Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Novel anthracene and pyridine comprising schiff base probe for selective "OFF-ON" fluorescent determination of Cu^{2+} ions towards live cell application

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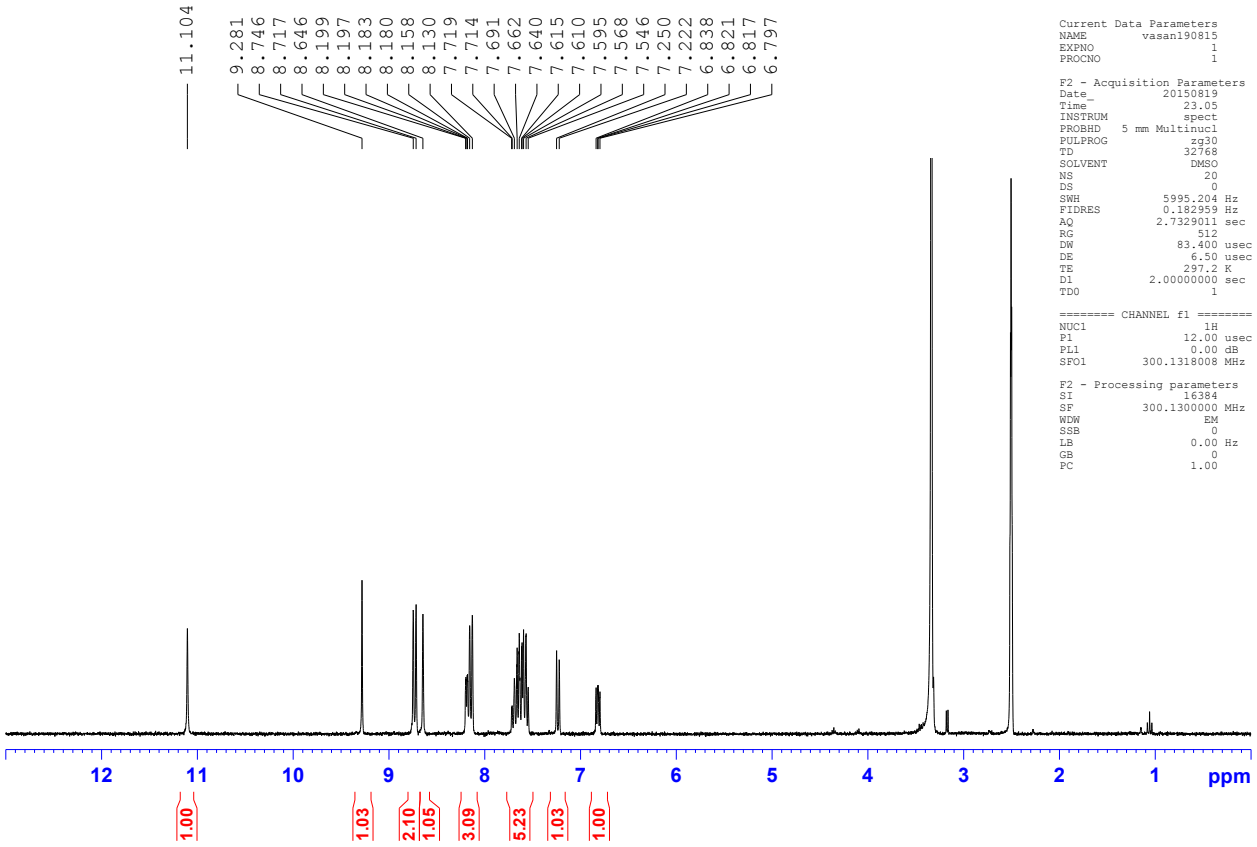

Fig. **S1** ^{1}H NMR spectrum of **AP** in d_6-DMSO.

