Supplementary Materials

Copper(II) complexes containing natural flavonoid pomiferin show considerable in vitro cytotoxicity and anti-inflammatory effects

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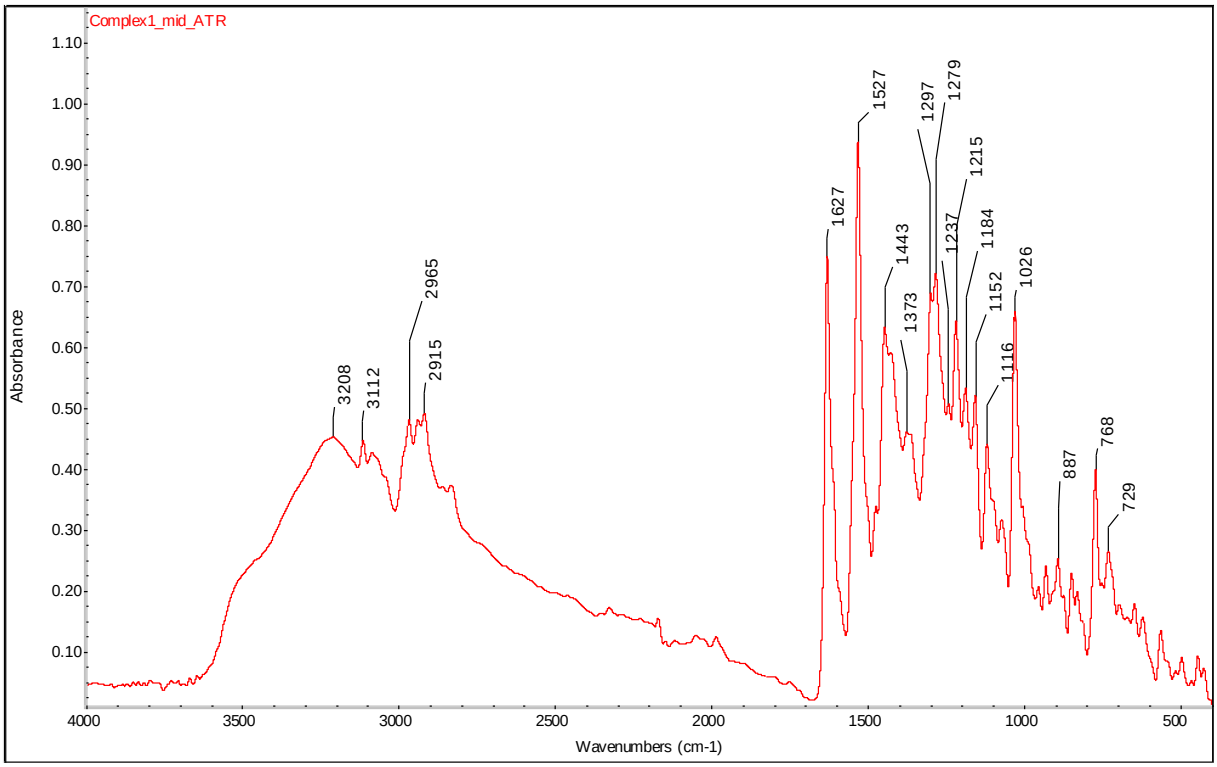

Figure S1 IR Spectrum of [Cu(L)(bpy)]NO_3·2MeOH (**1**).

