Electronic Supporting Information

First step towards a model system of the drug delivery network based on amide-POSS nanocarriers

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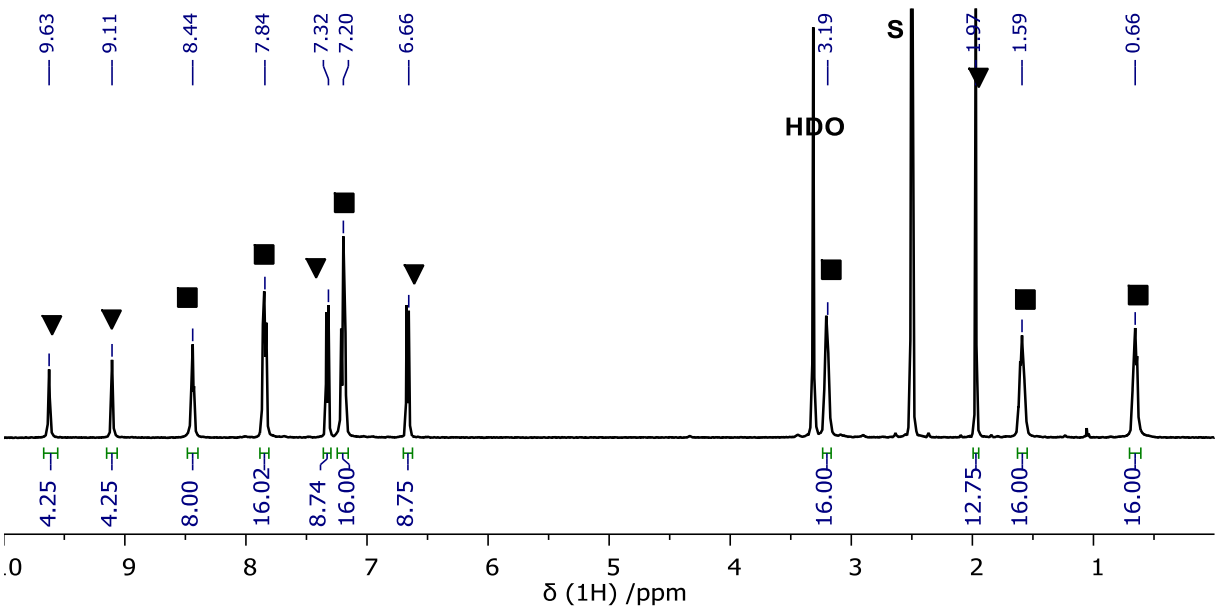


Figure S1. ^{1}H NMR (500 MHz, DMSO-d$_6$, 20 °C) spectrum of **2-acetaminophen**, s = solvent, square = POSS, triangle = drug.

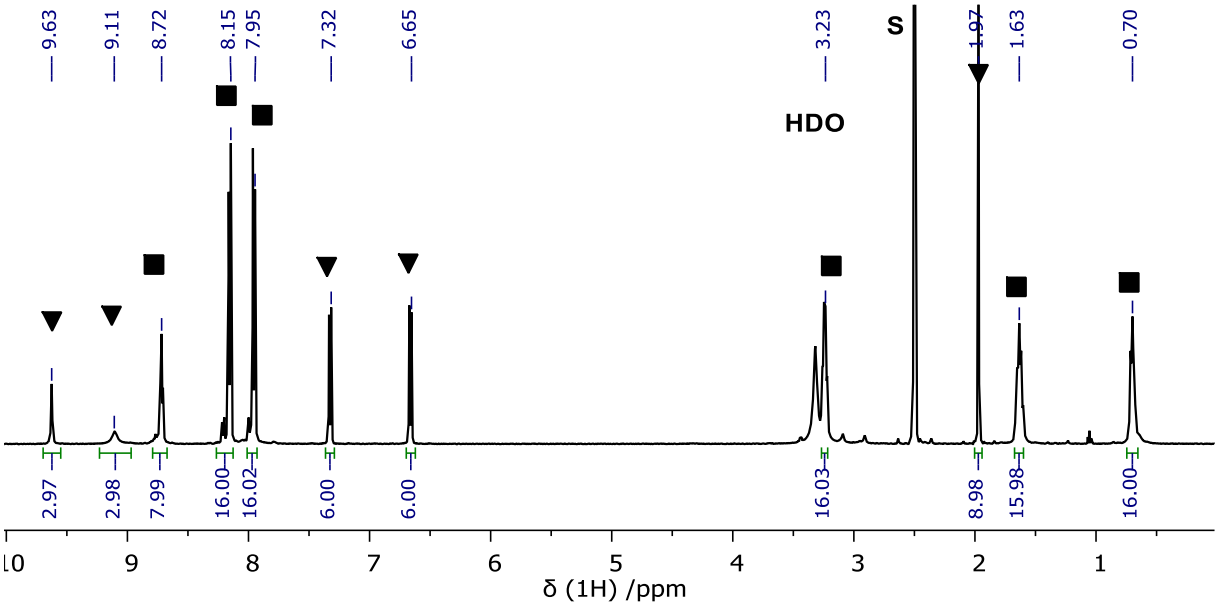


Figure S2. ^{1}H NMR (500 MHz, DMSO-d$_6$, 20 °C) spectrum of **3-acetaminophen**, s = solvent, square = POSS, triangle = drug.

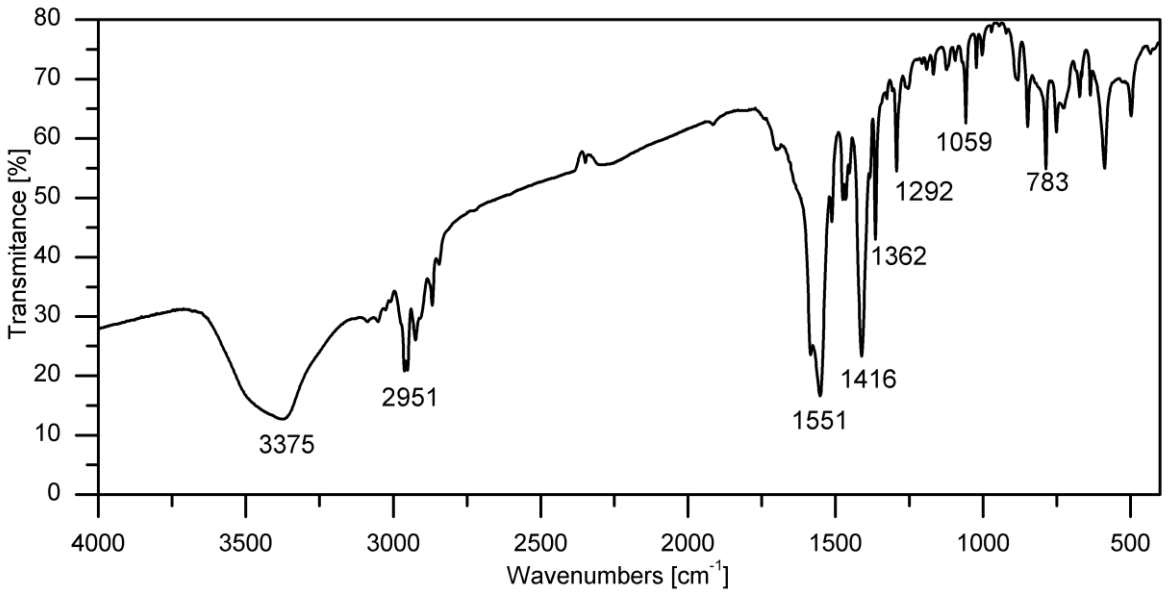


Figure S5. FT-IR (KBr pellets) spectrum of acetaminophen.

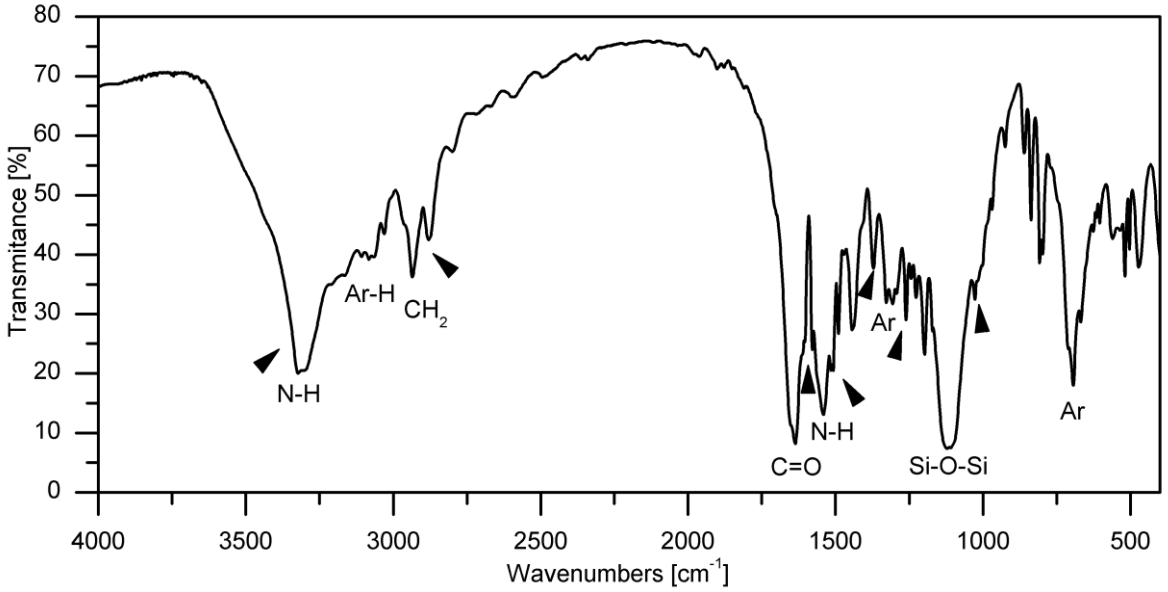


Figure S3. FT-IR (KBr pellets) spectrum of **1-acetaminophen**, arrow = signals from drug.