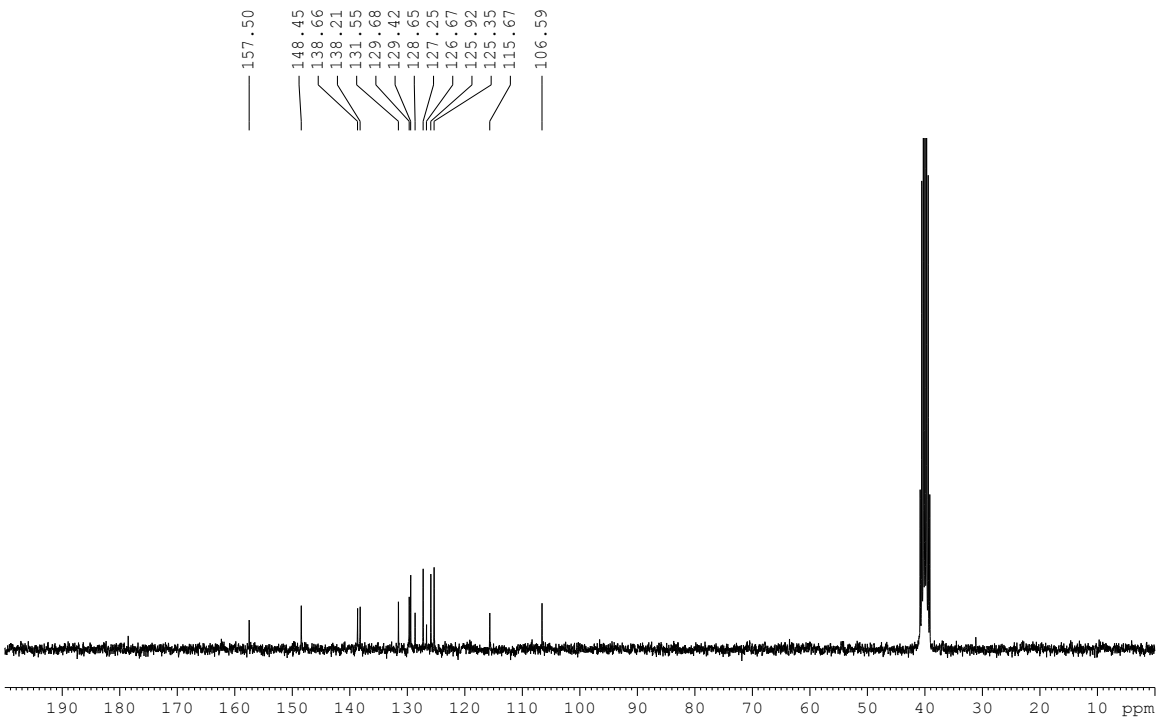

Fig. S2 ^{13}C NMR spectrum of **AP** in d_6-DMSO.

