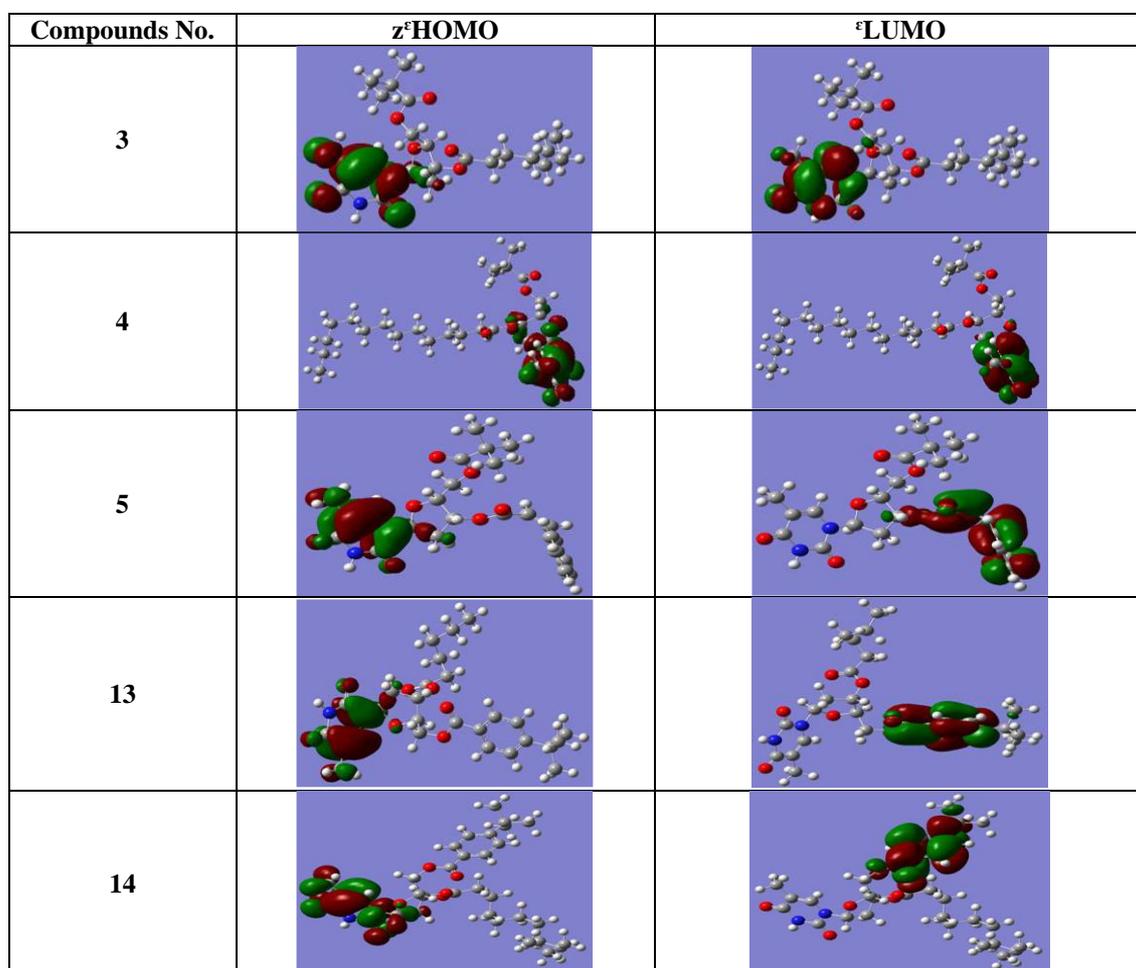
**Fig. S20.** XRD pattern for the compound **8**.



**Fig. S21.** XRD pattern for the compound **9**.



**Fig. S22.** XRD pattern for the compound **10**.

**Fig. S23.** XRD pattern for the compound **15**.**Fig. S24.** The HOMO and LUMO of the compounds **3**, **4**, **5**, **13**, and **14**.