

Showcasing research from Vicente Martí Centelles and Ramón Martínez Máñez, IDM- Universitat Politècnica de València and CIBER-BBN, Spain.

Comparing organic and metallo-organic hydrazone molecular cages as potential carriers for doxorubicin delivery

Our work describes a rare comparative study between a metallo-organic cage and a fully organic analogous system, both obtained by hydrazone bond formation self-assembly. The organic cage shows better properties, including stability and affinity towards the anticancer drug doxorubicin. Additionally, the organic cage shows minimal cell toxicity, whilst the doxorubicin-cage complex shows *in vitro* anti-cancer activity. Our results show that the properties of the organic cage are suitable for the future challenges of *in vivo* drug delivery using molecular cages. Cancer cell image created with BioRender.com.



