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ARTICLE

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AC IMPEDANCE SPECTROSCOPY ANALYSIS OF P-Si/$La_{0.7}Sr_{0.3}MnO_3$(LSMO)/CuPc/Au(A) AND P-Si/ $La_{0.7}Sr_{0.3}MnO_3$(LSMO)/P3HT/CuPc/Au(B) HYBRID INORGANIC-ORGANIC HETEROSTRUCTURE UNDER AMBIENT CONDITIONS

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Detail AC impedance spectroscopy fitting analysis of p-Si/LSMO/CuPc/Au(A) and p-Si/LSMO/P3HT/CuPc/Au(B) Hybrid Inorganic-Organic heterostructure in ambient conditions has been performed. The real and imaginary part of impedance i.e. Z' and -Z" vs frequency (f) plots for A and B are nearly same in nature. Non-Debye type of relaxation is dominant in both devices. Relaxation peak for B is observed to shift towards lower frequency range than A. Both the devices are fitted well with double circle R(PCR)(PCR) model.