Bioaccumulation of polystyrene nanoplastics and their effect on the toxicity of Au ions in zebrafish embryos

This illustration depicts how polystyrene nanoplastics can accumulate in zebrafish embryos in a size-dependent manner. Nanoplastics smaller than the size of the chorion pore canals can penetrate the chorion and are distributed in the whole body of zebrafish embryos, particularly the yolk. Furthermore, the accumulated nanoplastics produce adverse effects on developing zebrafish by elevating the toxicity of other substances such as metal ions (e.g., Au ions in this study). This study expands the understanding of the role of nanoplastics in co-existence of metal ions and their influences on live organisms.

See Jeong-Soo Lee, Jinyoung Jeong et al., Nanoscale, 2019, 11, 3173.