Sulfonate Ligands-Induced Formation of Alkali Metal - Cucurbit[5]uril-based Assemblies

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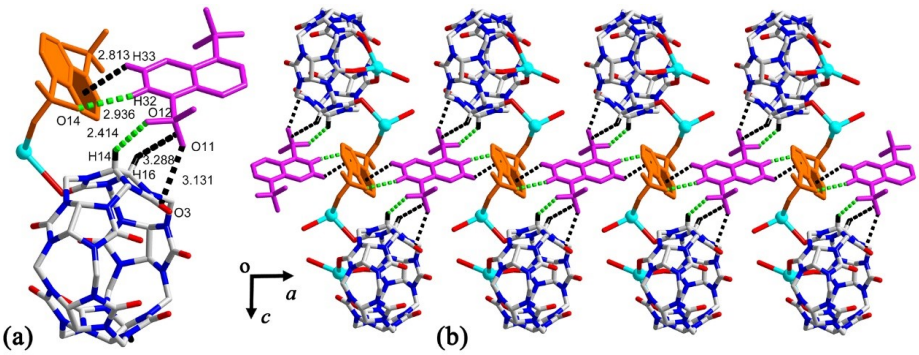


Fig. S1 (a) The interaction among the sulfonate ligands 1,5-NAS^{2-} and the outer surface of Q[5] molecules; (b) The ternary Q[5]-Na^{+}-1,5-NAS^{2-} supramolecular chain.

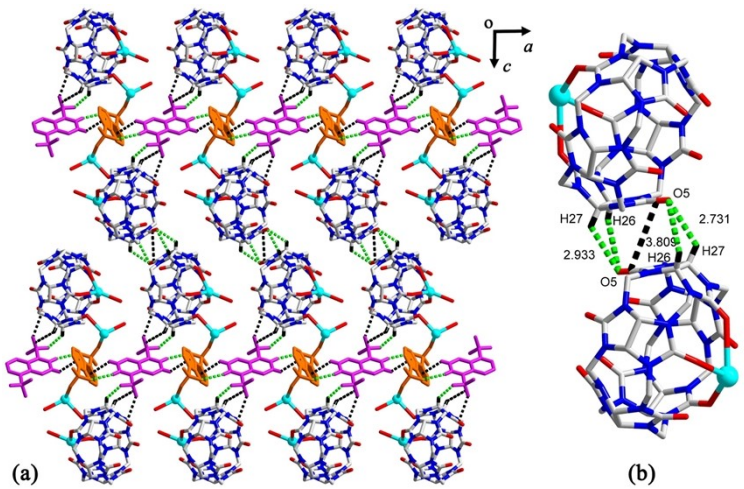


Fig. S2. (a) The 2D supramolecular layer (a) constructed from the Q[5]-Na^{+}-1,5-NAS^{2-} chains through the hydrogen bonding interactions between adjacent Q[5] (b).

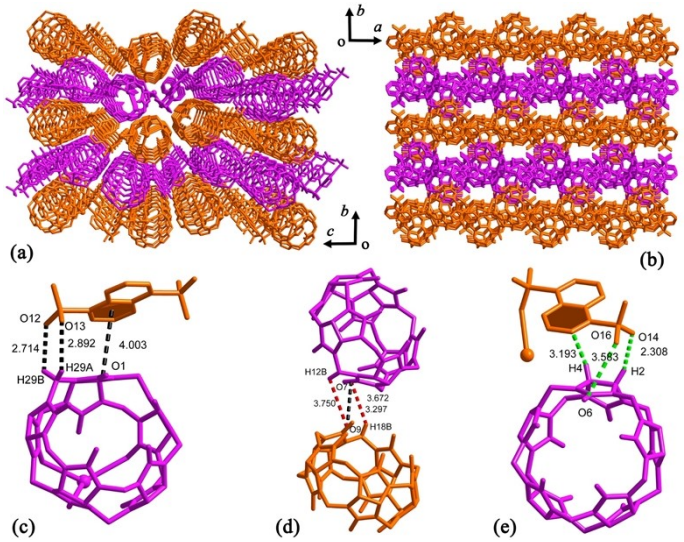


Fig.S3. The 3D supramolecular structure of assembly **3** along (a) *a*-axis; (b) and *c*-axis; (c) through the noncovalent interactions between Q[5]s (d) and those between Q[5] and NDS^{2-} (c, e).