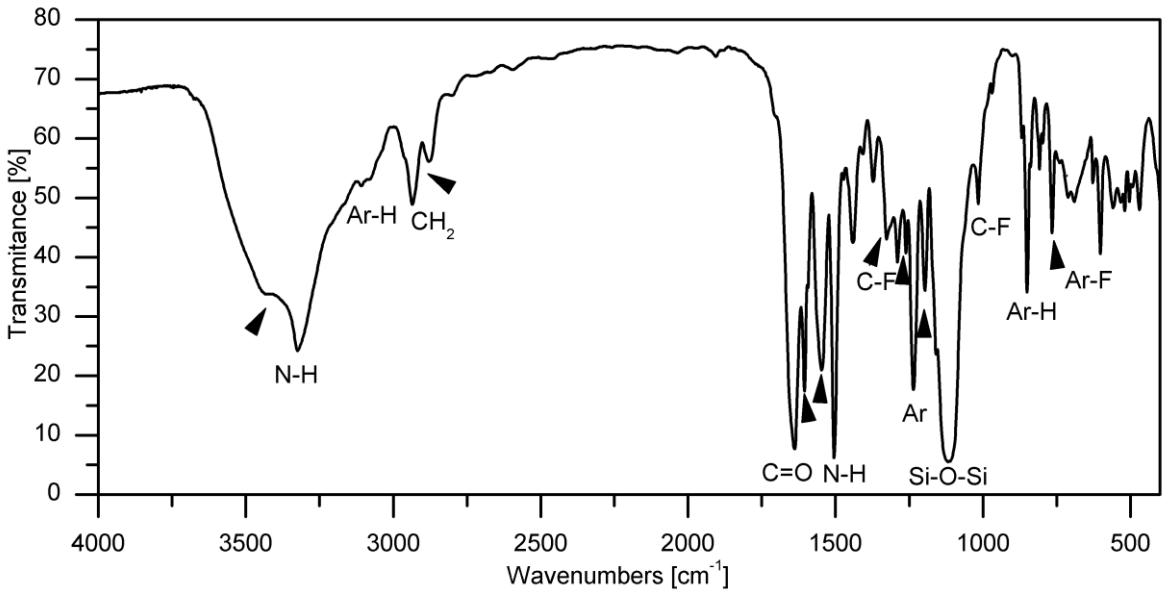


Figure S4. FT-IR (KBr pellets) spectrum of **2-acetaminophen**, arrow = signals from drug.

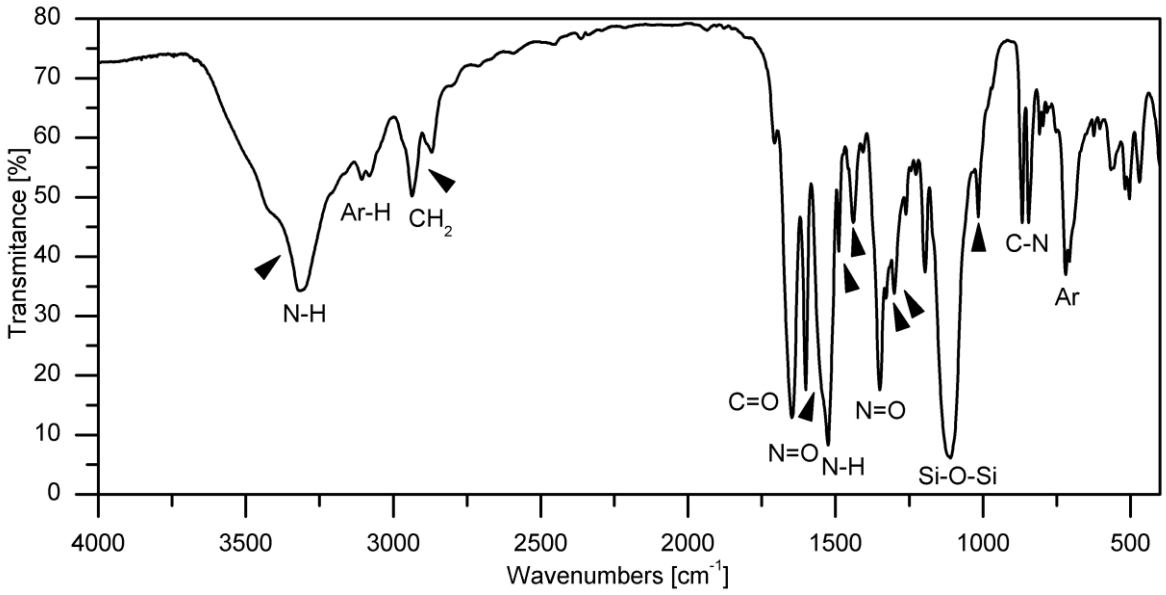


Figure S5. FT-IR (KBr pellets) spectrum of **3-acetaminophen**, arrow = signals from drug.

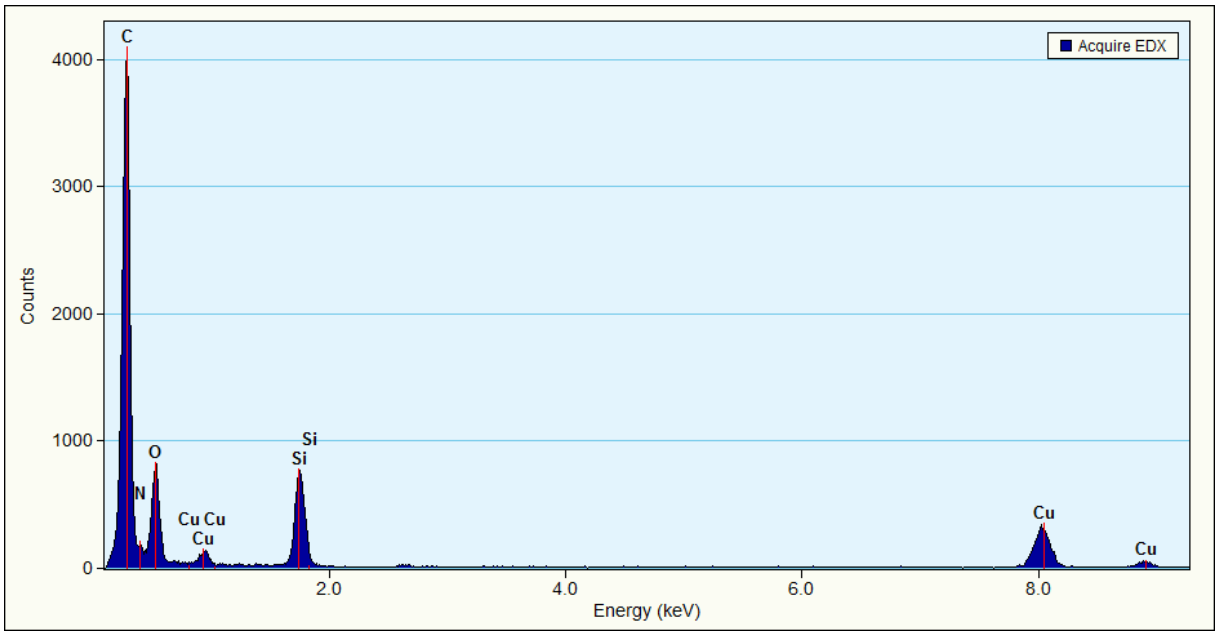


Figure S6. EDS spectra of **1-acetaminophen** (copper content is derived from the high-purity conducting Cu grid).

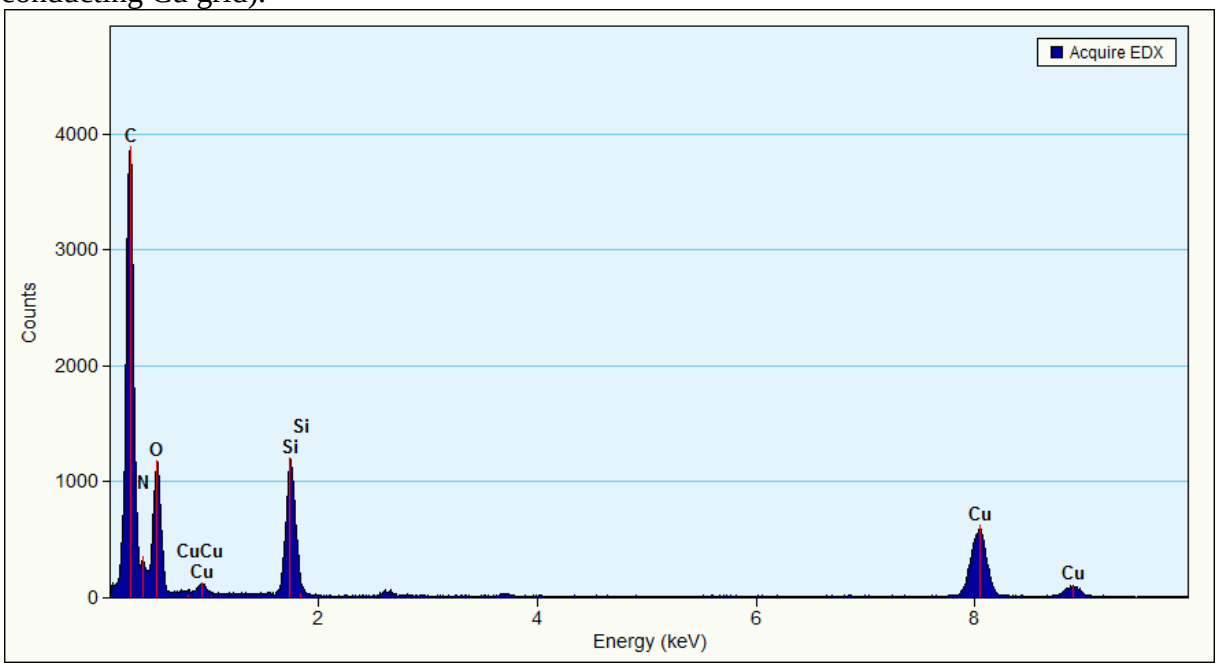


Figure S7. EDS spectra of **2-acetaminophen** (copper content is derived from the high-purity conducting Cu grid).

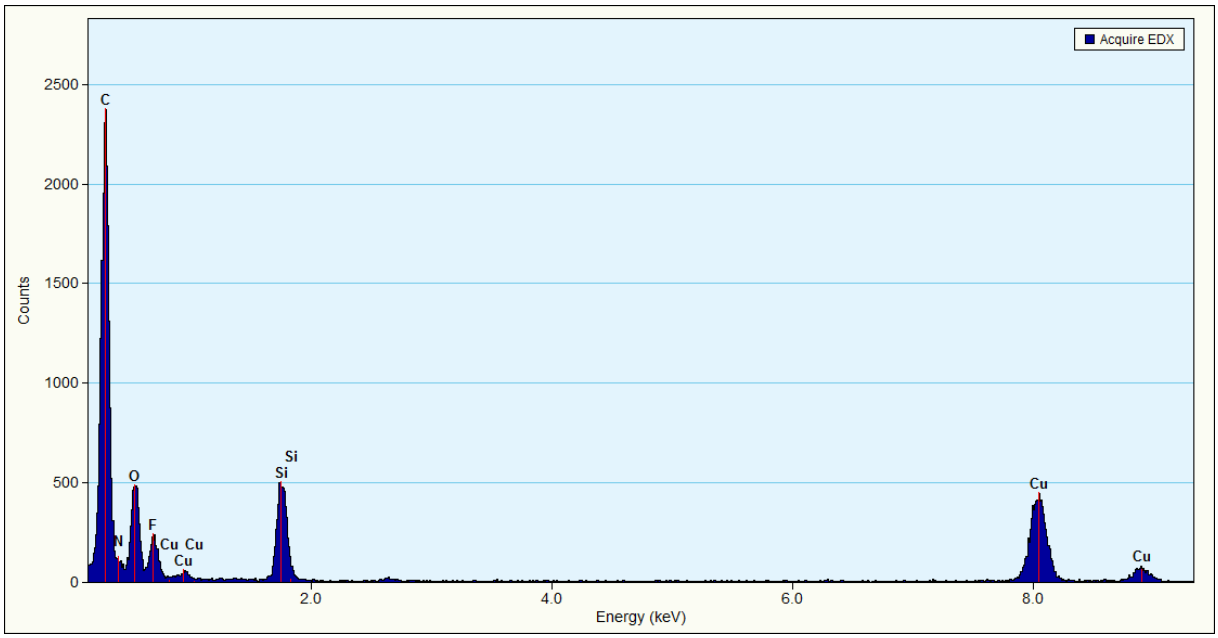


Figure S8. EDS spectra of **3-acetaminophen** (copper content is derived from the high-purity conducting Cu grid).

