

## Supporting Information

### Polycyclic Anthanthrene Small Molecules: Semiconductors for Organic Field-Effect Transistors and Solar Cells Applications

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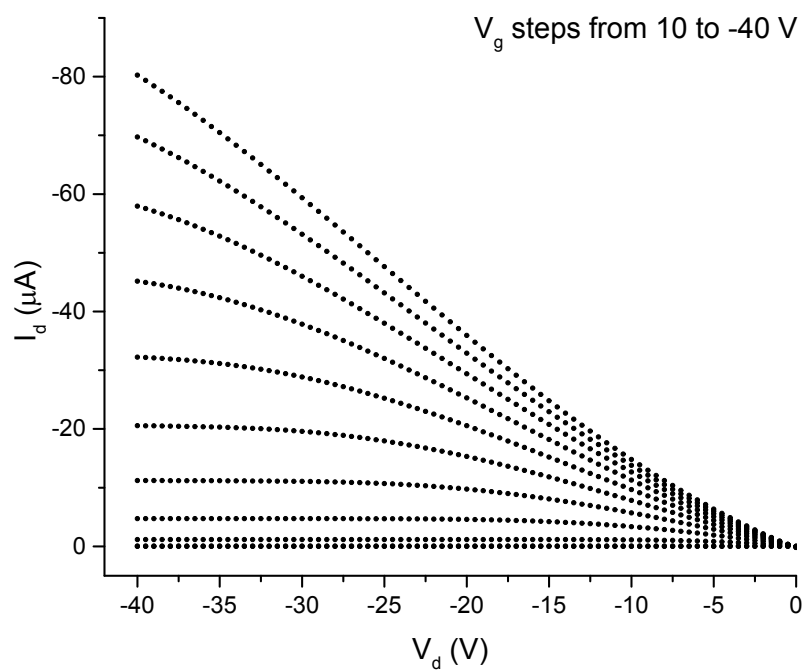
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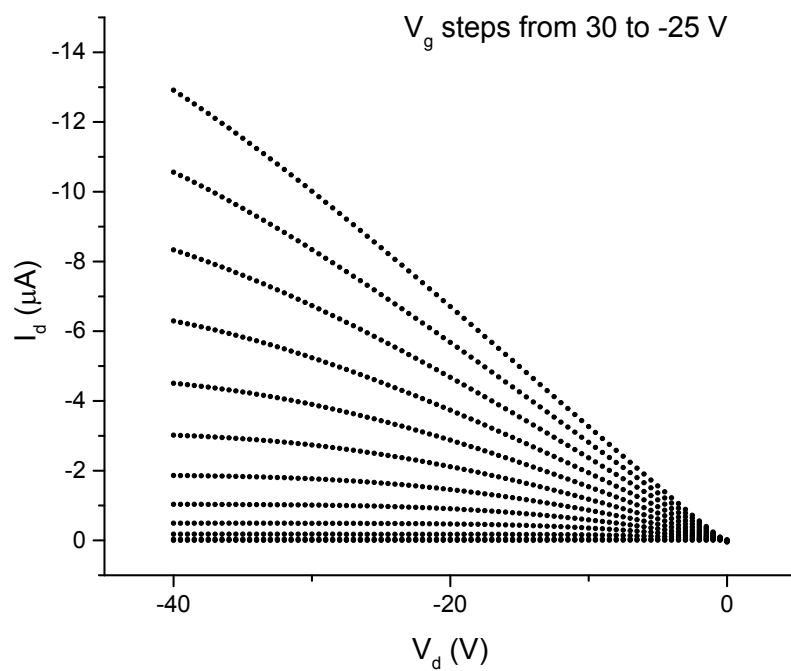
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### Table of Contents