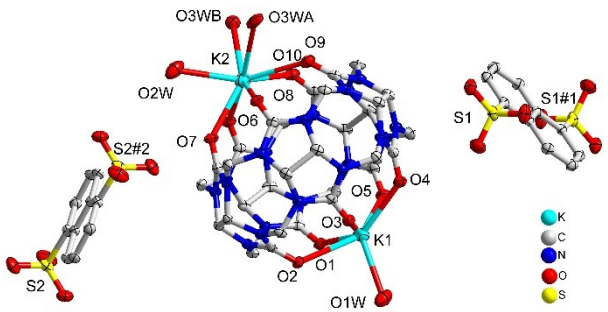


Fig. S4. The coordination environment of Na^+ in assembly **3** with displacement ellipsoids drawn at the 50% probability level. Hydrogen atoms was omitted for clarity.

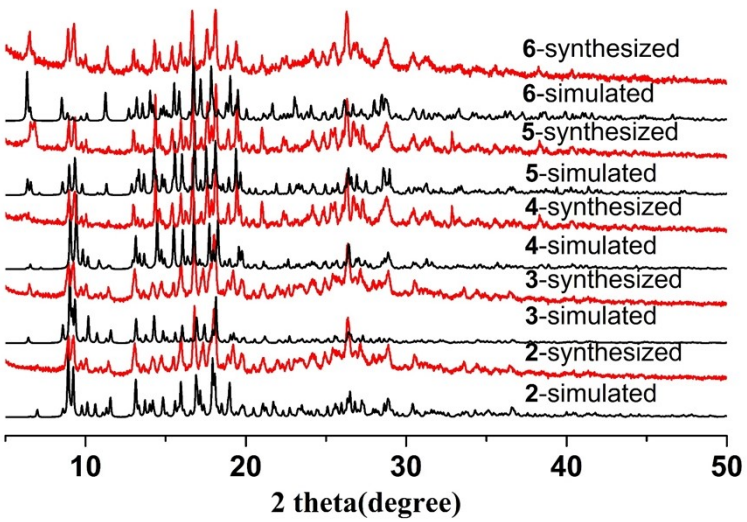


Fig. S5 PXRD patterns of **2**-**6**.

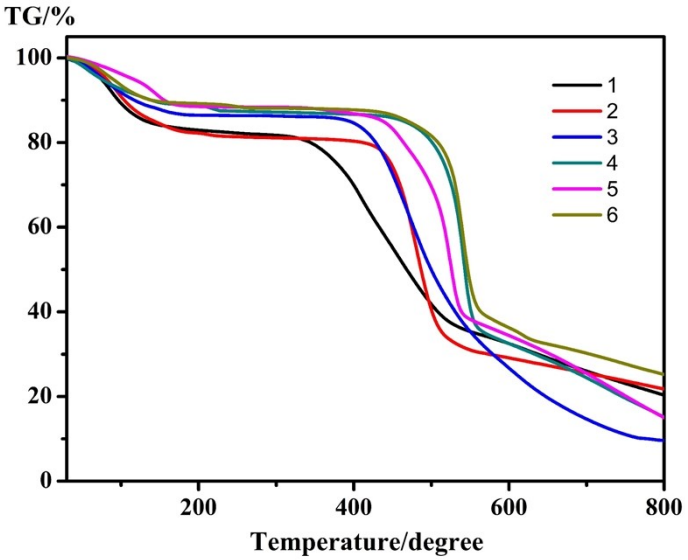


Fig. S6 TG curve of **2**-**6**.

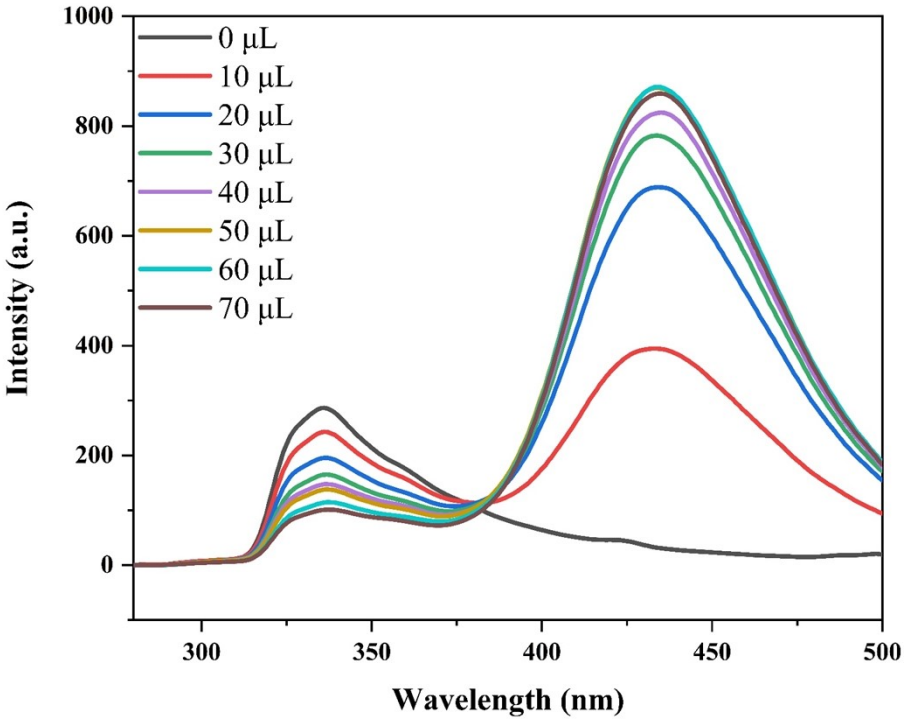


Fig. S7 Change in emission intensities of **2** with the gradual addition of NFX.

