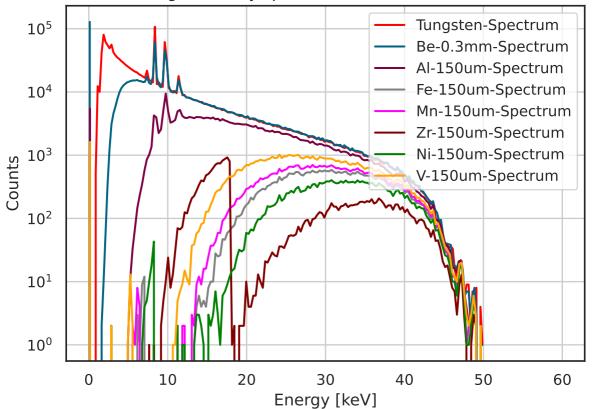
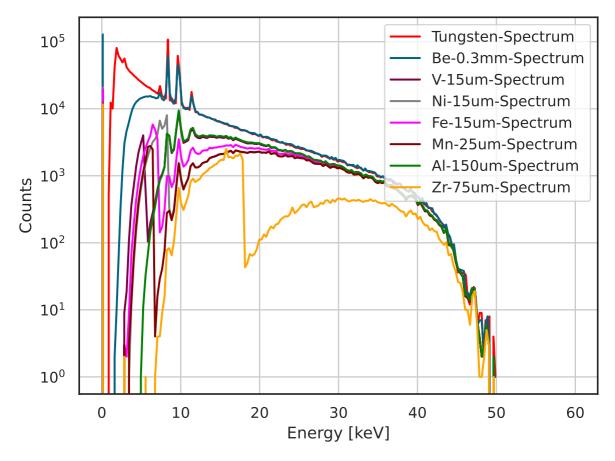
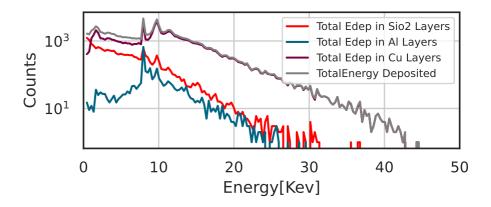


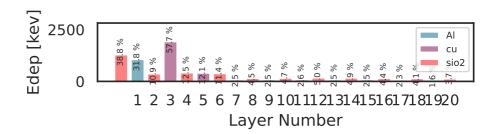
Tungsten x-ray spectrum After Different Filters



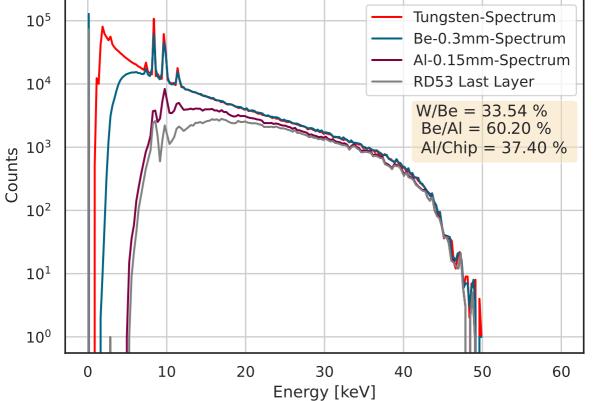


Attenuation of photons through metal layer stack 1.0 4 Kev 6 Kev 10 Kev 30 Kev 0.8 50 Kev Transmission I/I₀ 0.6 0.4 0.2 Layer stack

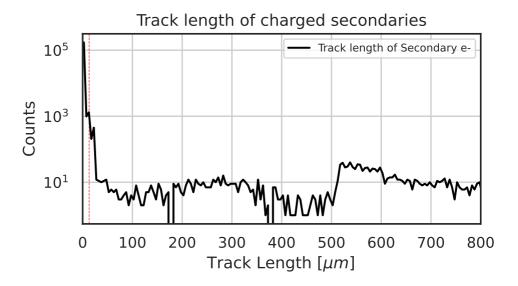


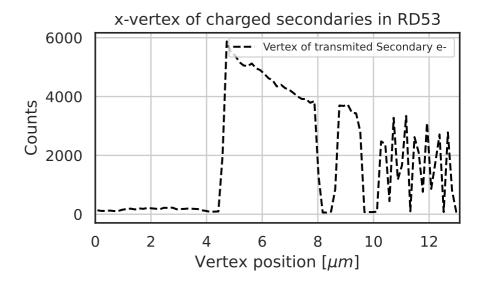


Tungsten x-ray spectrum in the back of the last metal layer stack of RD 10⁵ Tungsten-Spectrum Be-0.3mm-Spectrum Al-0.15mm-Spectrum 10^{4} RD53 Last Layer W/Be = 33.54 %Be/Al = 60.20 %10³ Al/Chip = 37.40 % 10^{2}