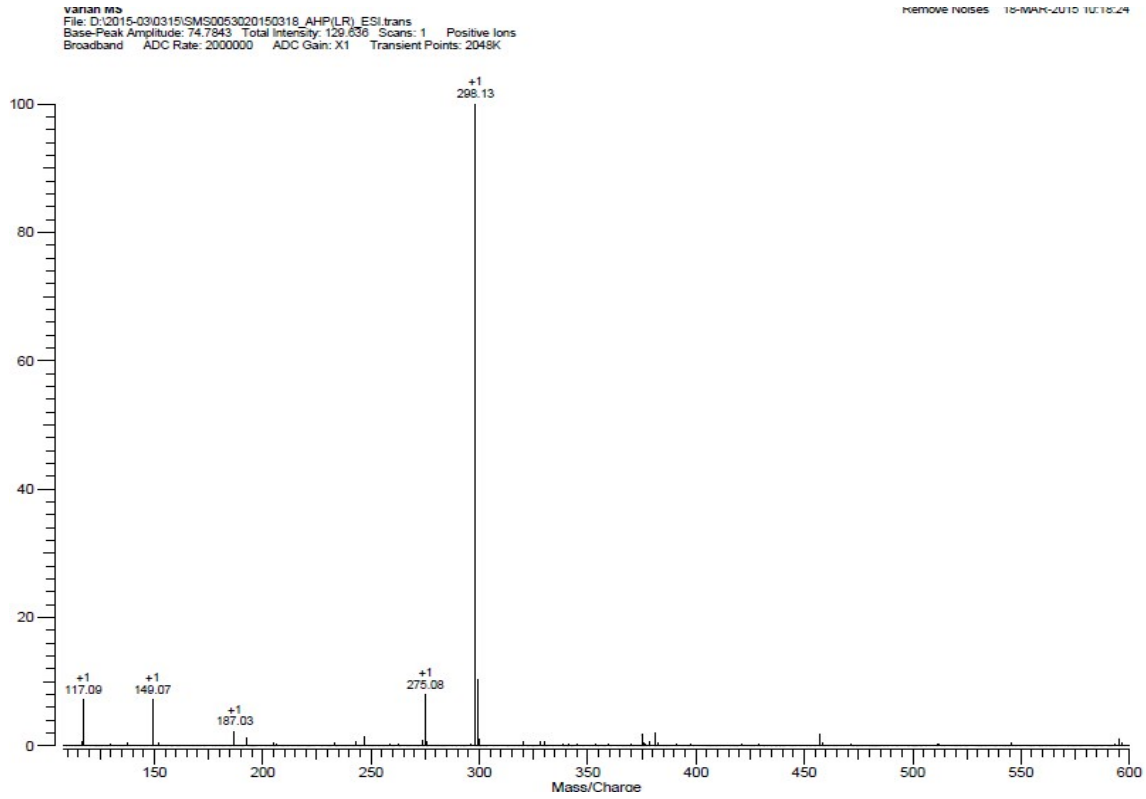

Fig. **S3** Mass (ESI) spectrum of **AP**.

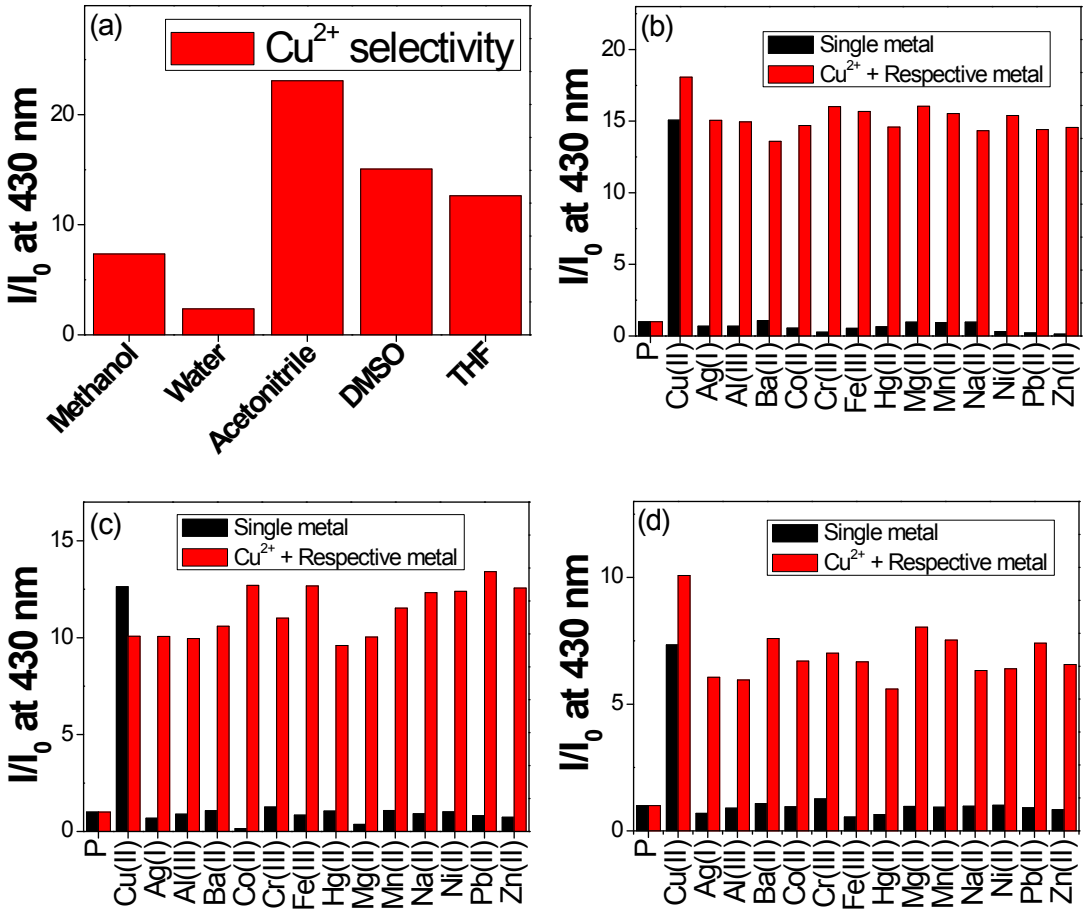

Fig. S4 (a) Cu^{2+} selectivity in different solvents; Histograms on single and dual metal studies of **AP** (20 μM in CH_3CN) probe in (b) DMSO, (c) THF and (d) Methanol (Single metal studies: 30 μM of Cu^{2+} and 150 μM of other metal ions were taken; Dual metal studies: 30 μM of Cu^{2+} + 150 μM of other metal ions were taken; 180 μM of Cu^{2+} ions were taken for its effect).