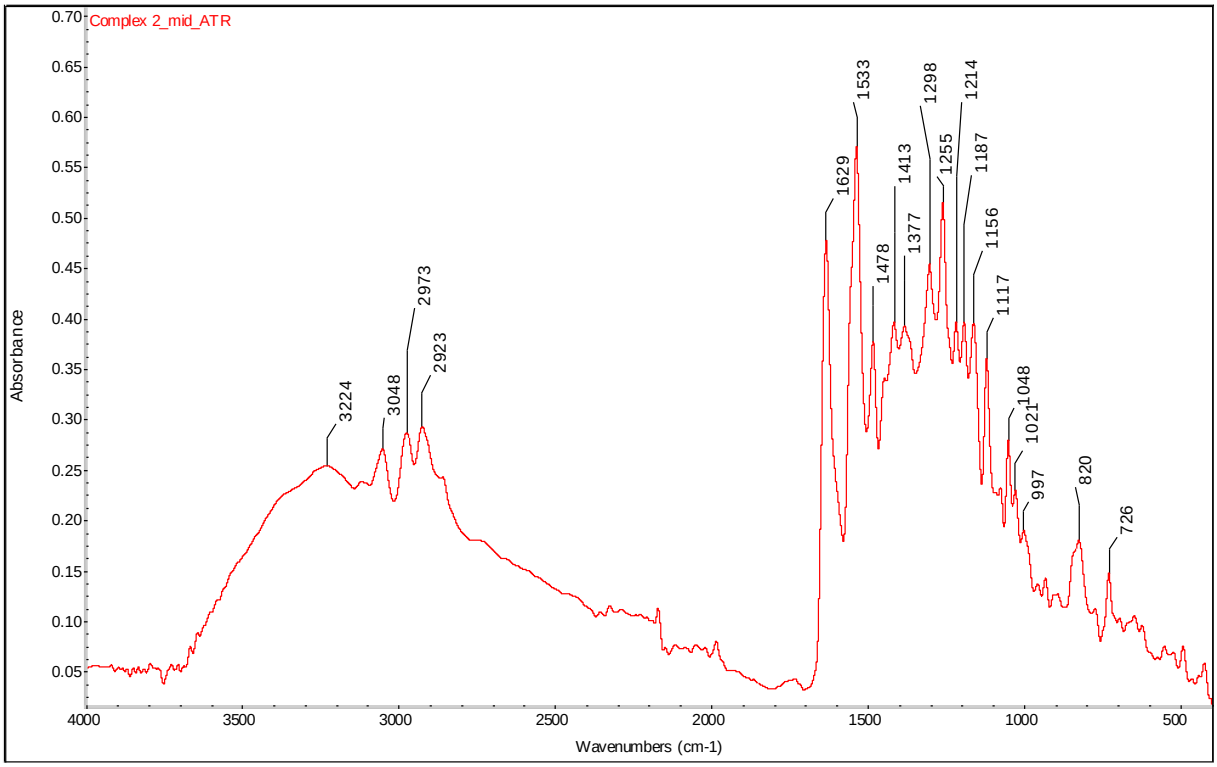

Figure S2 IR Spectrum of [Cu(L)(dimebpy)]NO_3·2H_2O (**2**).

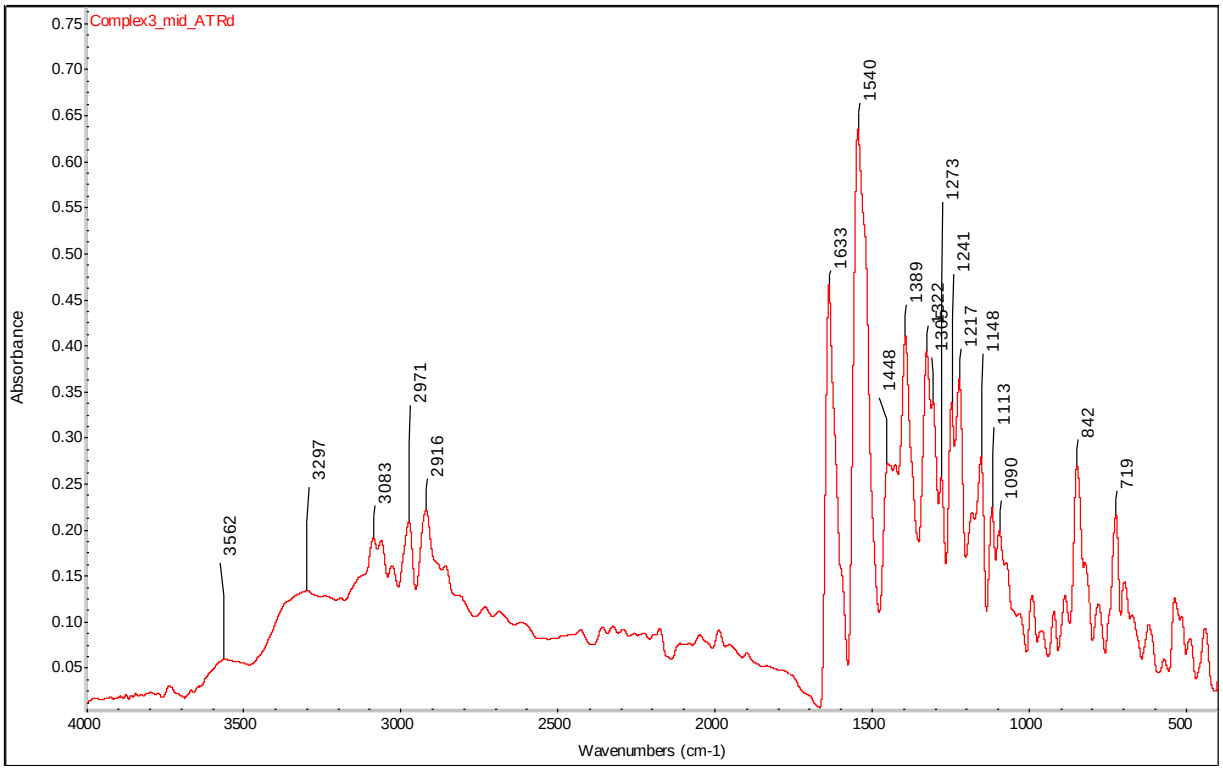

Figure S3 IR Spectrum of [Cu(L)(phen)]NO_3·2MeOH (**3**).

