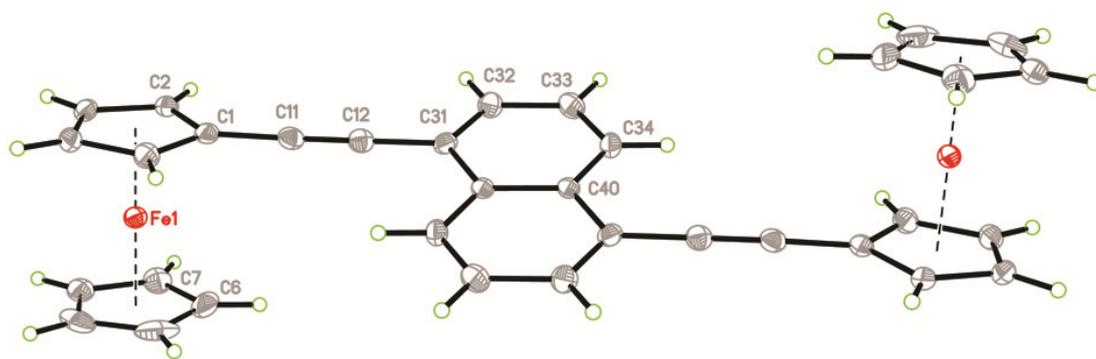
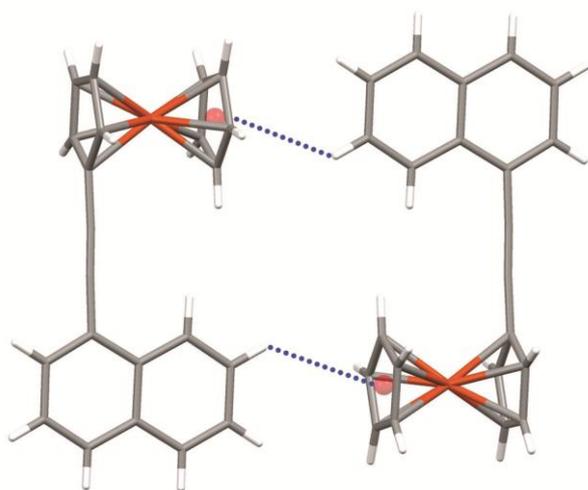


