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## Biocompatible Metal Organic Frameworks in Nanomedicine

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### Abstract

Metal Organic Frameworks (MOFs) are a recent class of tuneable porous hybrid solids based on metal sub-units connected to organic complexing molecules (carboxylates, phosphonates, azolates...) delimiting an ordered porous network. Their unprecedented structural and chemical diversity is of potential interest for many applications such as gas storage, separation or catalysis, among others.(1) Recently, some of us demonstrated their high potential in biomedicine for drug delivery, release of biologically active gases or imaging.(2) This led in most cases to very high drug loading capacities and a prolonged release using a wide range of active drugs with different polarities and sizes.(3) We will report here the recent progresses in this field from the synthesis, degradability, toxicity and biodistribution of nanoparticles of biocompatible MOFs,(4) to their encapsulation, release and in vitro or in vivo properties.(5-10)

### References

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