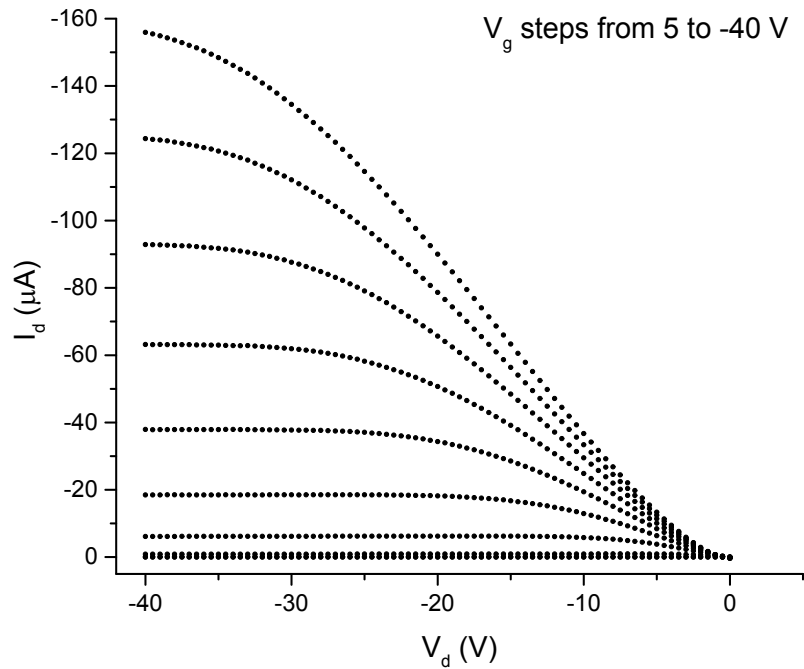
|                                                                                                                                                       |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| <b>Fig. S1.</b> Output characteristics for compound <b>1</b> after cyclohexane solvent annealing .....                                                | 2 |
| <b>Fig. S2.</b> Output characteristics for compound <b>2</b> after toluene solvent annealing .....                                                    | 2 |
| <b>Fig. S3.</b> Output characteristics for compound <b>3</b> after toluene solvent annealing .....                                                    | 3 |
| <b>Fig. S4.</b> UV-vis film absorption of compound <b>3</b> at different ratio of PC <sub>61</sub> BM with different annealing conditions .....       | 3 |
| <b>Fig. S5.</b> EQE for compound <b>2</b> :PC <sub>61</sub> BM at a ratio of 1:0.7 before and after thermal annealing .....                           | 4 |
| <b>Fig. S6.</b> EQE for <b>1</b> :PC <sub>61</sub> BM at different D/A before (solid lines) and after (dashed lines) thermal annealing at 80 °C ..... | 4 |
| <b>Fig. S7.</b> Thin film absorption of compound <b>2</b> and with PC <sub>61</sub> BM at a 1:0.7 ratio with different treatment .....                | 5 |



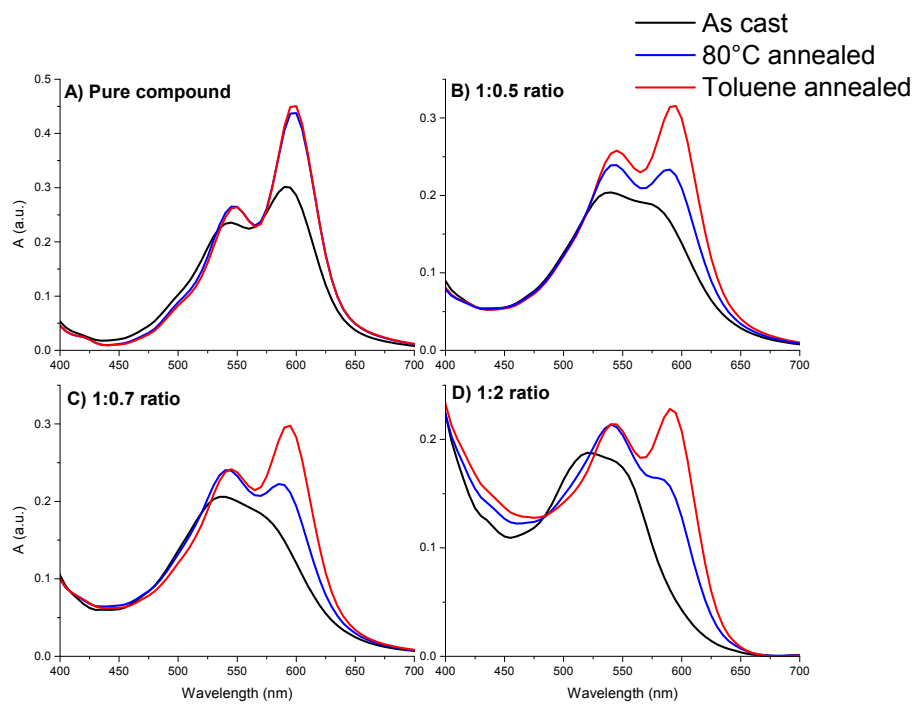
**Fig. S1.** Output characteristics for compound 1 after cyclohexane solvent annealing



