Supplementary Information (SI) for Nanoscale Advances. This journal is © The Royal Society of Chemistry 2025

Plasmon-Enhanced Photocatalytic Nanoreactors for Selective Inactivation of Murine Leukemia Virus (MLV)

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Electronic Supplementary Information

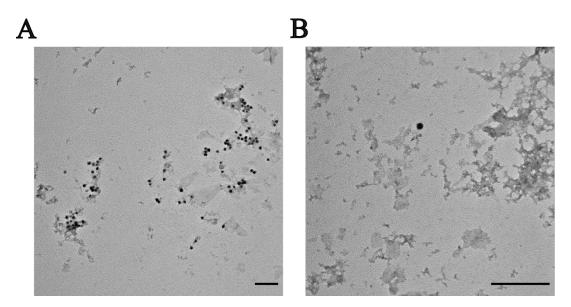


Figure S1: (A) TEM image of PNVs functionalized with ANXV bound to MLVs or membrane debris from the host cell. (B) TEM image of the same MLV sample treated with PNV that lack ANXV. The scale bars for A and B are 500 nm.

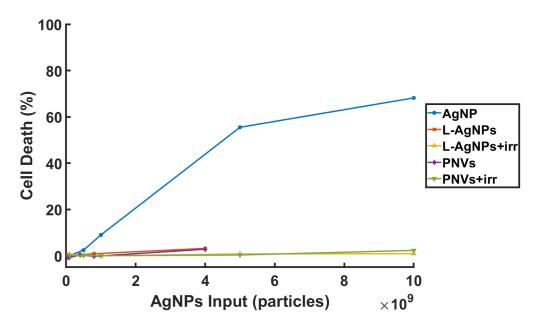


Figure S2: LDH measurements in Rat-2 cells for citrate capped AgNPs, as well as L-NPs and PNVs with and without 470 nm illumination (65 mW/cm², 30 min). The procedure followed here is identical to the one described in the section **Nanoparticle-mediated Viral Inactivation and Infection Assays** in the Methods part of the main text but without the input of MLVs.

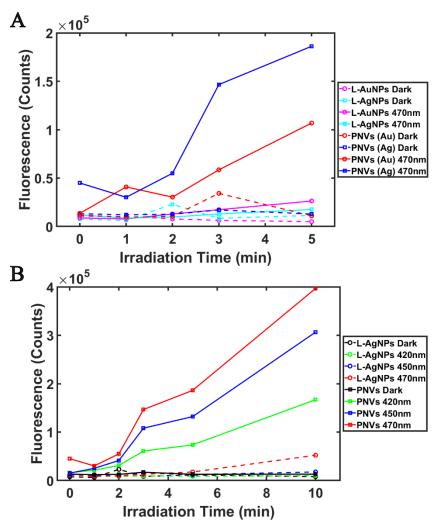


Figure S3. (A) Fluorescence DHR123 assay of ROS generation by lipid coated NPs and PNVs with Au or Ag core under specified conditions. (B) Fluorescence DHR123 assay of ROS generation by lipid coated AgNPs and PNVs for illumination at different wavelengths: 420, 450, 470 nm. All samples were illuminated using a 470 nm LED with 15 mW/cm².