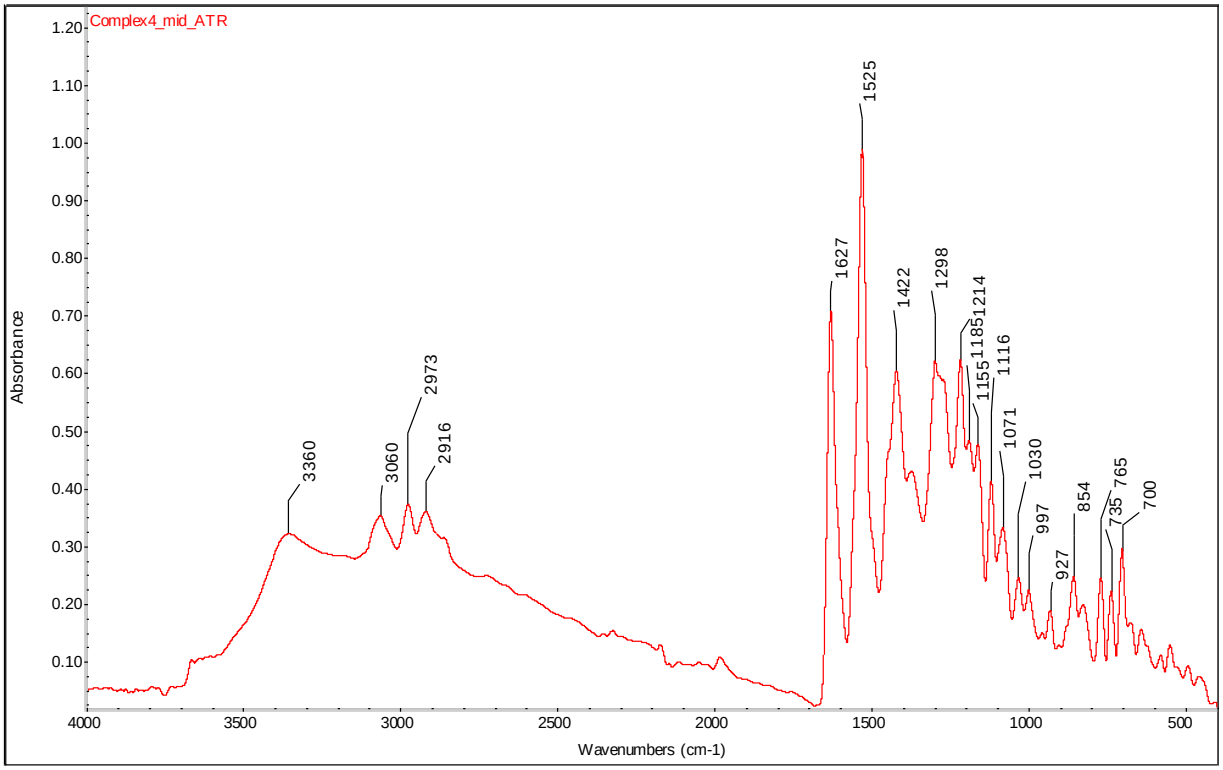

Figure S4 IR Spectrum of [Cu(L)(bphen)]NO_3·MeOH (**4**).

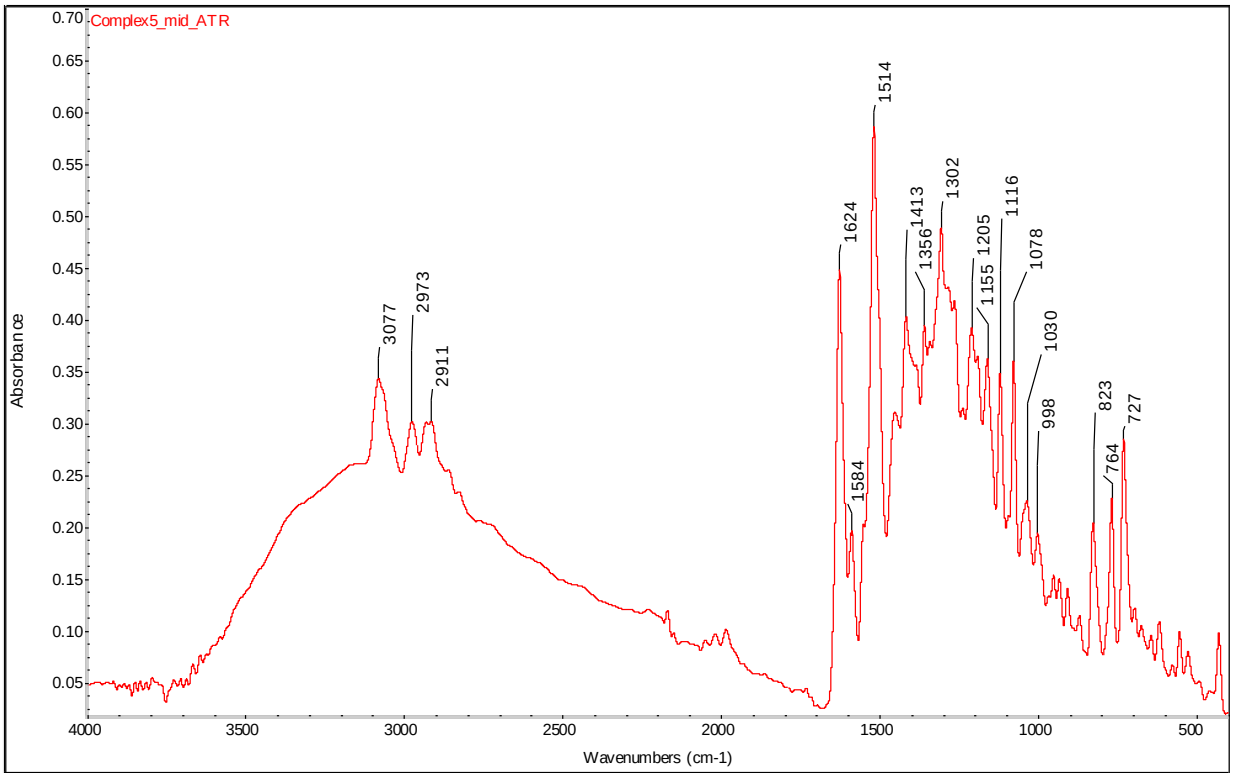

Figure S5 IR Spectrum of [Cu(L)(dppz)]NO_3·MeOH (**5**).