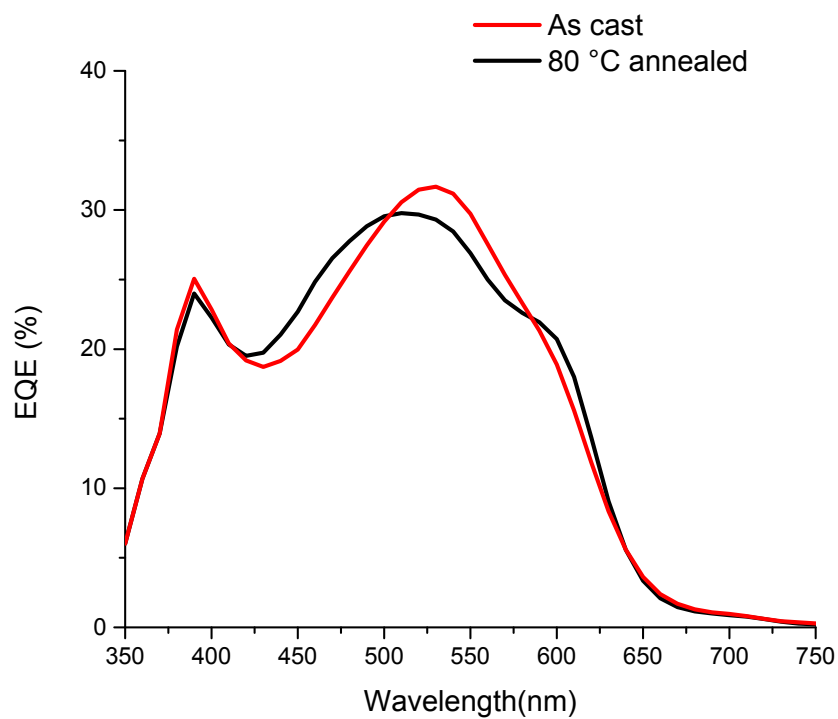
**Fig. S2.** Output characteristics for compound 2 after toluene solvent annealing



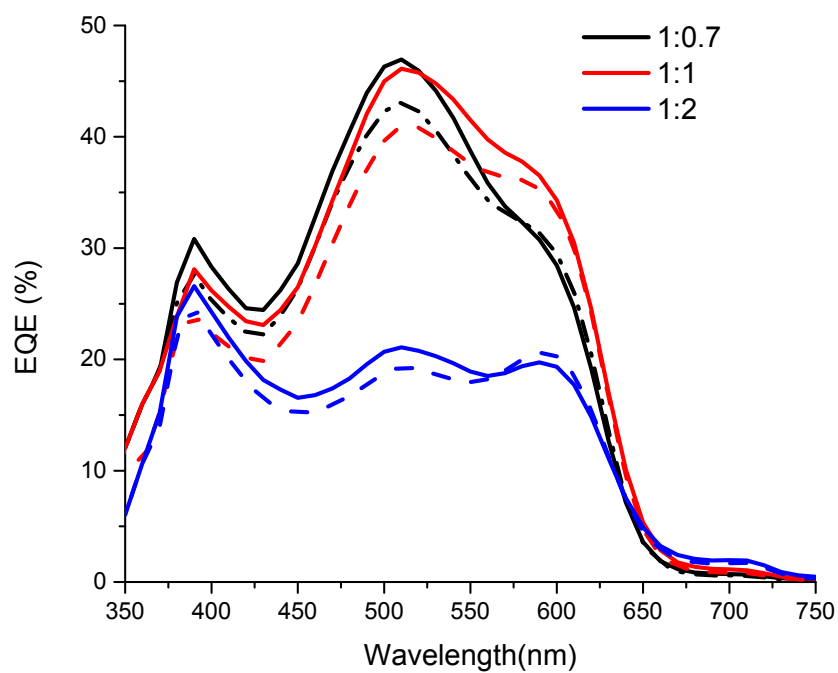
**Fig. S3.** Output characteristics for compound **3** after toluene solvent annealing



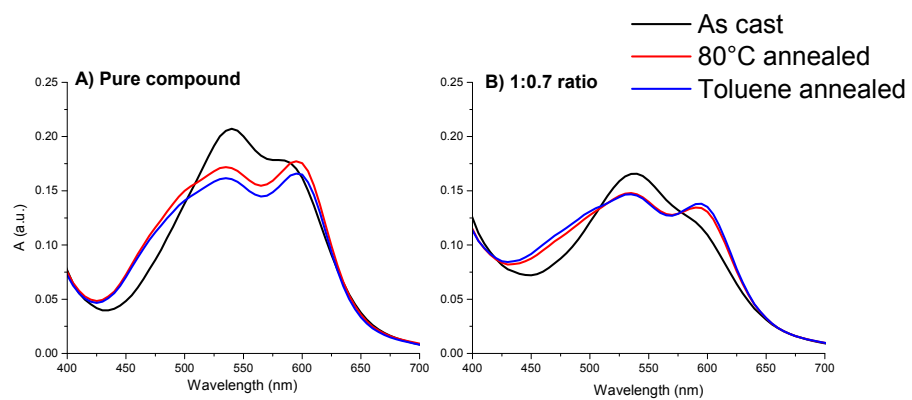
**Fig. S4.** UV-vis film absorption of compound **3** at different ratio of PC<sub>61</sub>BM with different annealing conditions



**Fig. S5.** EQE for compound **2**:PC<sub>61</sub>BM at a ratio of 1:0.7 before and after thermal annealing



**Fig. S6.** EQE for **1**:PC<sub>61</sub>BM at different D/A before (solid lines) and after (dashed lines) thermal annealing at 80 °C



**Fig. S7.** Thin film absorption of compound **2** and with PC<sub>61</sub>BM at a 1:0.7 ratio with different treatment