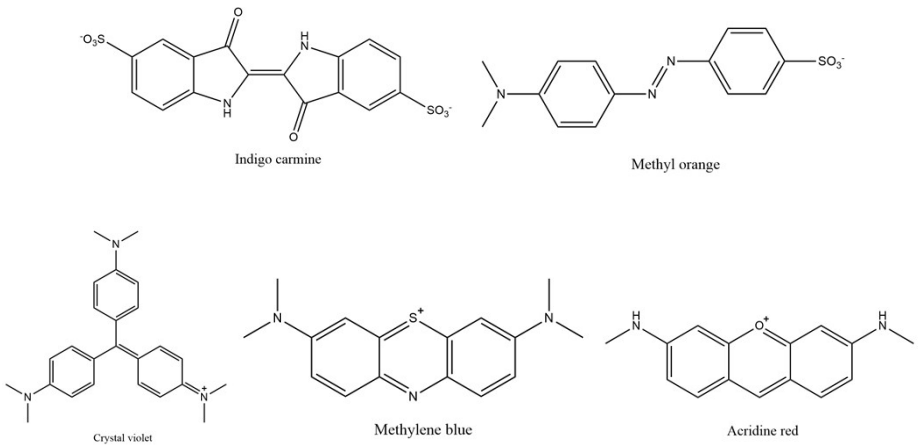


Fig.S8 The structure of the dyes used in this work.