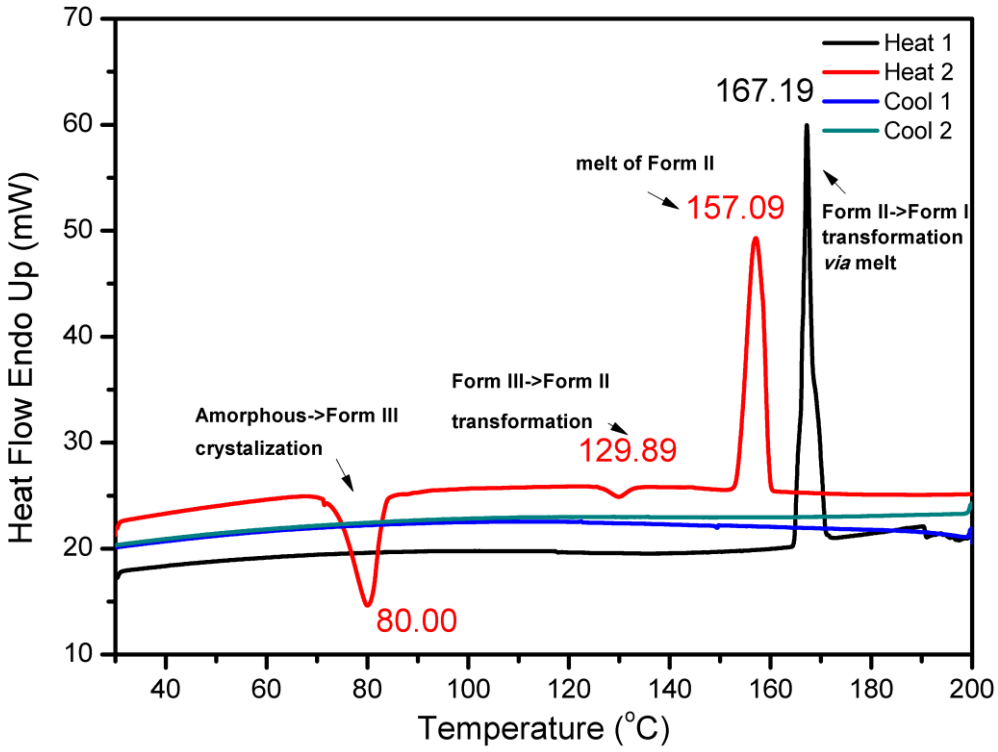


Figure S9. DSC of acetaminophen, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

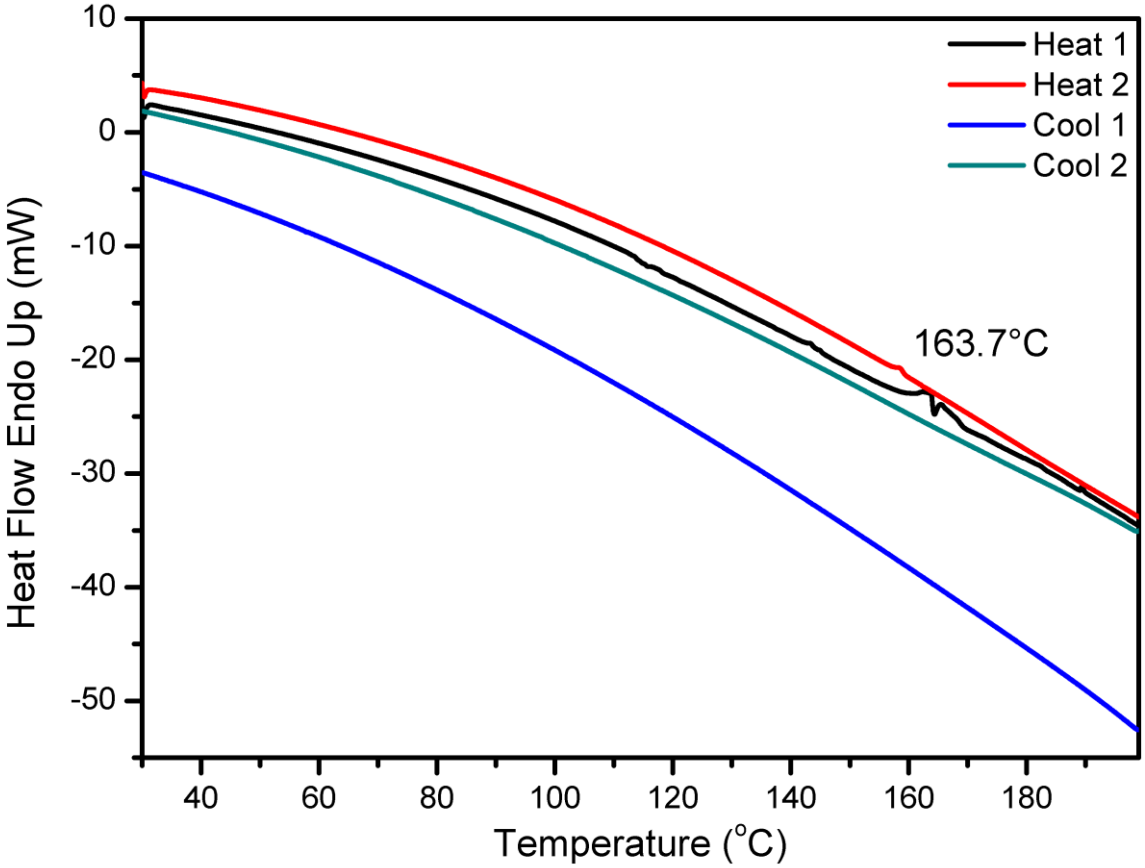


Figure S10. DSC of **1-acetaminophen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

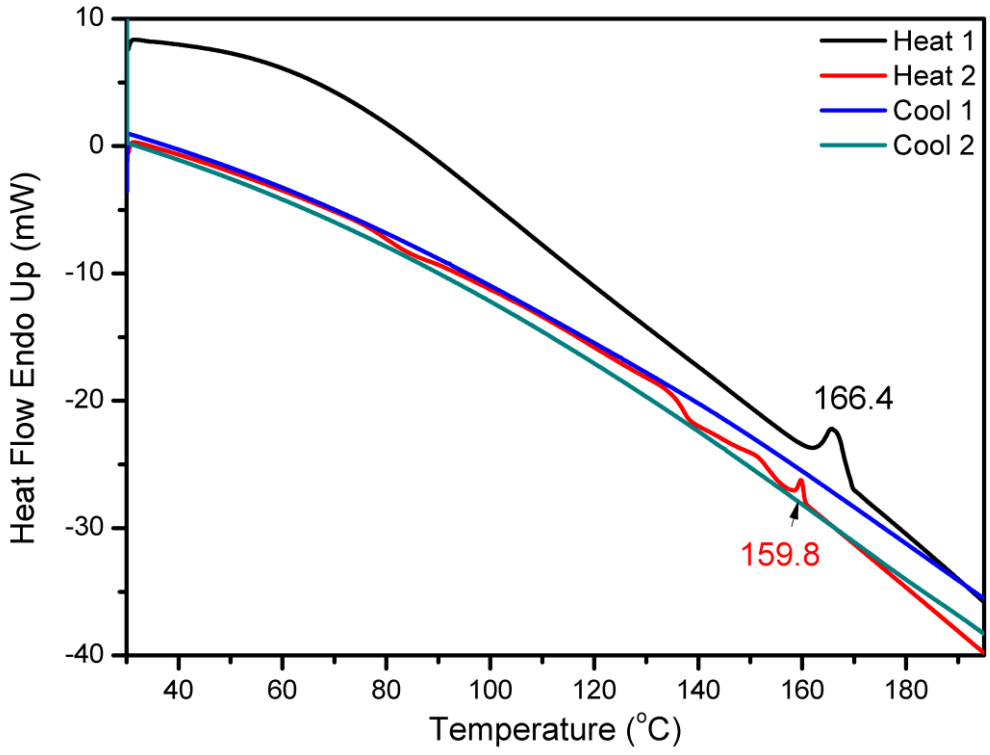


Figure S11. DSC of **2-acetaminophen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

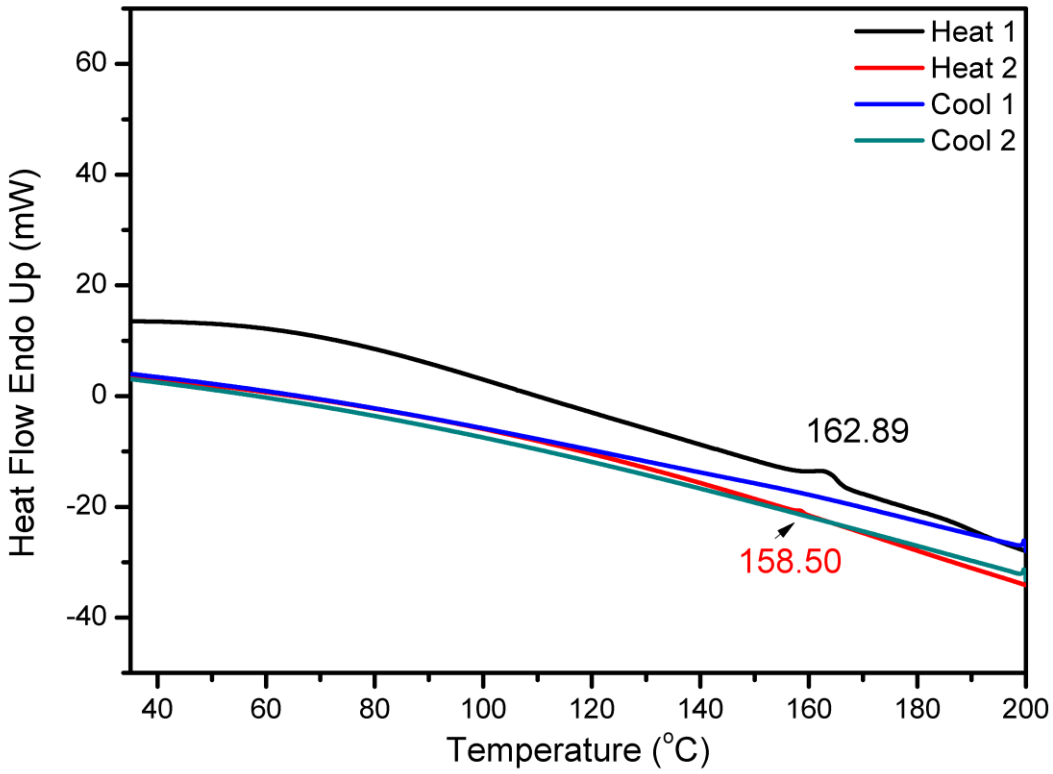


Figure S12. DSC of **3-acetaminophen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