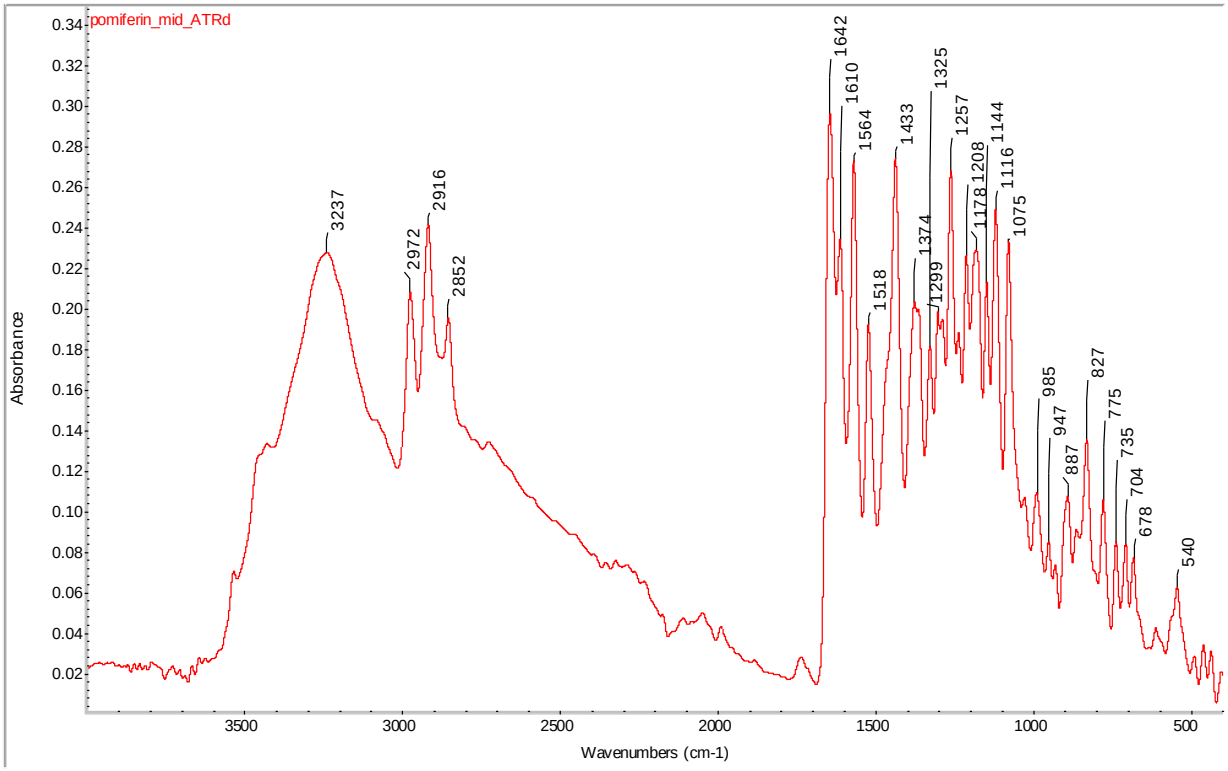

Figure S6 IR Spectrum of pomiferin (**HL**).