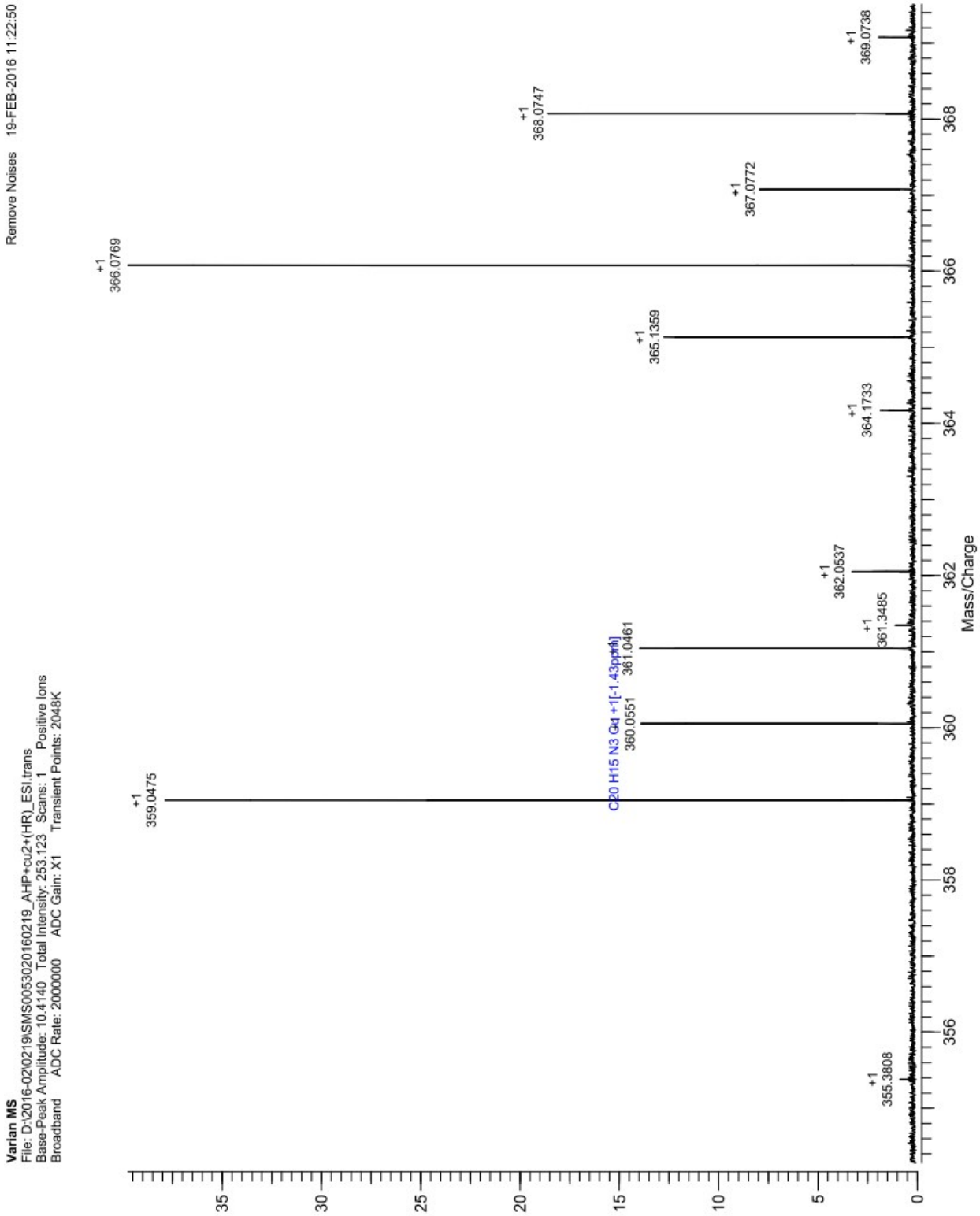

Fig. S5 HR-Mass spectrum of **AP**---Cu^{2+} complex**.**

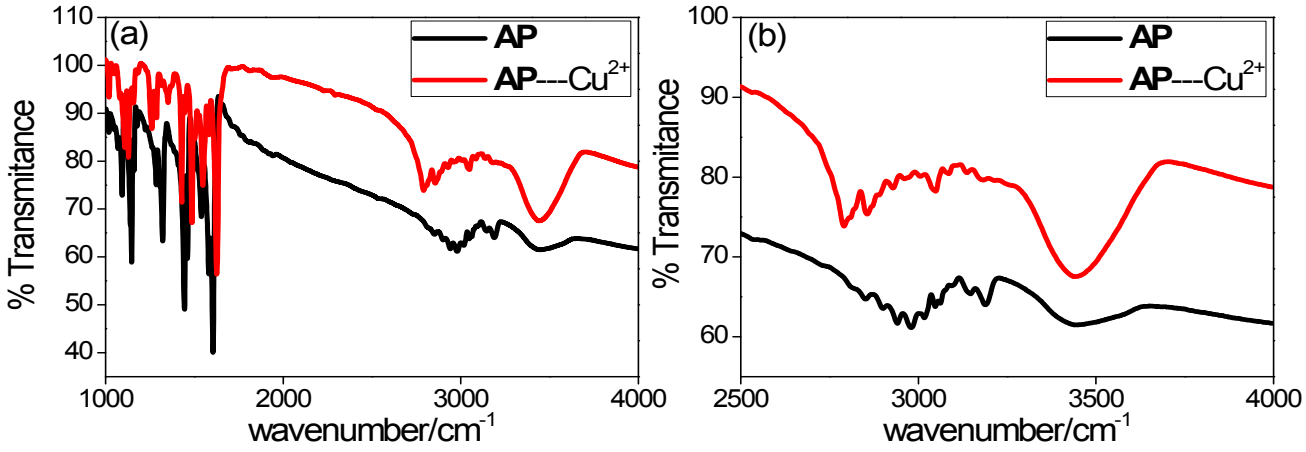

Fig. S6 FTIR Analysis (a) **AP** probe and (b) **AP**---Cu^{2+}.