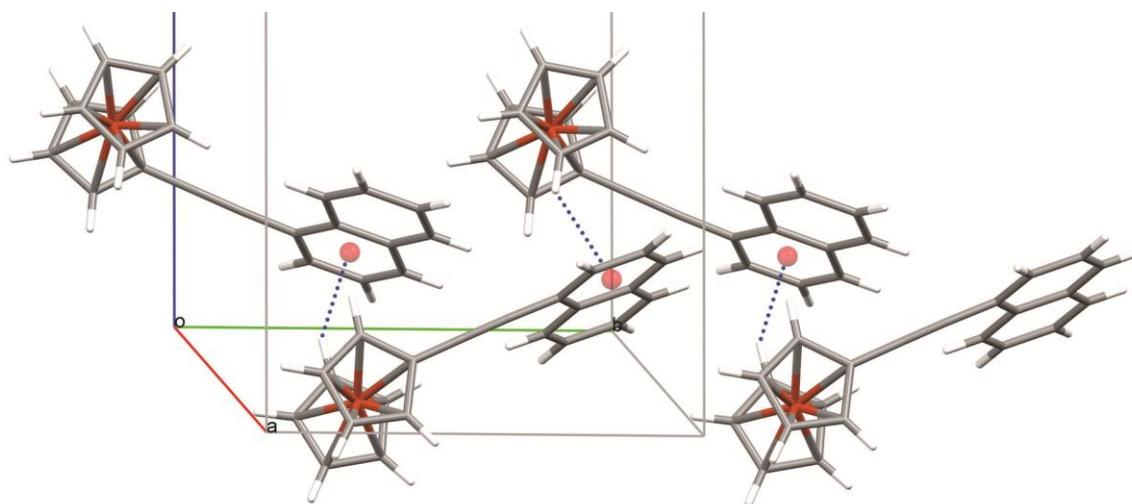
### ESI Fig.s 1-10



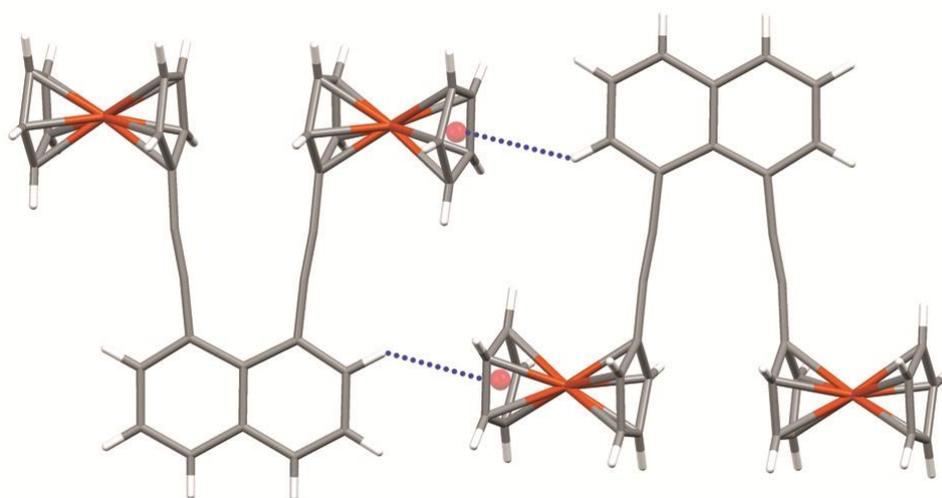
**ESI Fig. 1** Structure of the dimorph of 1,5-bis(ferrocenylethynyl)naphthalene **IIIb** drawn with 50% probability ellipsoids and showing the atomic labelling schemes. For clarity only the first two C atoms of the consecutively numbered cyclopentadienyl rings have been labelled.



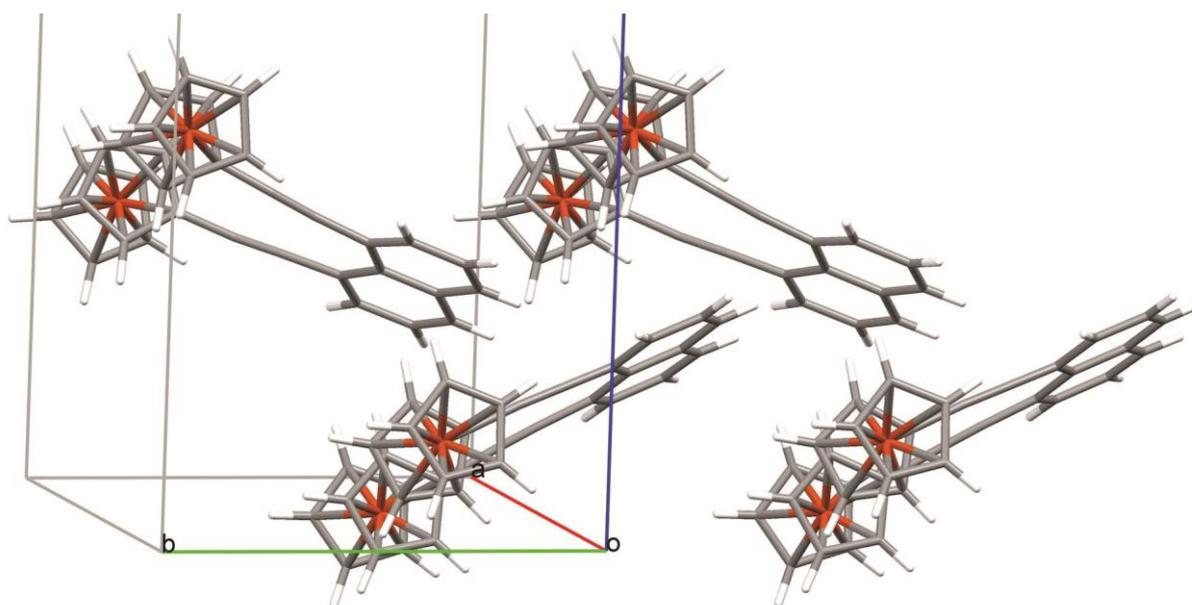
**ESI Fig. 2** Second inversion dimer motif of **I** showing EF CH $\cdots$  $\pi$  from H(37) to Cg2 (3.103 Å).