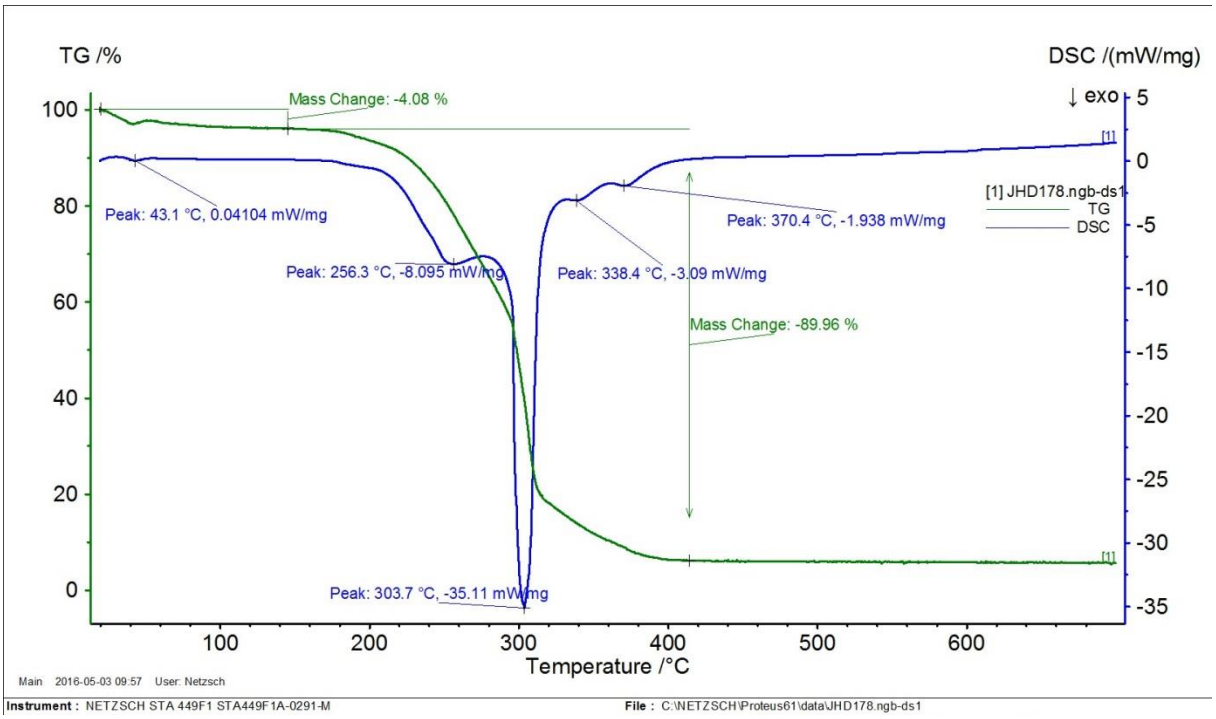

Figure S7. TG/DSC curves of [Cu(L)(bphen)]NO_3·MeOH **4** (here labelled as JHD 178). The loss of the MeOH molecule is accompanied by a theoretical weight loss of 3.52% (an experimental weight loss = 4.08%).

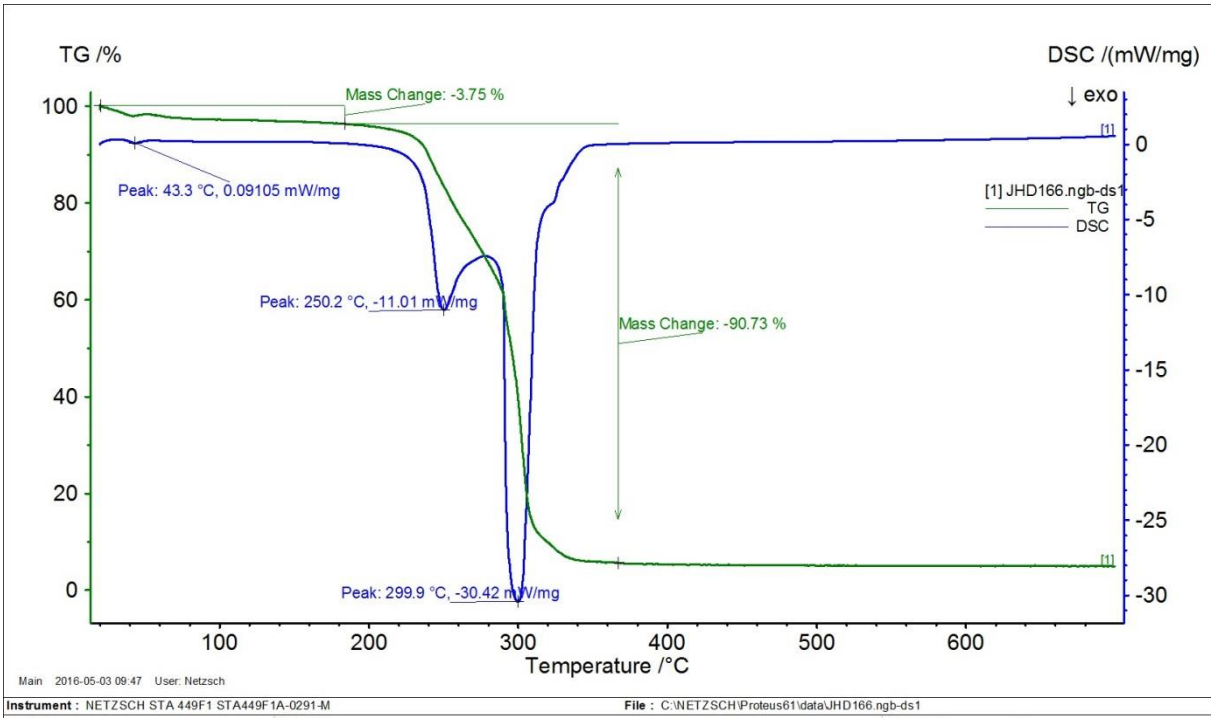

Figure S8 TG/DSC curves of [Cu(L)(dppz)]NO_3·MeOH **5** (here labelled as JHD 166). The elimination of the MeOH molecule is accompanied by a theoretical weight loss of 3.73% (an experimental weight loss = 3.75%).

