

Abstract Submitted  
for the MAR10 Meeting of  
The American Physical Society

**Large Single Grain Thin Film by Hollow Capillary Method** SONGTAO WO, RANDALL HEADRICK, University of Vermont, JOHN ANTHONY, University of Kentucky — Using 6,13-bis(triisopropyl-silylethynyl) pentacene (TIPS-Pentacene), we have made solution processed thin film transistor by hollow capillary method. The grain size is 1mm wide and more than 10mm long along with the writing direction routinely, which cover the channels of entire device. Thickness of the highly uniform and continuous film can be varied from 10nm to 100nm by tuning the concentration and speed of substrate. We also show the Evidence of two preferred growth orientation along with the writing direction. The field effect mobility shows highly orientation-dependence.

Songtao Wo  
university of vermont

Date submitted: 22 Nov 2009

Electronic form version 1.4