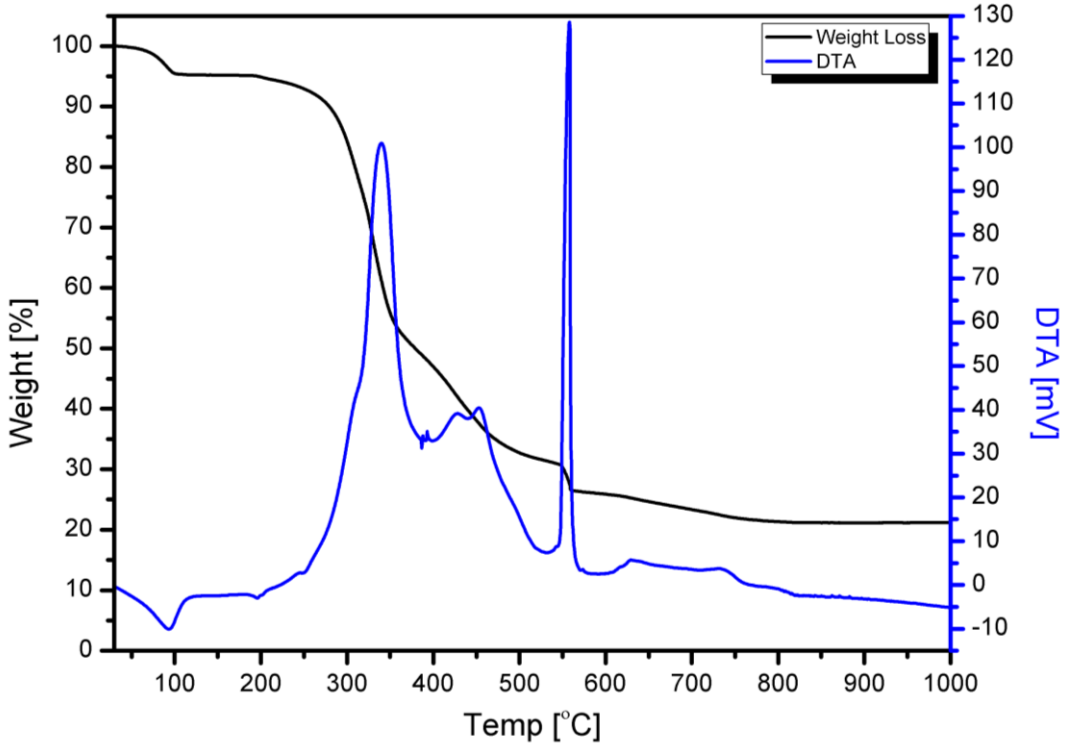


Figure S13. TG-DTA thermogram of **1-acetaminophen** 10 °C/min (in the air atmosphere: 60% N_2, 40% O_2).

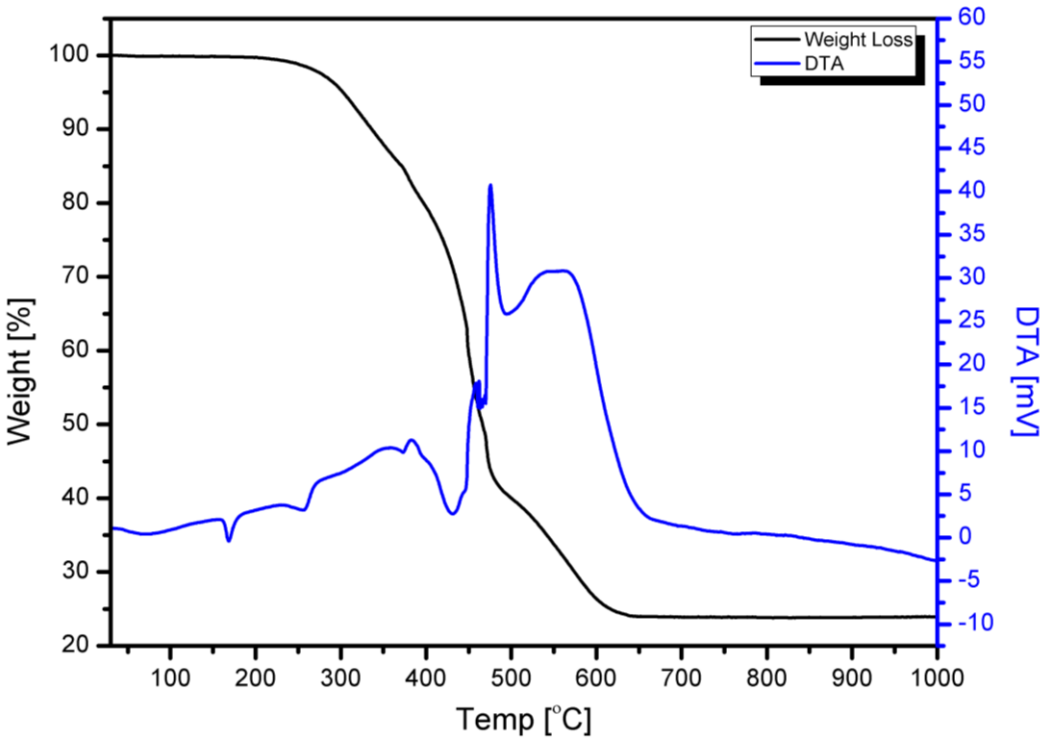
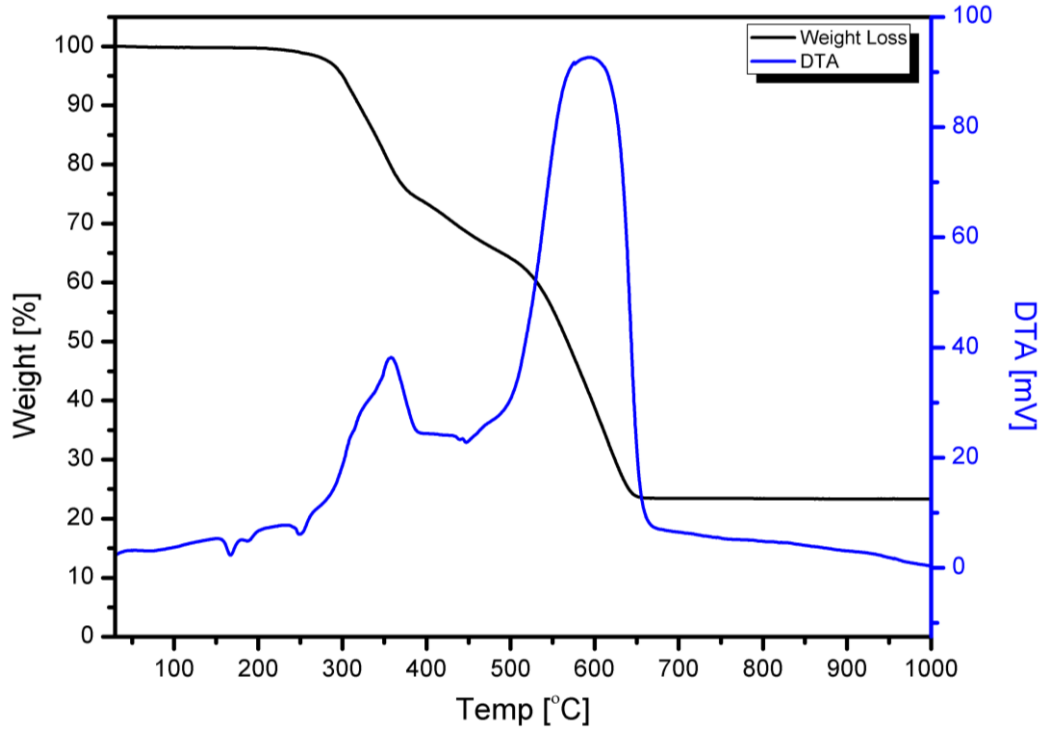


Figure S14. TG-DTA thermogram of **2-acetaminophen** 10 °C/min (in the air atmosphere: 60% N_2, 40% O_2).



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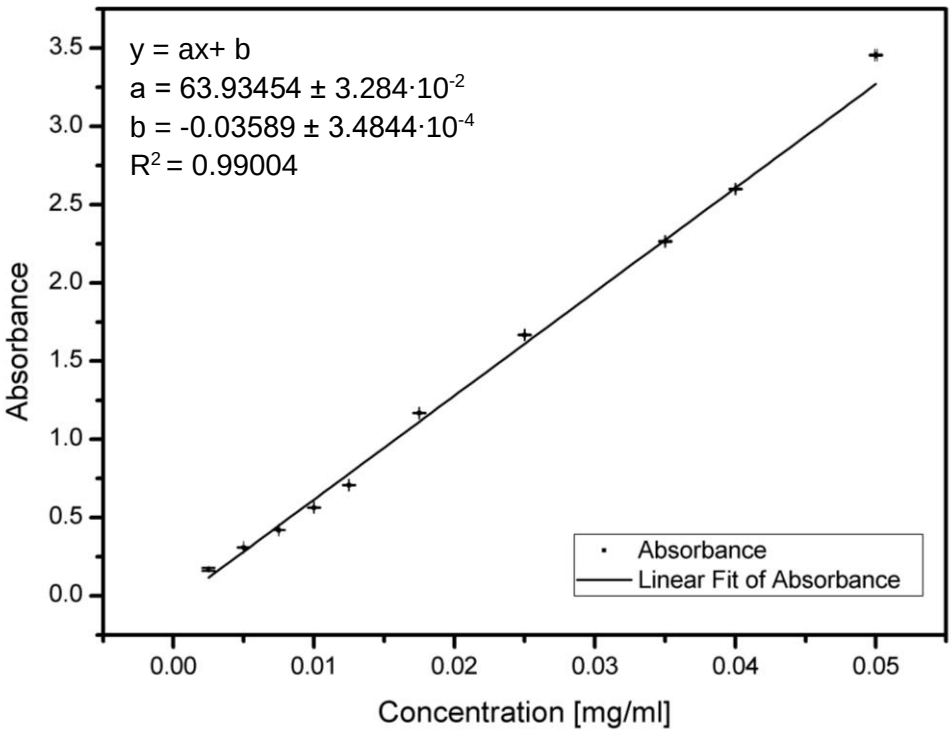

Figure S16. Calibration curve for acetaminophen in 0.1 M phosphate buffer.