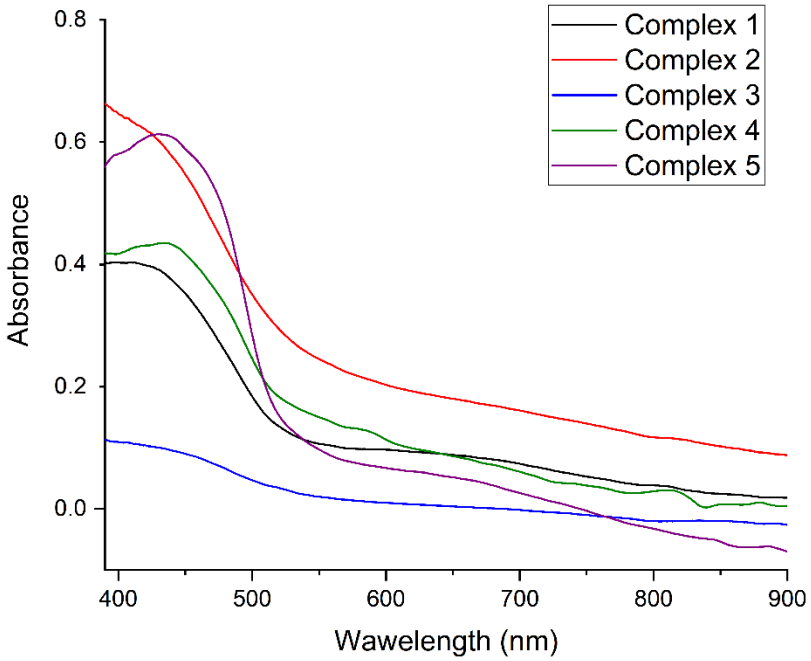

Figure S9 Diffuse reflectance UV/Vis spectra of complexes **1–5** measured in solid state (Nujol mulls).

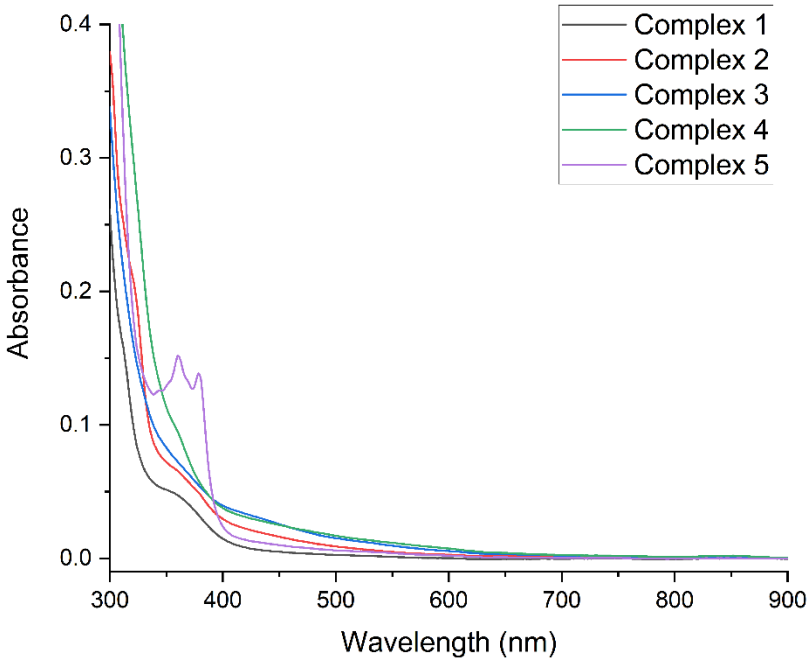

Figure S10 UV/Vis spectra of complexes **1–5** measured in DMF solutions at the 10 μM concentration.

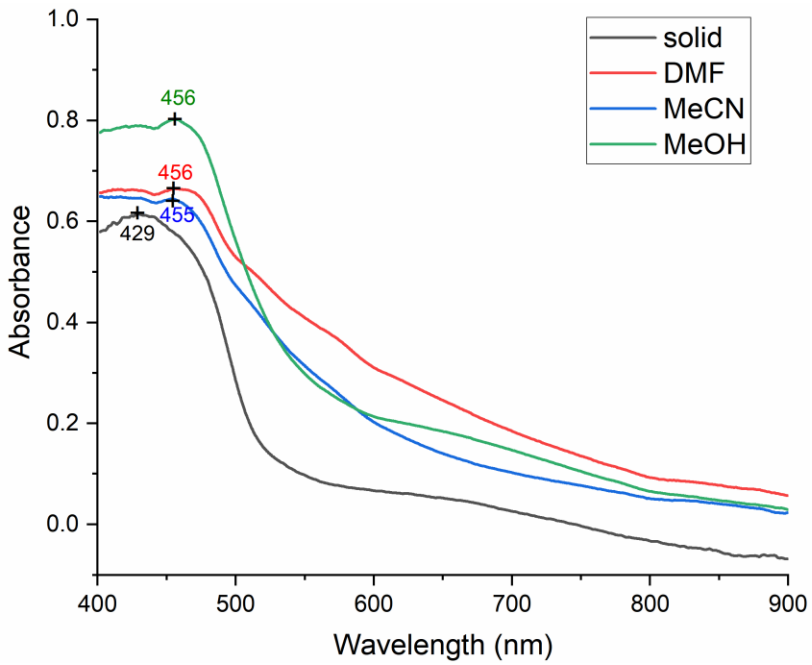

Figure S11 UV/Vis spectra of [Cu(L)(dppz)]NO_3·MeOH **5** in DMF, MeCN and MeOH (each at 15 mM concentration), and in the solid state.