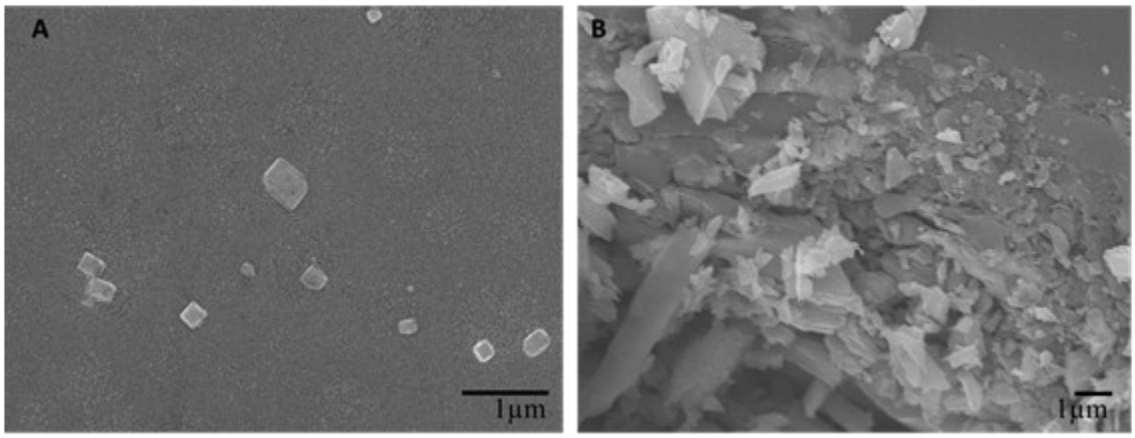

Fig. S7 SEM Image (A) **AP** probe and (B) **AP**---Cu^{2+}.

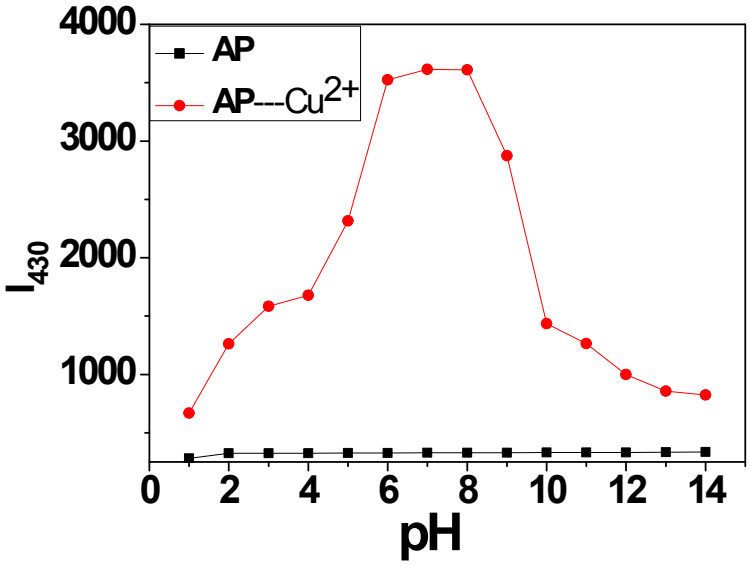

Fig. S8 pH effect on **AP** and **AP**---Cu^{2+} sensor system.