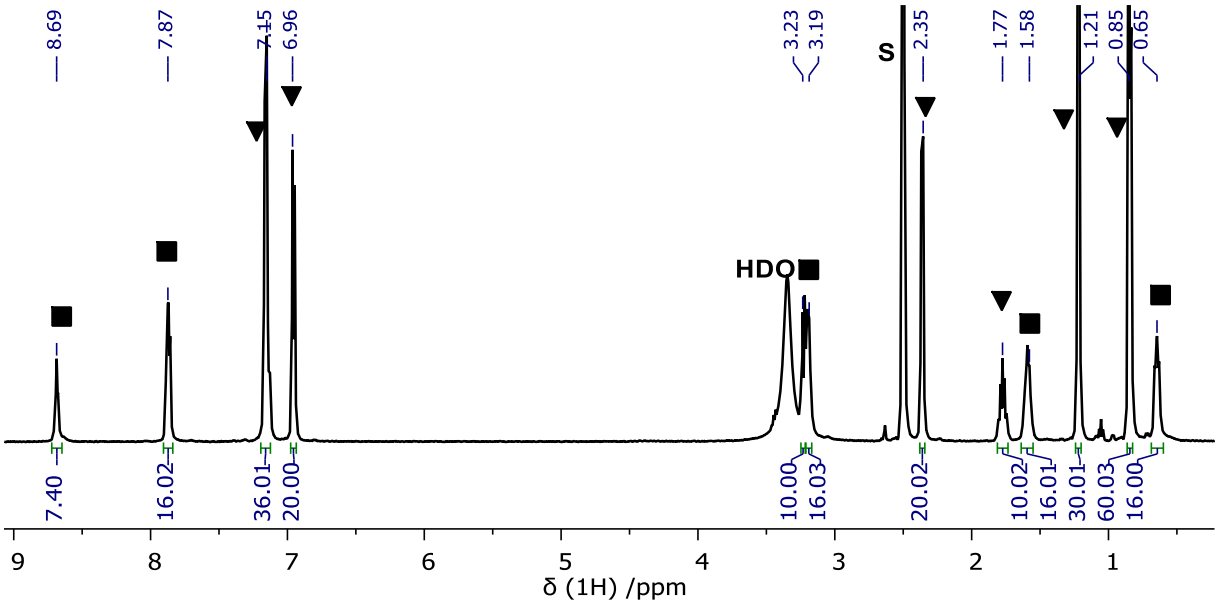

Figure S17. ^{1}H NMR (500 MHz, DMSO-d_6, 20 °C) spectrum of **2-ibuprofen**, solvent, square = POSS, triangle = drug.

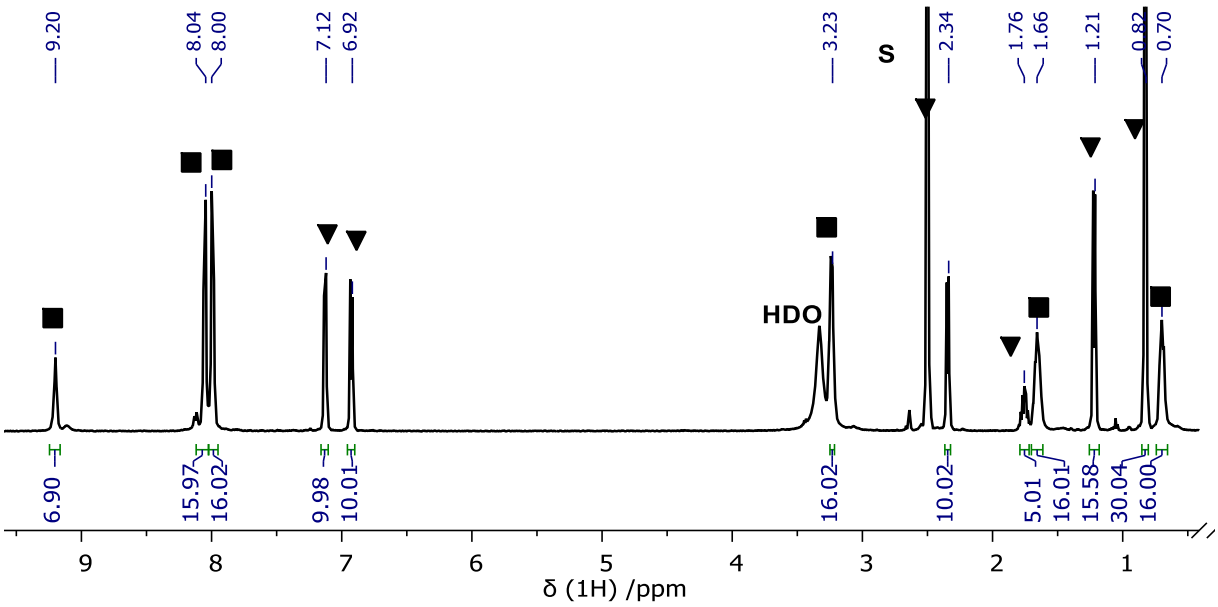

Figure S18. ^{1}H NMR (500 MHz, DMSO-d_6, 20 °C) spectrum of **3-ibuprofen**, solvent, square = POSS, triangle = drug.

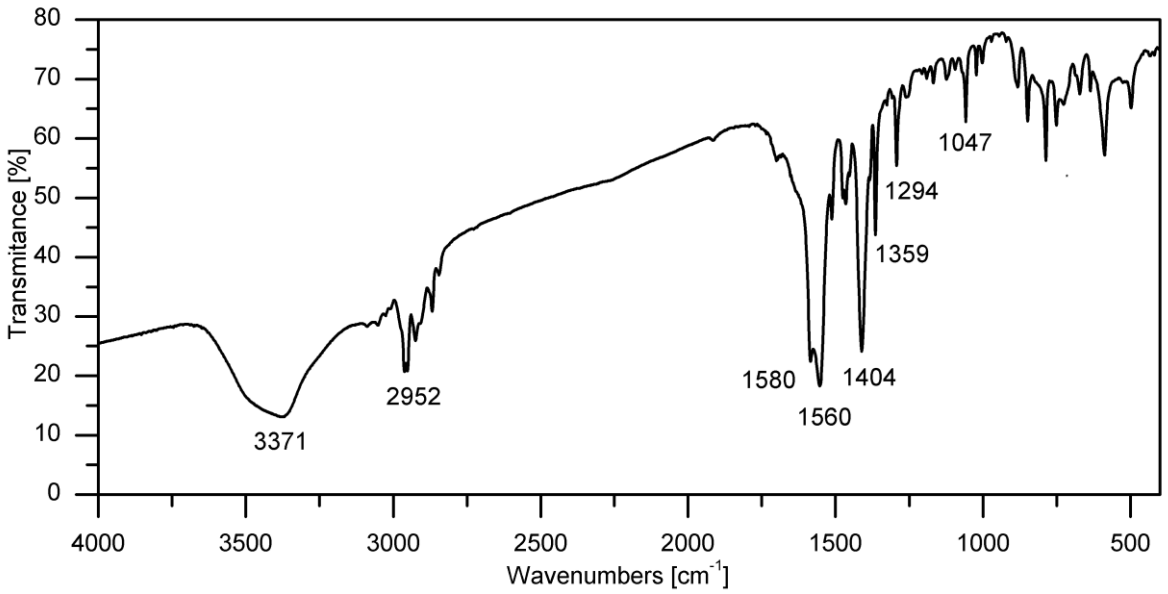

Figure S19. FT-IR (KBr pellets) spectrum of ibuprofen.

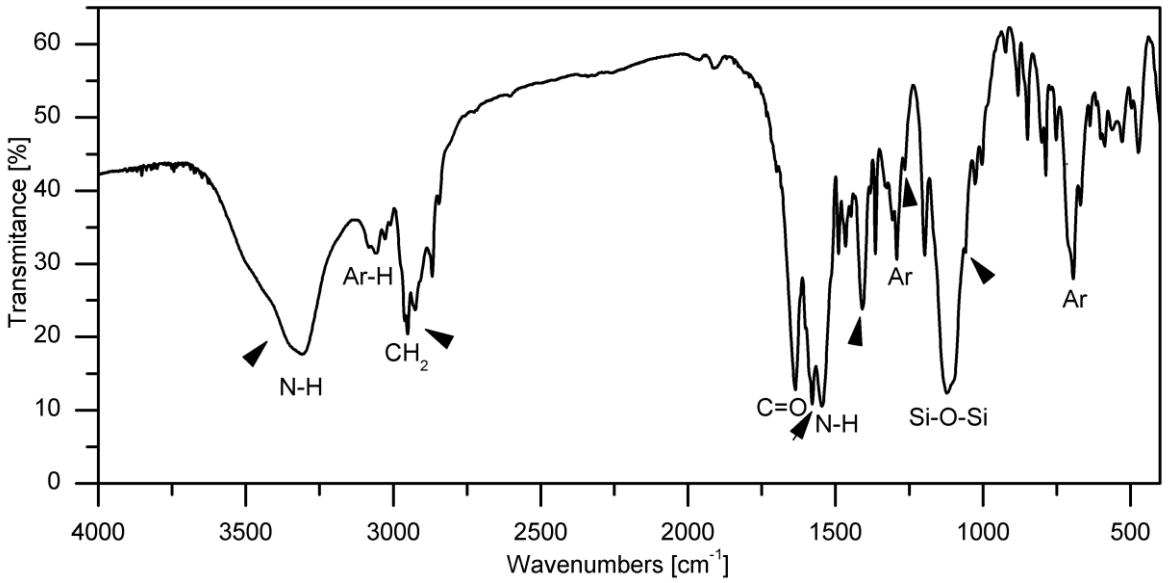

Figure S**20**. FT-IR (KBr pellets) spectrum of 1-ibuprofen, arrow = signals from drug.

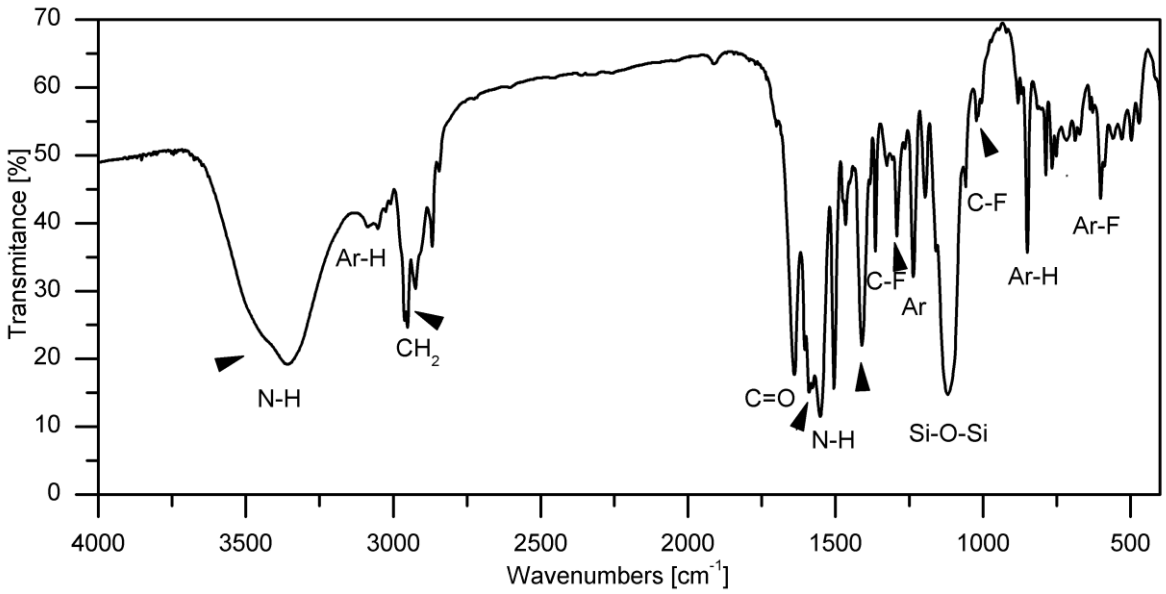

Figure S21. FT-IR (KBr pellets) spectrum of **2-ibuprofen**, arrow = signals from drug.