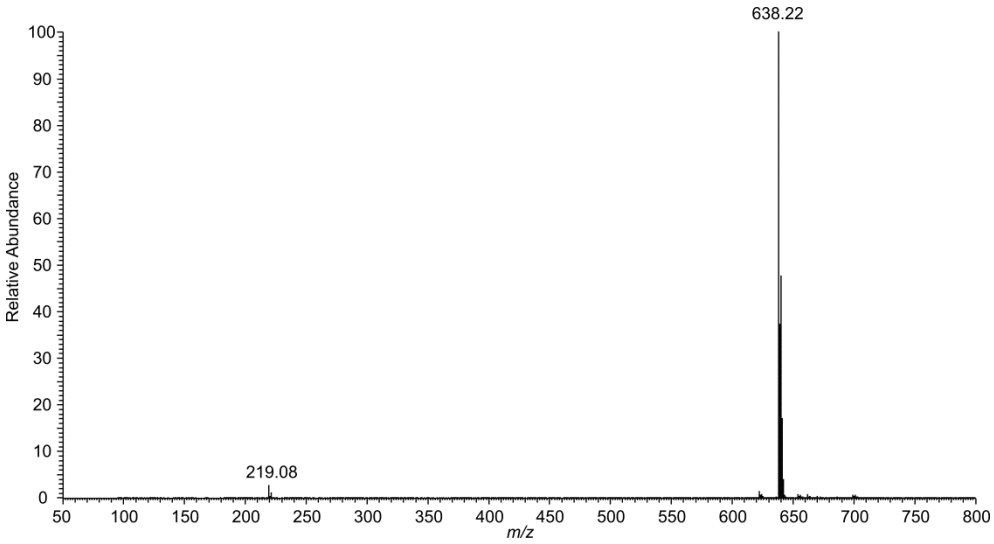

Figure S12 Mass spectra (ESI+MS) of the complex **1** showing the dominant peak associated with the corresponding complex cations.

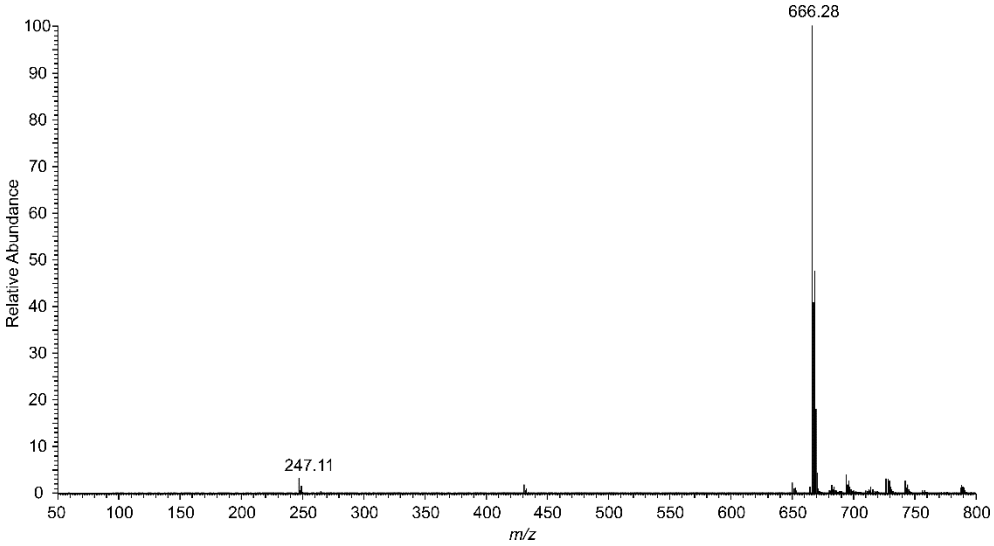

Figure S13 Mass spectra (ESI+MS) of the complex **2** showing the dominant peak associated with the corresponding complex cations.

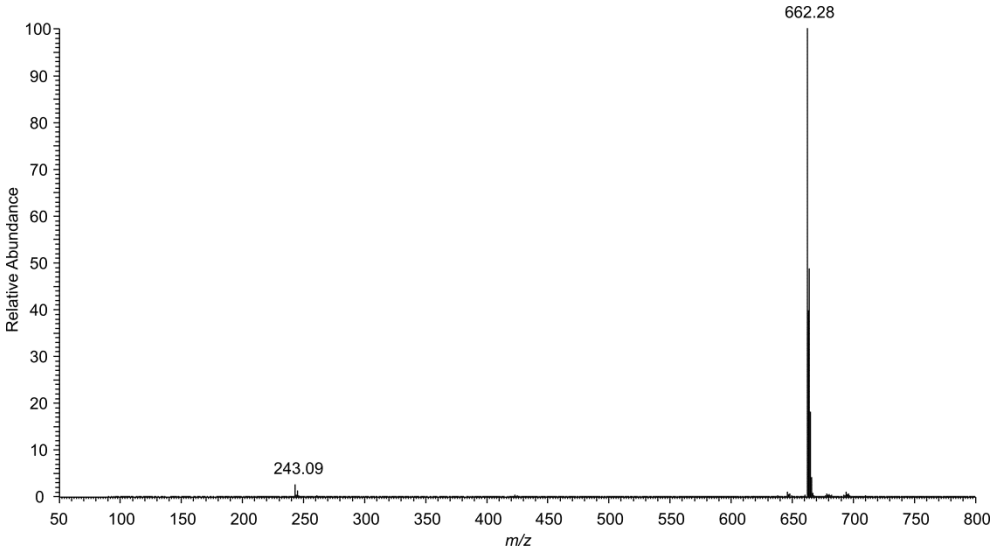

Figure S14 Mass spectra (ESI+MS) of the complex **3** showing the dominant peak associated with the corresponding complex cations.