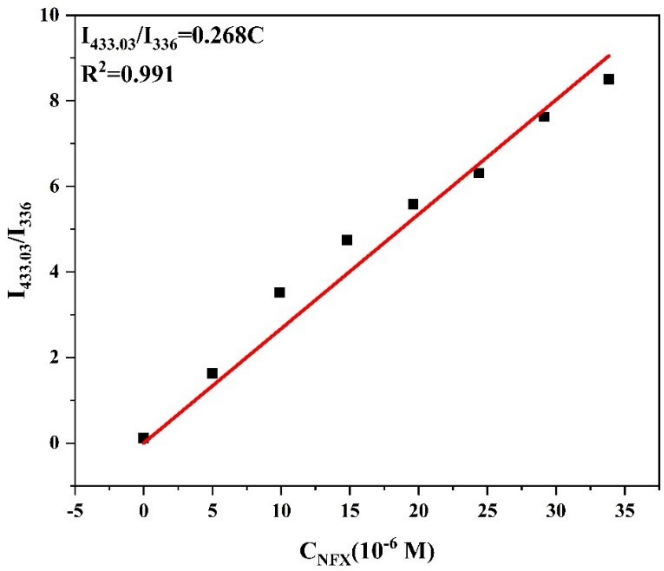
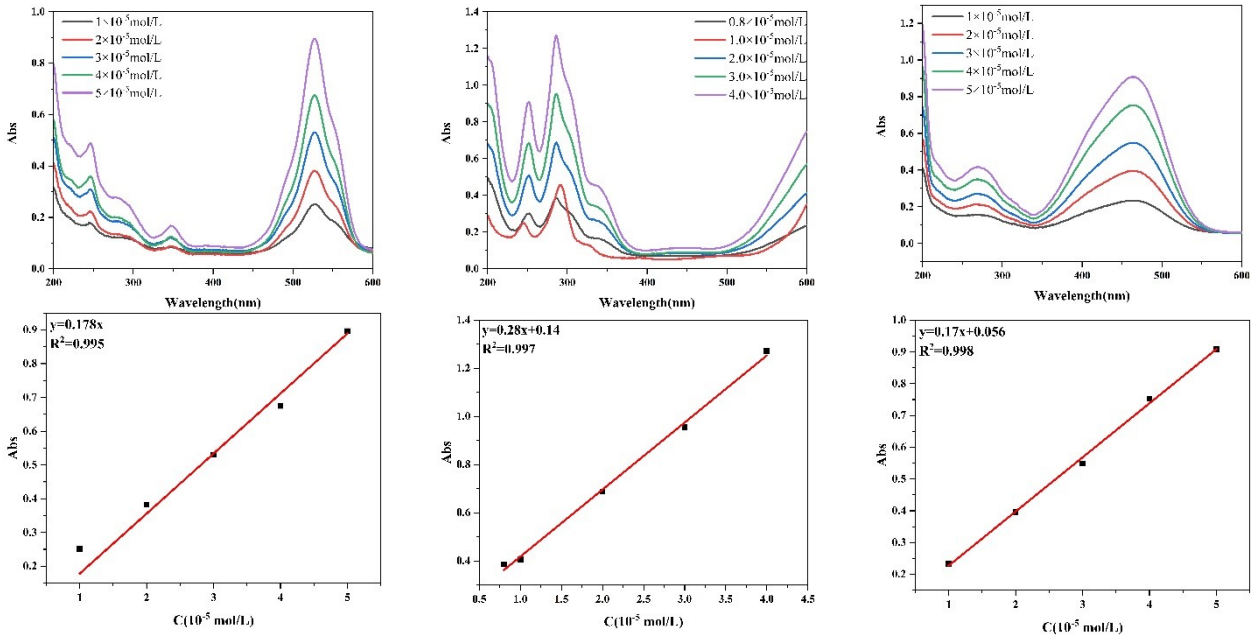
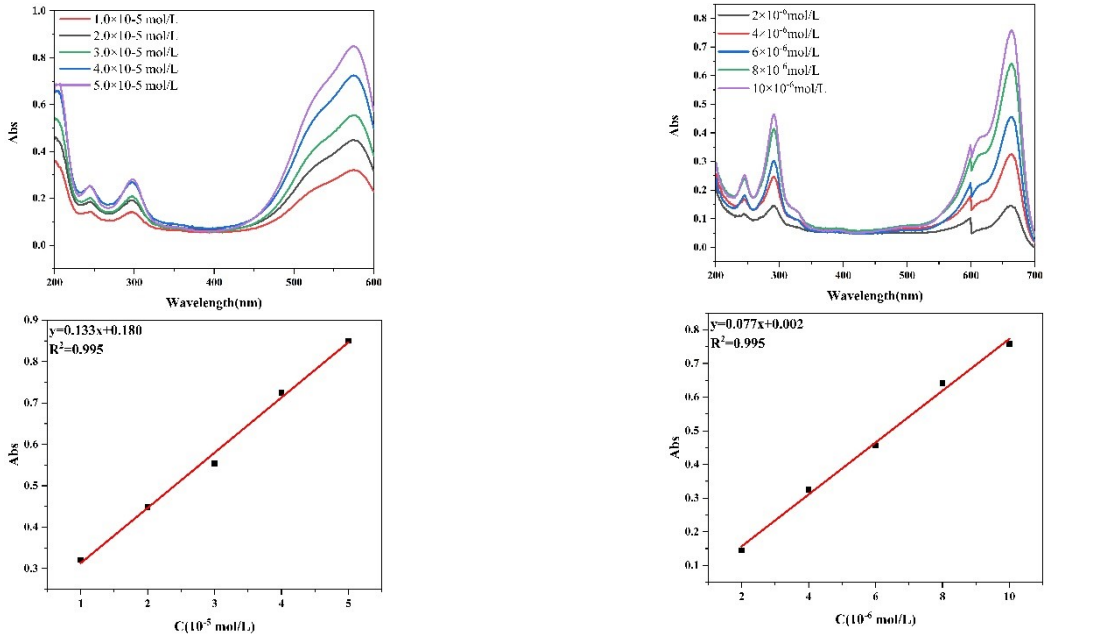


Fig. S9 Linear relationship between different concentrations of NFX and value of I_{433}/I_{336}..



acridine red (AR) indigo carmine (IC) crystal violet (CV)



methyl orange (MO) methylene blue (MB)

Fig S10. The standard curve of the five dyes including acridine red (AR), indigo carmine (IC), crystal violet (CV), methyl orange (MO) and methylene blue (MB).

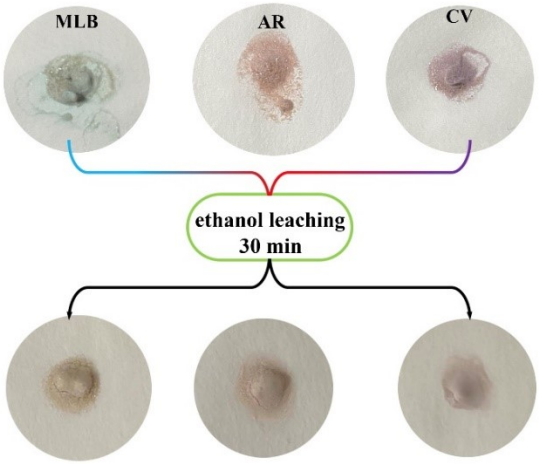


Fig S11. Compound **2** adsorbing cationic dye has been recycled and regenerate through ethanol leaching.