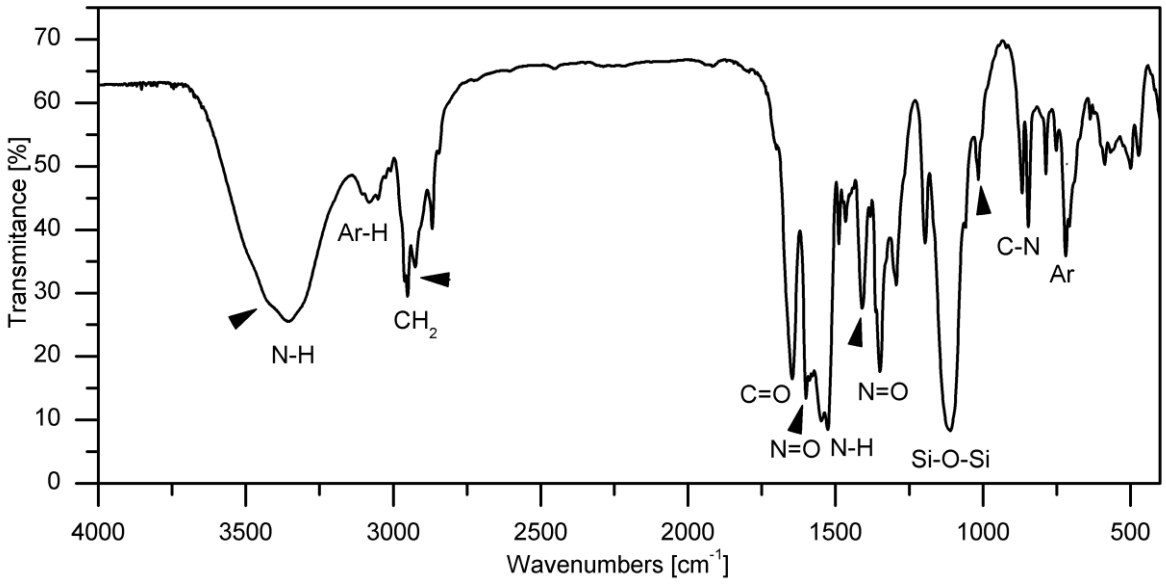

Figure S22. FT-IR (KBr pellets) spectrum of **3-ibuprofen**, arrow = signals from drug.

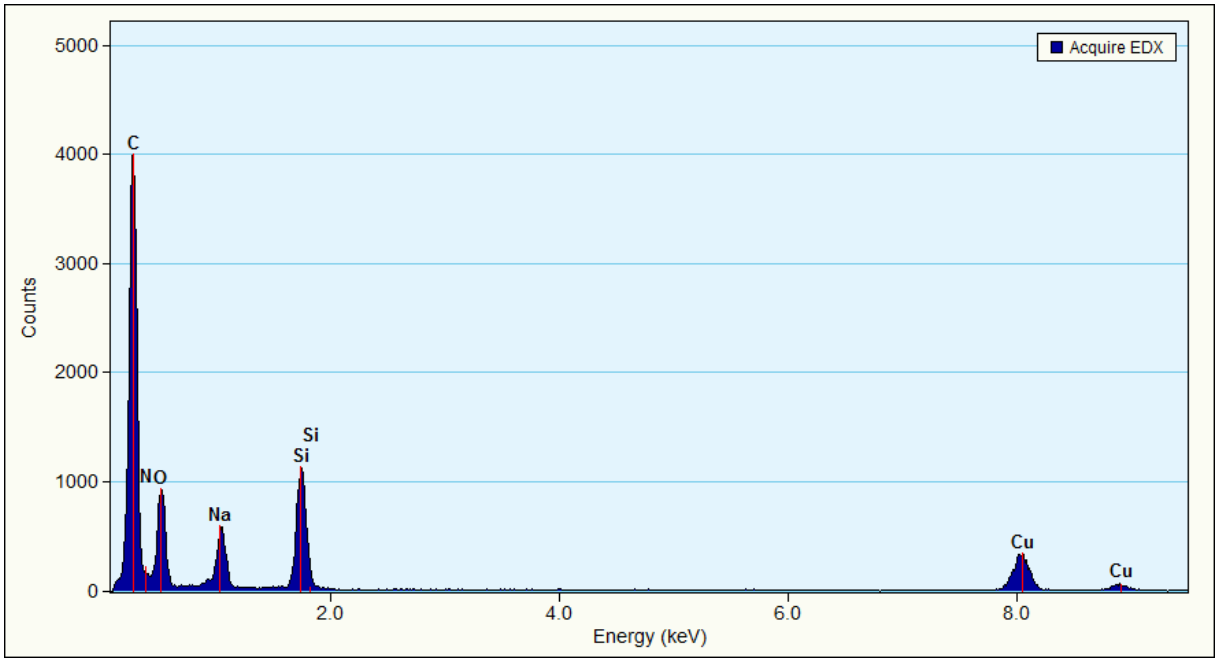

Figure S23. EDS spectra of **1-ibuprofen** (copper content is derived from the high-purity conducting Cu grid).

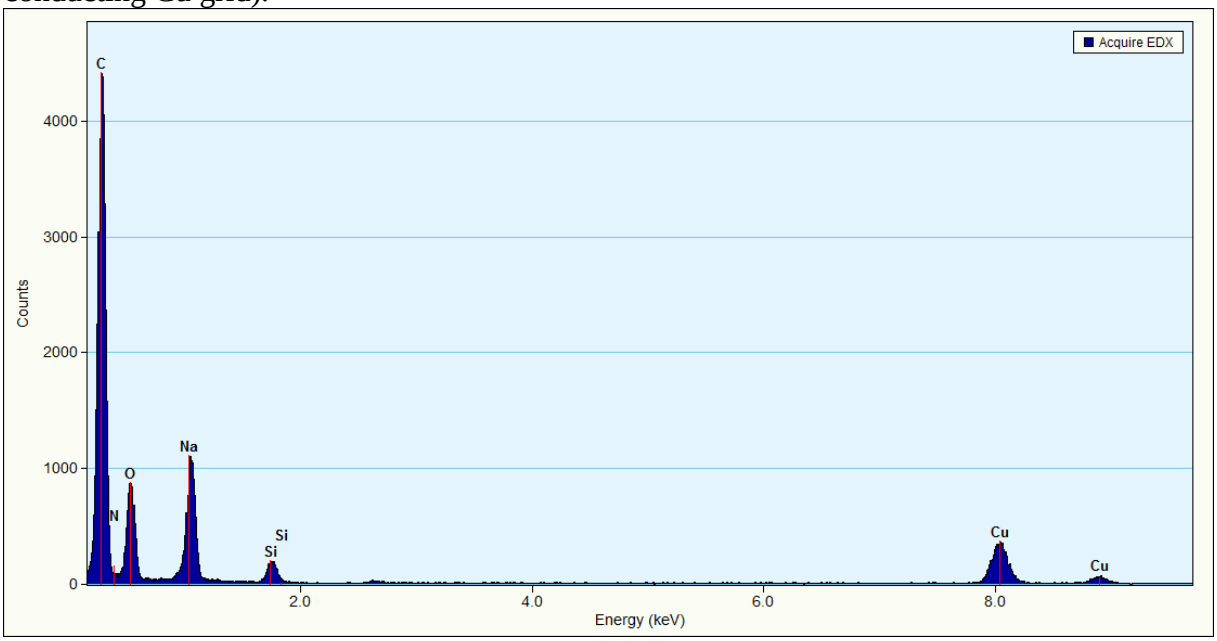

Figure S24. EDS spectra of **2-ibuprofen** (copper content is derived from the high-purity conducting Cu grid).

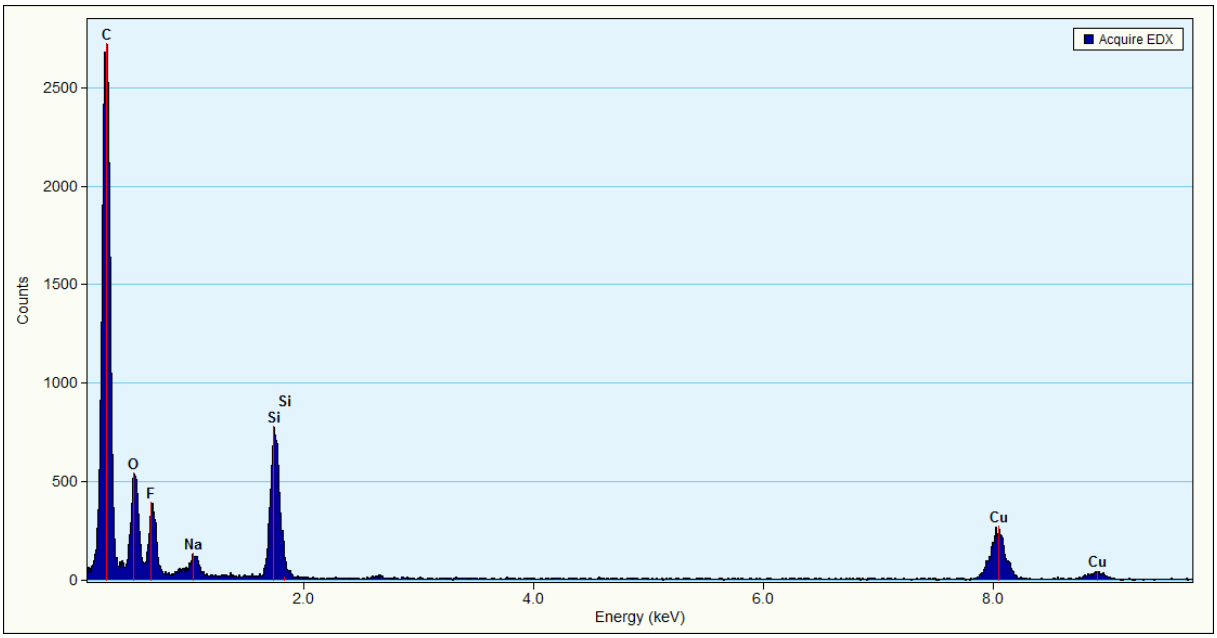

Figure S25. EDS spectra of **3-ibuprofen** (copper content is derived from the high-purity conducting Cu grid).