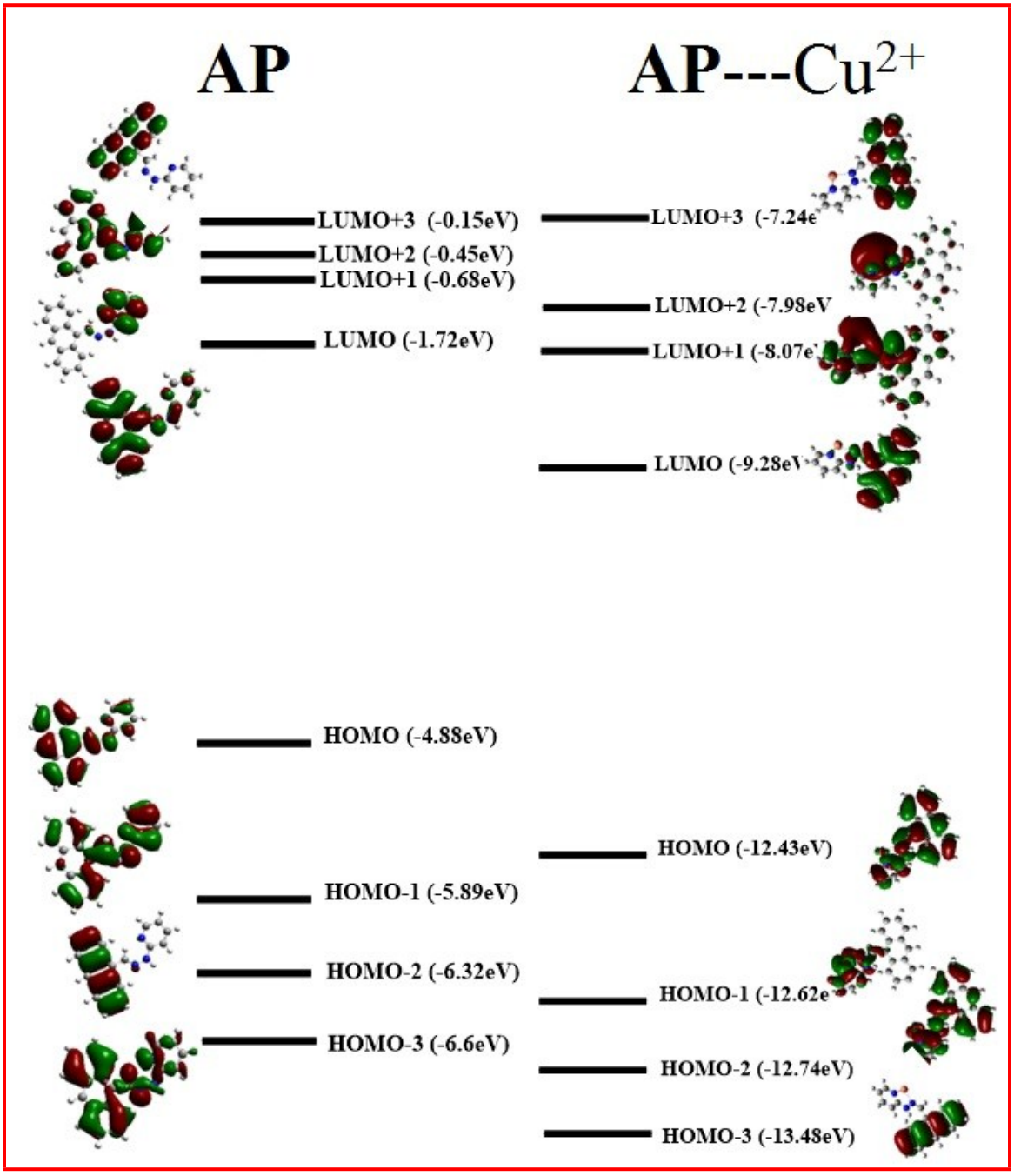

Fig. S9 HOMOs and LUMOs of **AP** and **AP**---Cu^{2+} complex.