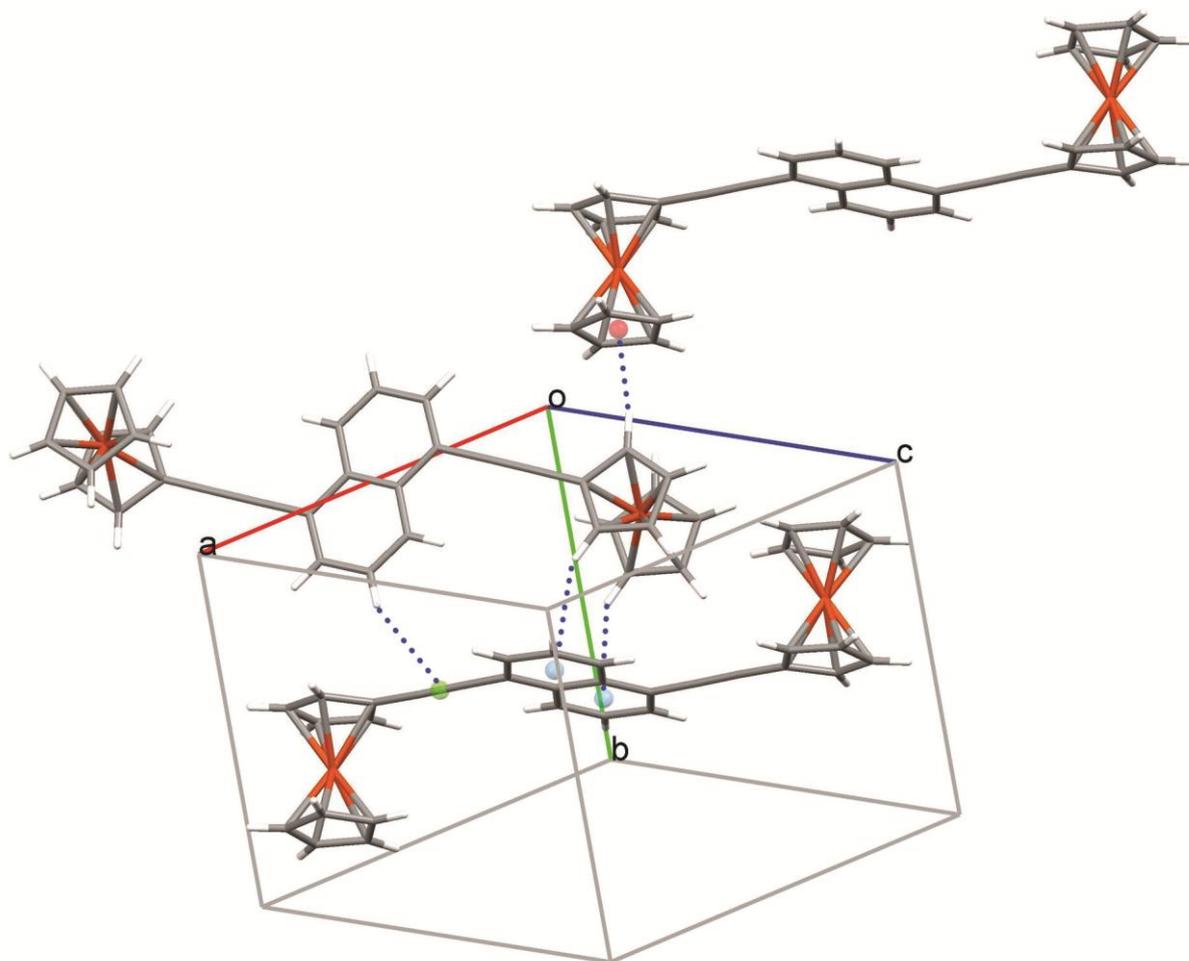
**ESI Fig. 3** Herringbone motif for **I** showing EF CH $\cdots$  $\pi$  from H(7) to Cg3 (2.934 Å).



