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Gradual thickness change of CuPc on MoOx on Oxygen Plasma Treated ITO[1] CHENGGONG WANG, IRFAN IRFAN, YONGLI GAO[2], Department of Physics and Astronomy, University of Rochester — The thickness dependence of copper phthalocyanine (CuPc) interlayer on molybdenum trioxide (MoO_3) and conducting indium tin oxide (ITO) has been investigated with ultraviolet photoemission spectroscopy (UPS). We also investigated the air exposure effect on the CuPc/MoO_3/ITO interlayers. It was found that the MoO_3 interlayer substantially increased the substrate work function (WF). With the deposition of CuPc the WF decreased and saturated at the thickness of 80 Å. We also found that $3x10^6$ Langmuir (L) air exposure decreased both the MoO_3 WF and the interface dipole between CuPc/MoO_3 interface.

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