#### **Supplementary Materials**

# Structural scope of six new layered to pillar-layered hybrid inorganicorganic networks bearing [BW<sub>12</sub>O<sub>40</sub>]<sup>5-</sup> and lanthanoid-cluster; data base study toward ligand role in assemblies

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- Fig. S6. TGA diagrams of compounds 2, 3, and 5.

Table S1. Bond Valence Summation of the inorganic addenda metals.





## Figure S2.



Figure S3.













Figure S6.





### Table S1.

Compound 1	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
BVS	6.12	6.19	5.88	6.39	6.22	6.28	6.38	6.25	6.18	6.33	6.10	6.11
AVE. of the oxidation No.	6.20											
Compound <b>3</b>	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
BVS	6.15	6.30	6.37	6.22	6.30	6.28	6.19	6.36	6.30	6.19	6.25	6.29
AVE. of the oxidation No.	6.29											
Compound 4	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
BVS	6.23	6.10	6.19	6.34	6.25	6.09	6.31	6.23	6.26	6.19	6.34	6.08
AVE. of the oxidation No.	6.22											