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Auger Photo Electron Spectroscopy (APECS) measurement of the low energy tail (LET) of Cu MVV and Ag NVV Auger peak down to 0 eV¹ K. SHASTRY, A.H. WEISS, Univ of Texas at Arlington, R.A. BARTYNSKI, Rutgers University, S.L. HULBERT, Brookhaven National Labs, RUTGERS UNI-VERSITY COLLABORATION, BROOKHAVEN NATIONAL LABS COLLABO-RATION — The low energy Auger peak sit on large background due to secondary electrons that arise from loss processes unrelated to the Auger process. Auger photoelectron coincidence spectroscopy (APECS) technique was used to probe the surfaces of Cu (100) and Ag (100) to suppress background unrelated to the auger process and obtain the energy distribution of the electrons emitted as a result of the MVV transition in Cu and NVV transition in Ag over the full range of emitted energies (0eV-81eV). The measurements reveal a well formed auger peak at 40 eV and 60 eV for Cu and Ag respectively accompanied by a significant back ground in the low energy region of the spectrum. The origins of the low energy tail (LET) are discussed in terms of extrinsic mechanisms in which the electrons from the peak lose energy as they propagate to the sample surface, as well as intrinsic mechanisms in which multi- electron auger processes distribute the energy gained by filling of the core hole to multiple electrons.

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