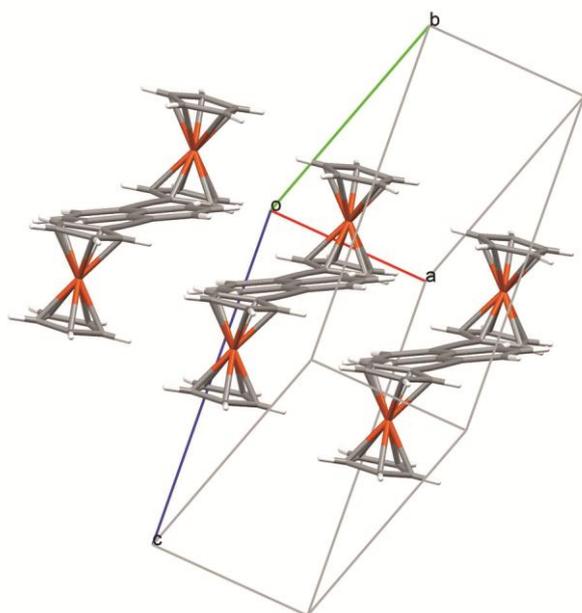
**ESI Fig. 4** Second inversion dimer motif of **II** showing EF CH $\cdots$  $\pi$  from H(32) to Cg2 (2.896 Å).



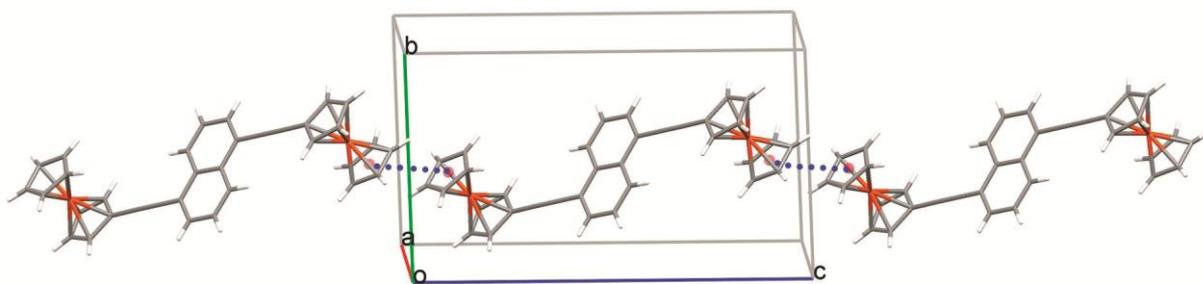
**ESI Fig. 5** Herringbone motif for **II**.