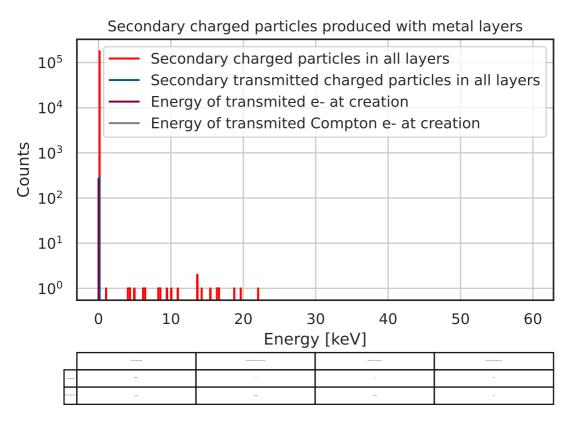


Tungsten x-ray spectrum in the back of the last metal layer stack of RD 10^{5} Without metal layers With metal layers 10^{4} 10³ Counts 10² 10^{1} 10⁰ 10 20 30 40 50 60 Energy [keV]

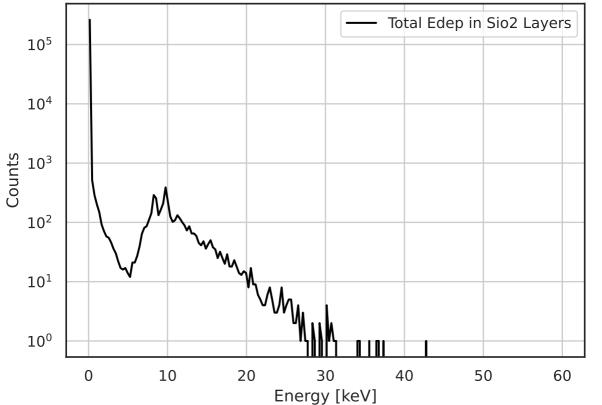


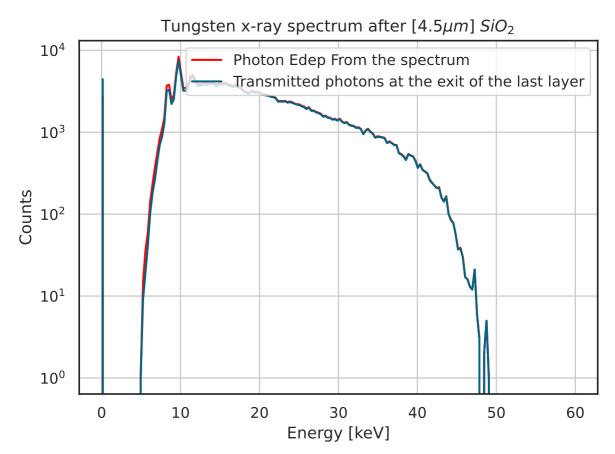




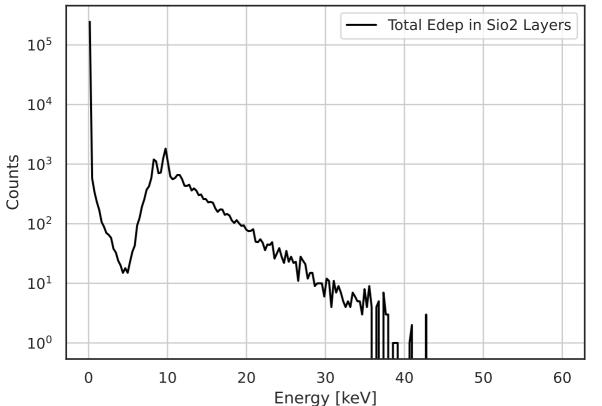


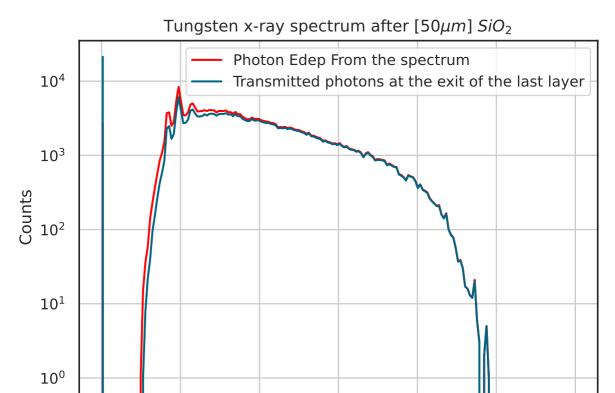
Energy deposition in all the silicon layers [4.5 μm] of RD53 Metal Stack