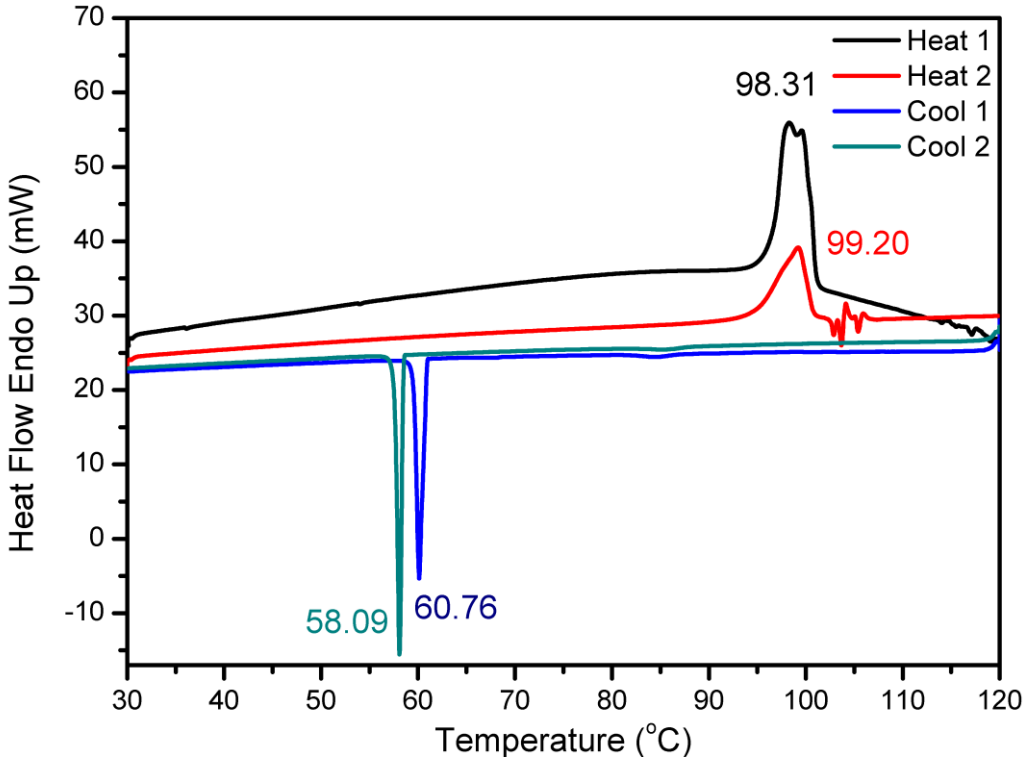

Figure S26. DSC of ibuprofen, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

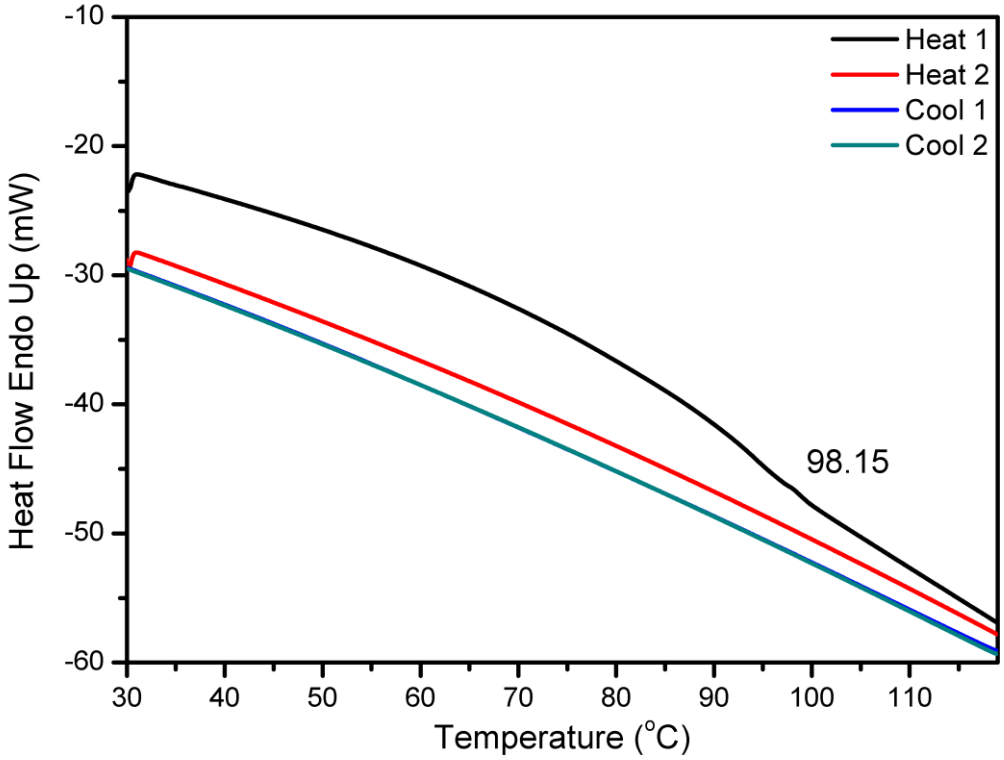

Figure S27. DSC of **1-ibuprofen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

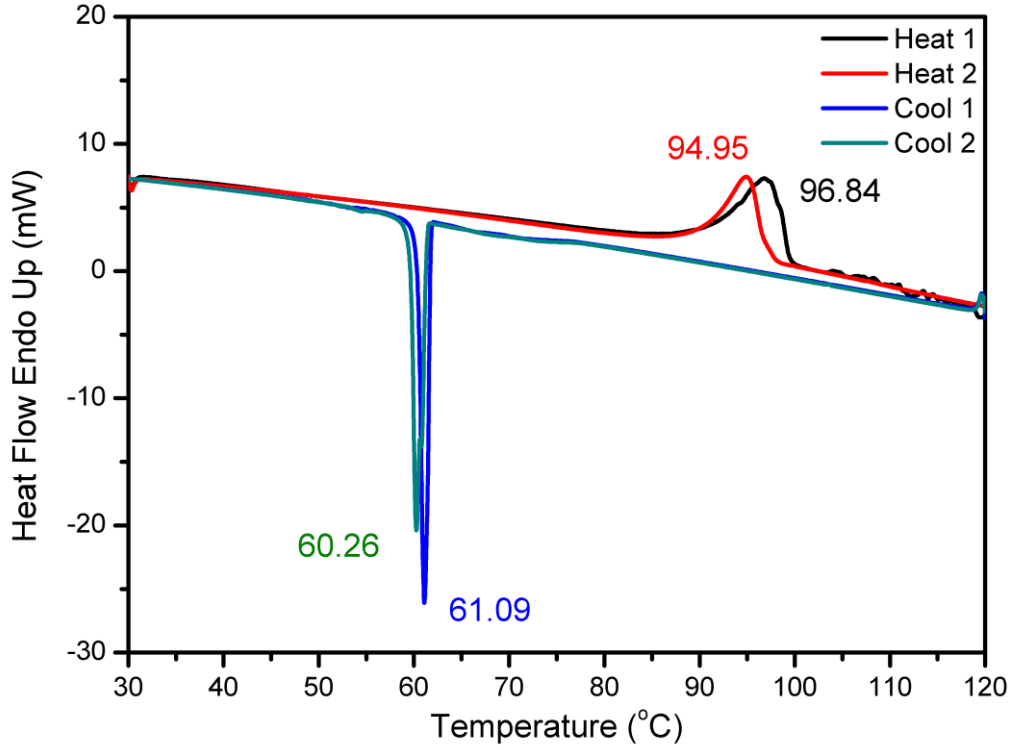

Figure S28. DSC of **2-ibuprofen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

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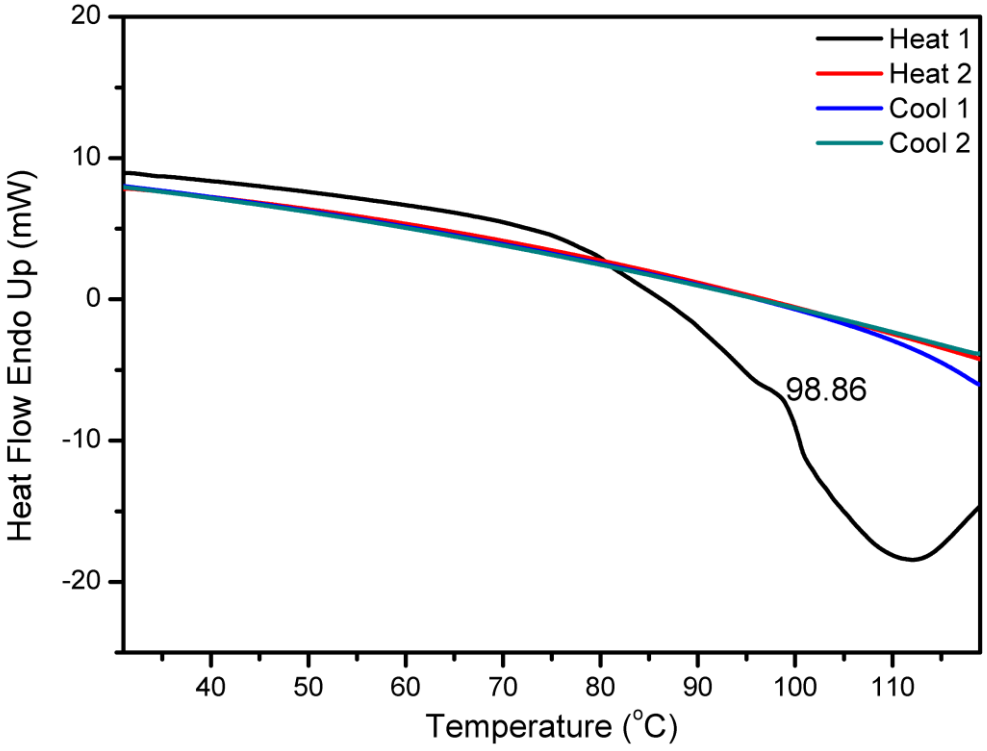

Figure S29. DSC of **3-ibuprofen**, 1st and 2nd heat & cooling cycle (10 °C/min in the helium atmosphere).

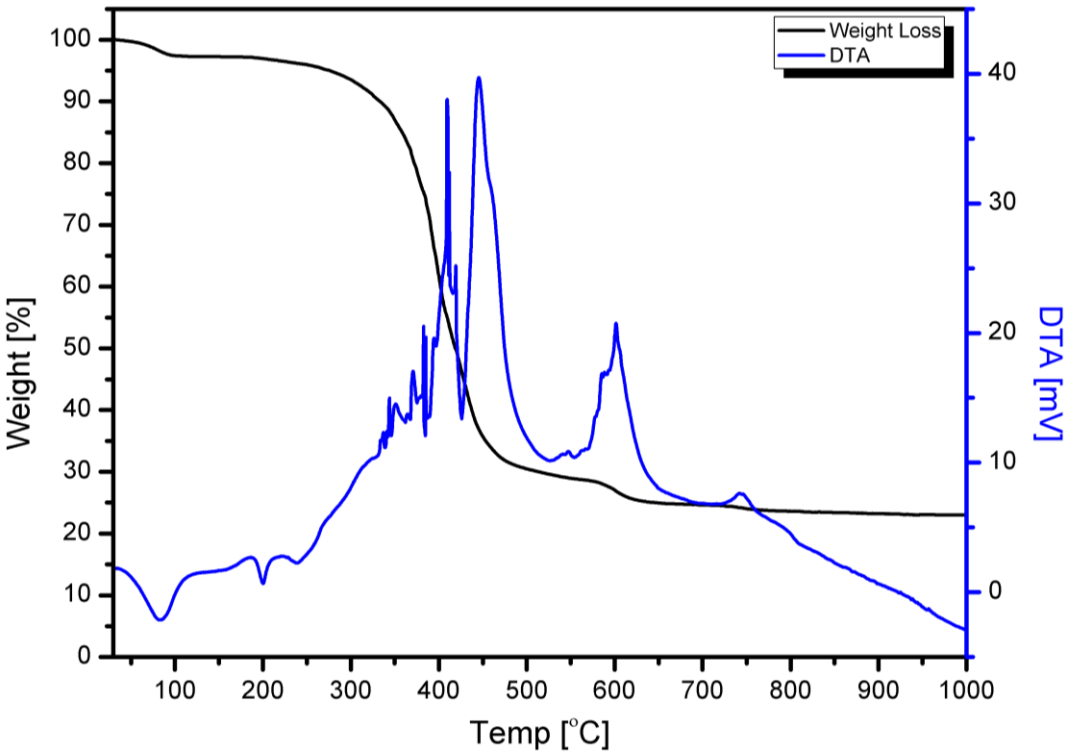

Figure S30. TG-DTA thermogram of **1-ibuprofen** 10 °C/min (in the air atmosphere: 60% N_2, 40% O_2).

