

Understanding the poor fill factor of solution-processed squaraine based solar cells in terms of charge carrier dynamics probed by impedance and transient spectroscopy

Anitha B, Vijith K. P, Akhil Alexander, Varun Srivastava, Manoj A.G. Namboothiry*

School of Physics, Indian Institute of Science Education and Research Thiruvananthapuram (IISER-TVM), Near Jersey Farm, Maruthamala P.O, Vithura, Thiruvananthapuram - 695 551, Kerala, India

*Corresponding author E-mail: manoj@iisertvm.ac.in

Supplementary material

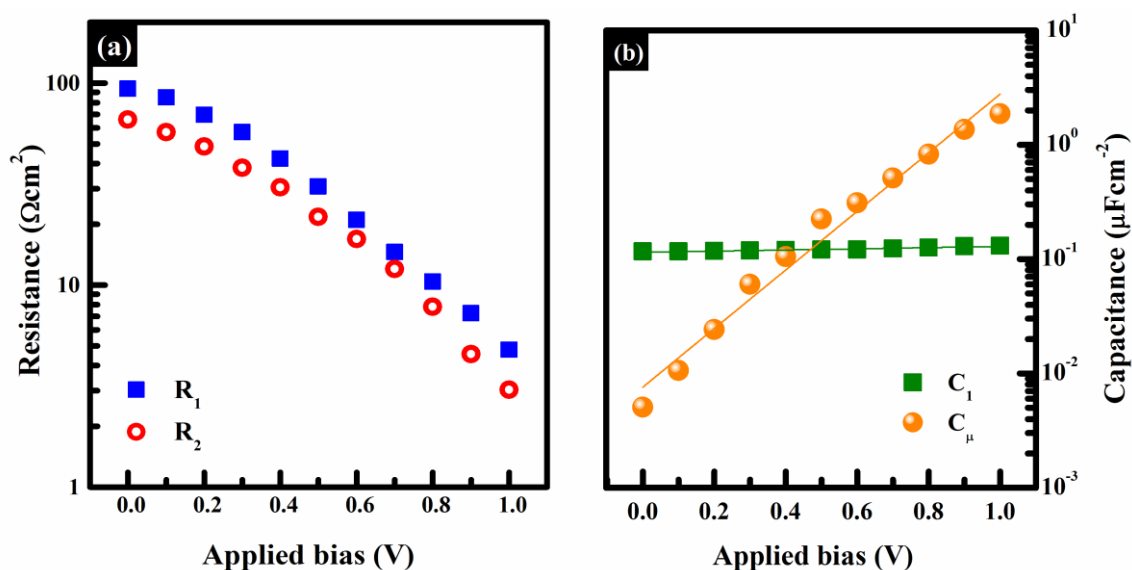


Fig. S1 Variation of (a) R_1 and R_2 , and (b) C_1 and C_μ as a function of applied bias for SQ:PCBM device

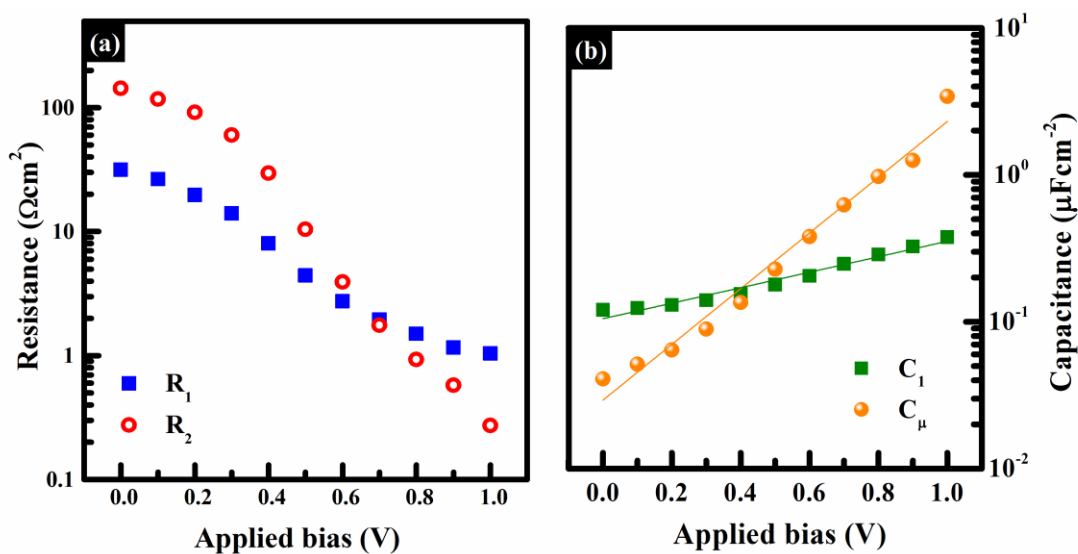


Fig. S2 Variation of (a) R_1 and R_2 , and (b) C_1 and C_μ as a function of applied bias for PTB7:PCBM device

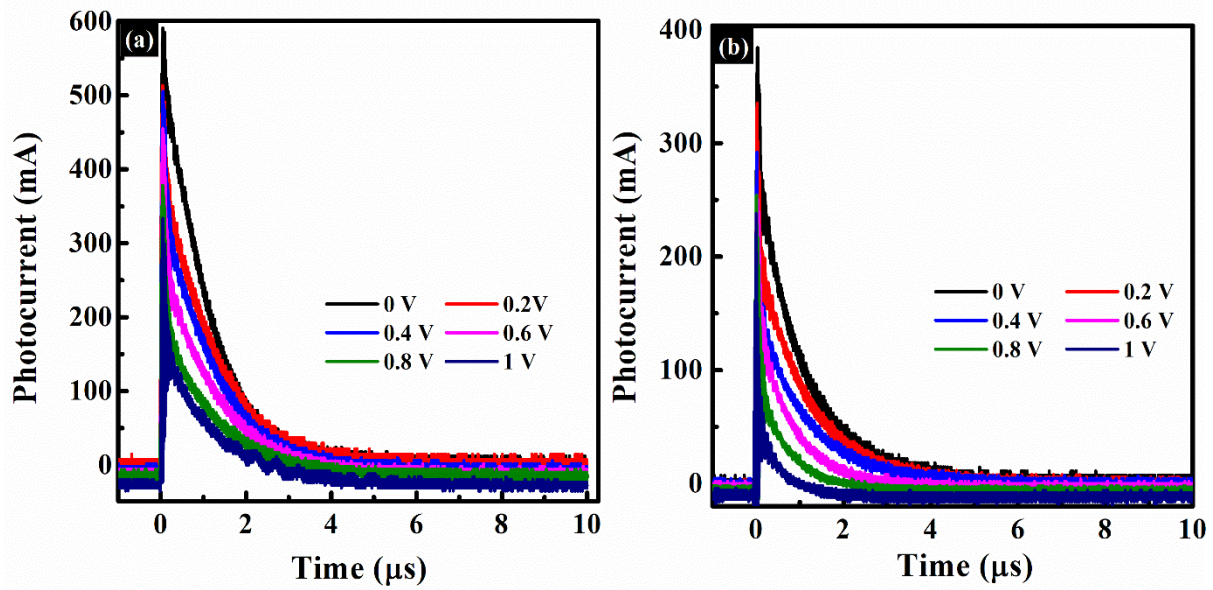


Fig. S3 Photocurrent transients at different bias voltages for (a) PTB7:PCBM and (b) SQ:PCBM devices