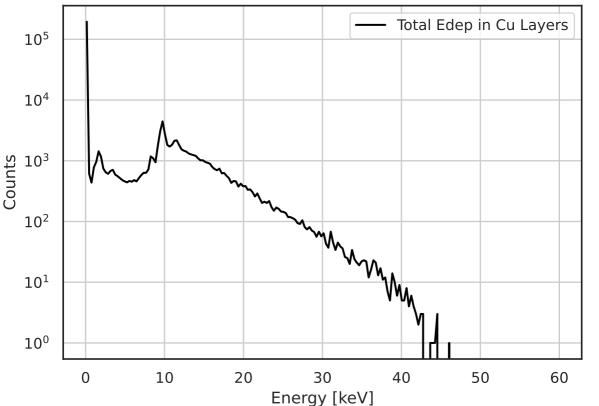
Energy deposition in all the silicon layers [$50\mu m$] of RD53 Metal Stack

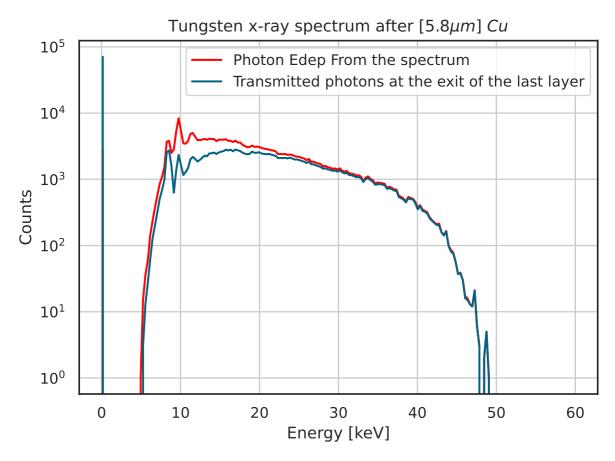


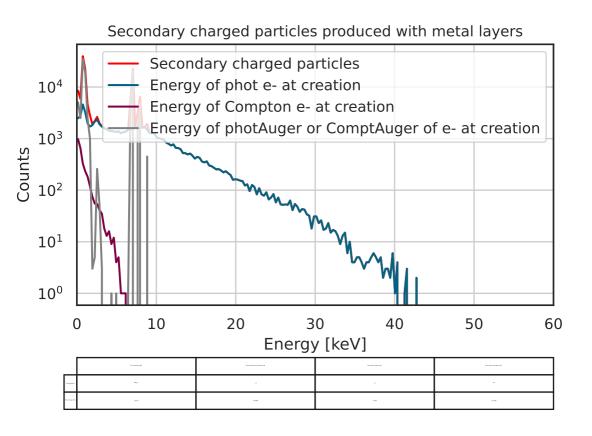


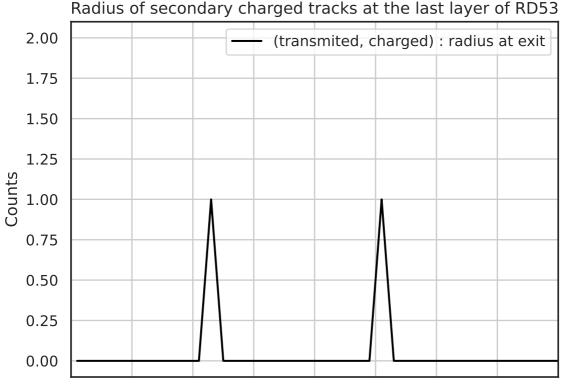
Energy [keV]

Energy deposition in all the Copper layers [5.8 μm] of RD53 Metal Stac









0.0000 0.0025 0.0050 0.0075 0.0100 0.0125 0.0150 0.0175 0.0200 Radius[mm]