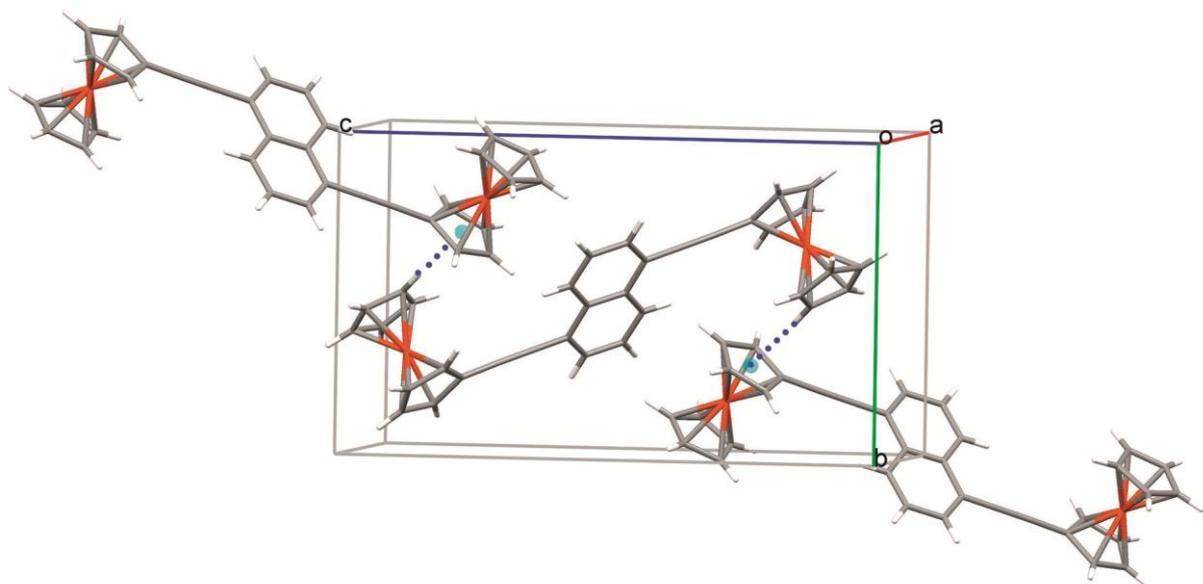
**ESI Fig. 6** Packing of **IIIa**, short contacts (shown dotted) between orthogonal repeat motifs generate 3-dimensional herringbone down *c*



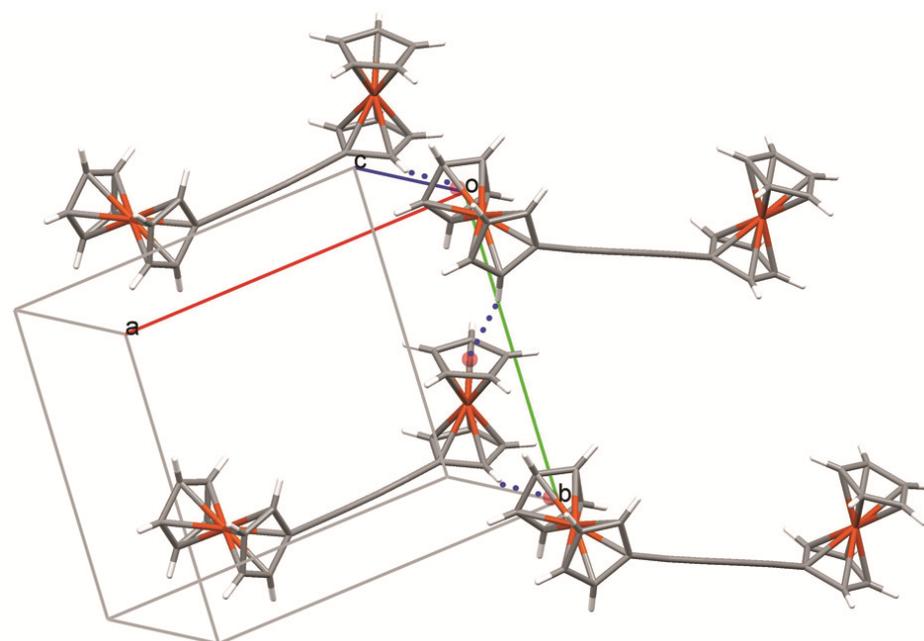
**ESI Fig. 7** Packing of **IIIb**, staircase motif in (0 1 -1)



ESI Fig. 8 Packing of IIIb, OFF motif down *c*



ESI Fig. 9 Packing of IIIb, EF motif that generates sheets in (102)



ESI Fig. 10 Packing of IV, EF motif Cp3 H(22) to Cg4 (2.749 Å).