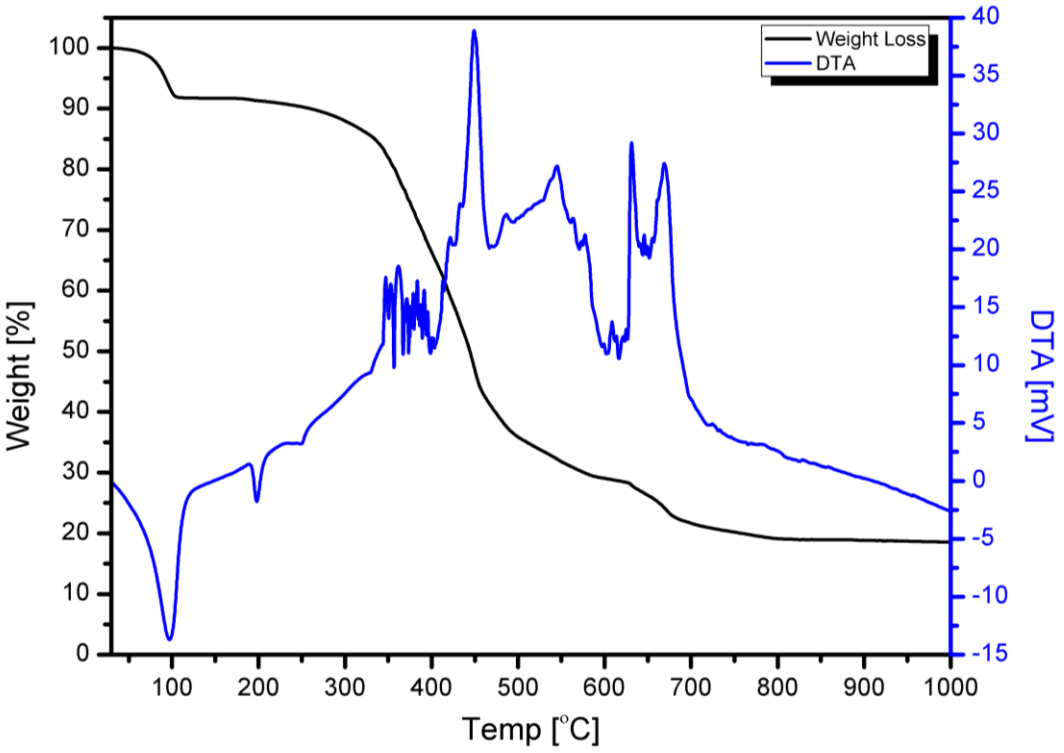

Figure S31. TG-DTA thermogram of **2-ibuprofen** 10 °C/min (in the air atmosphere: 60% N_2, 40% O_2).

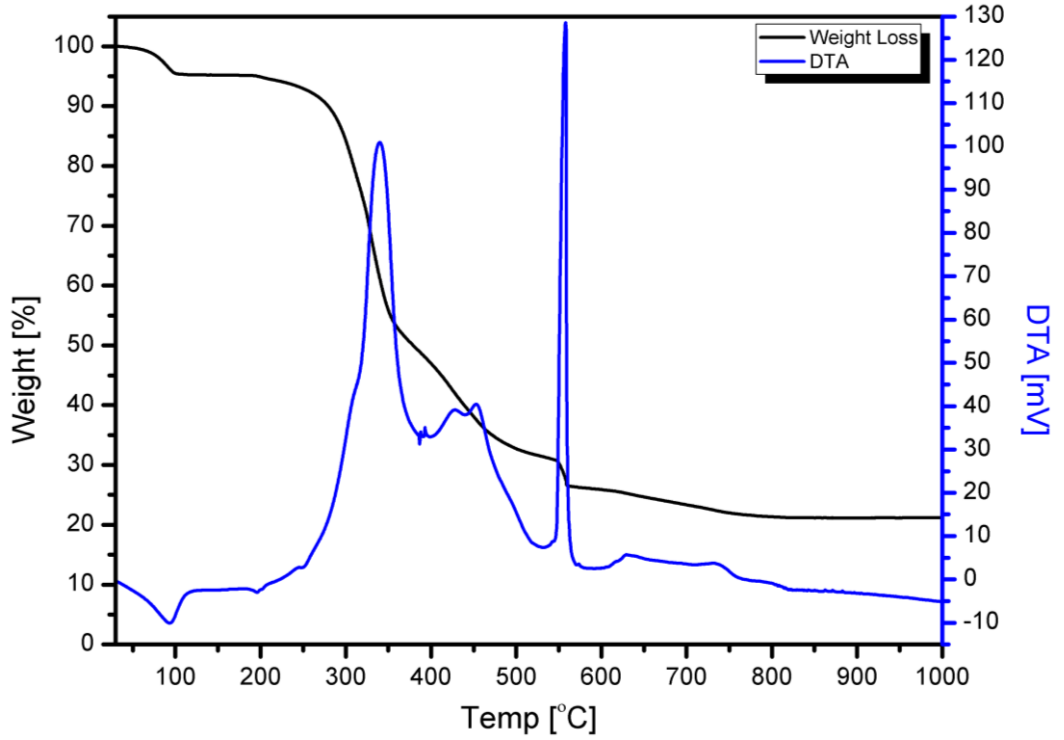

Figure S32. TG-DTA thermogram of **3-ibuprofen** 10 °C/min (in the air atmosphere: 60% N_2, 40% O_2).

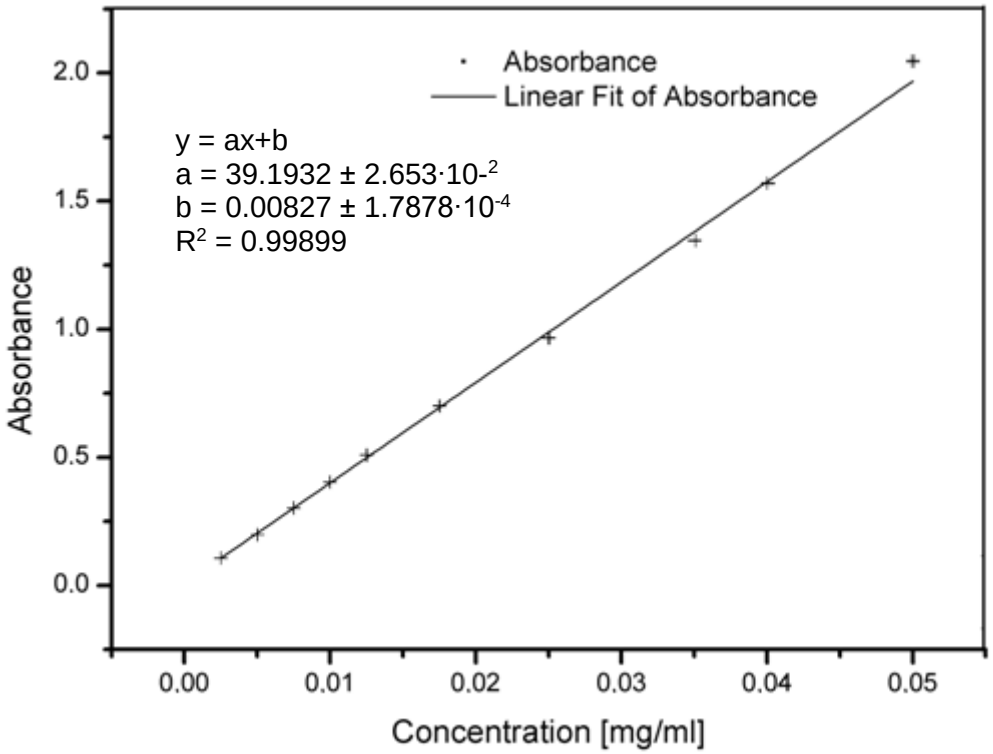

Figure S33. Calibration curve for ibuprofen 0.1 M phosphate buffer.

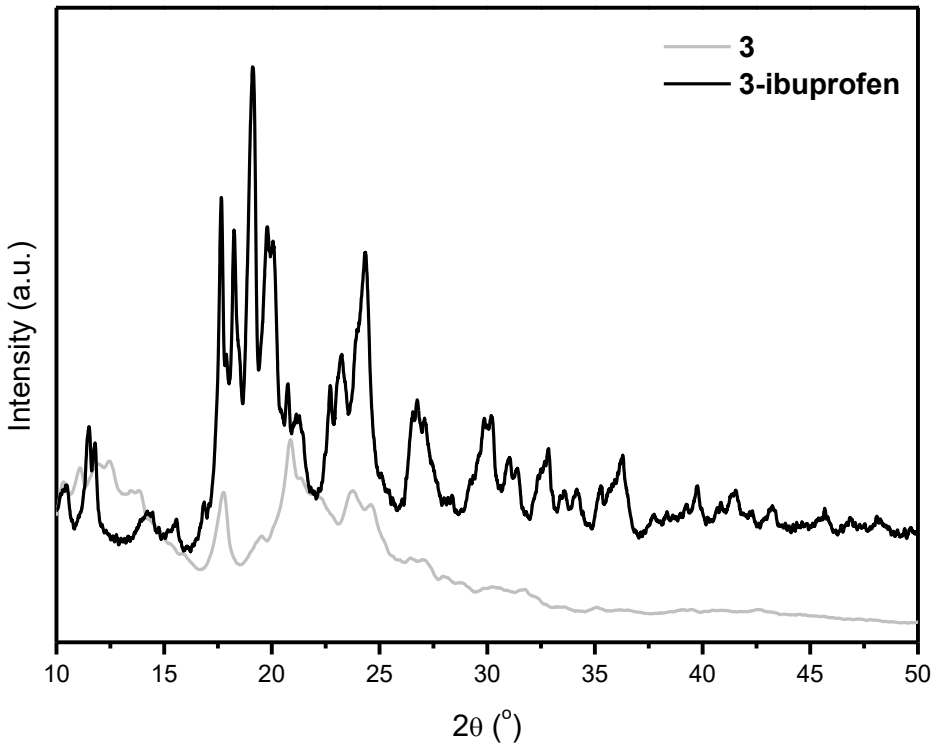

Figure S34. Powder XRD patterns of **2** and **2-ibuprofen**.