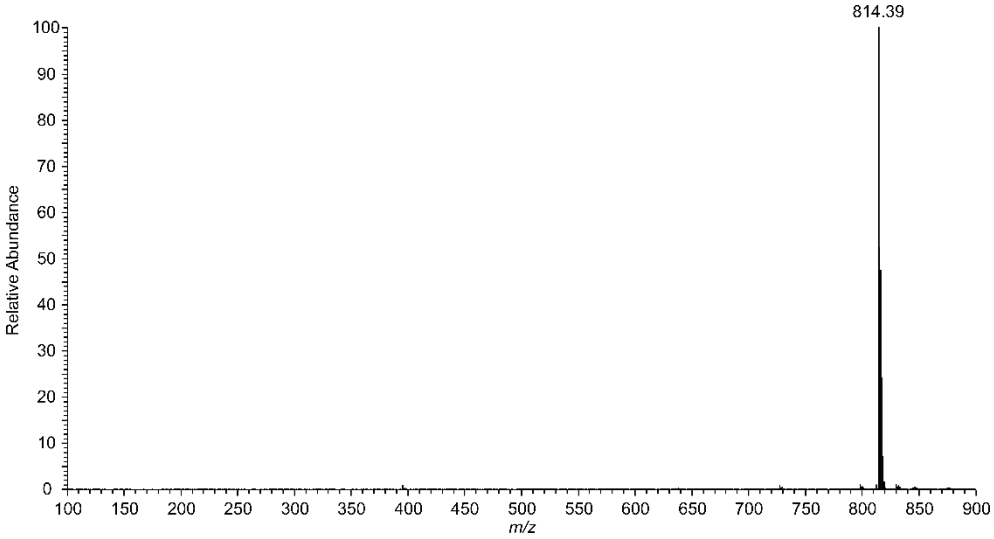

Figure S15 Mass spectra (ESI+MS) of the complex **4** showing the dominant peak associated with the corresponding complex cations.

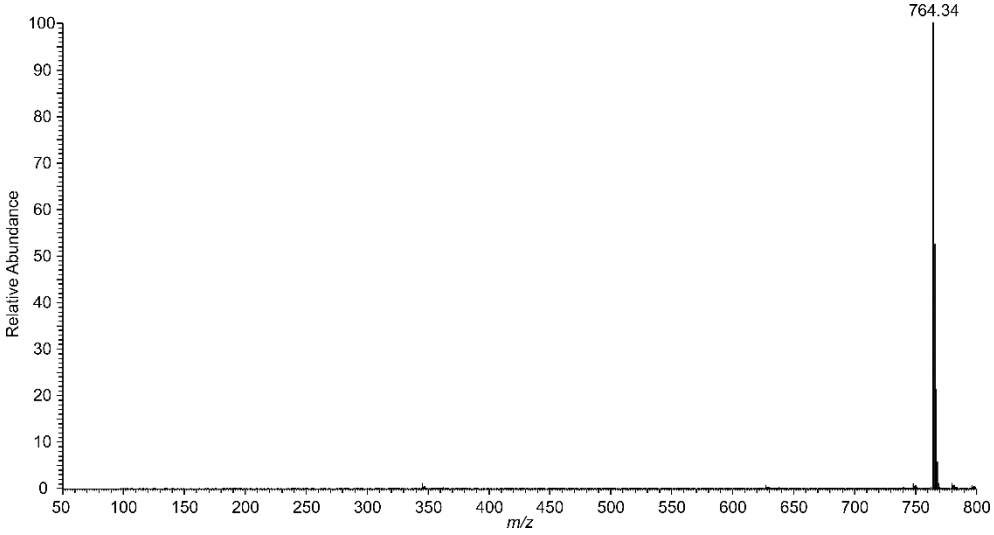

Figure S16 Mass spectra (ESI+MS) of the complex **5** showing the dominant peak associated with the corresponding complex cations.

Table S1 The values of molar conductivity of complexes **1**–**5** in different solvents.

Complex	Λ_M (MeCN) [S cm^2 mol^{-1}]	Λ_M (MeOH) [S cm^2 mol^{-1}]	Λ_M (DMF) [S cm^2 mol^{-1}]
1	143	83	68
2	132	84	82
3	143	81	85
4	138	81	80
5	n.m.	104	78
Reference data*	120-160	80-115	65-90

* Reference data for 1:1 electrolytes in the corresponding solvent, ref. W.J. Geary, The use of conductivity measurements in organic solvents for the characterization of coordination compounds, Coord. Chem. Rev. 7 (1971) 81–122. n.m. = not measured.