

CdSe (quantum dots)-Graphene Oxide system for thiophene polymerization: A new strategy, a new material

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Supporting Information

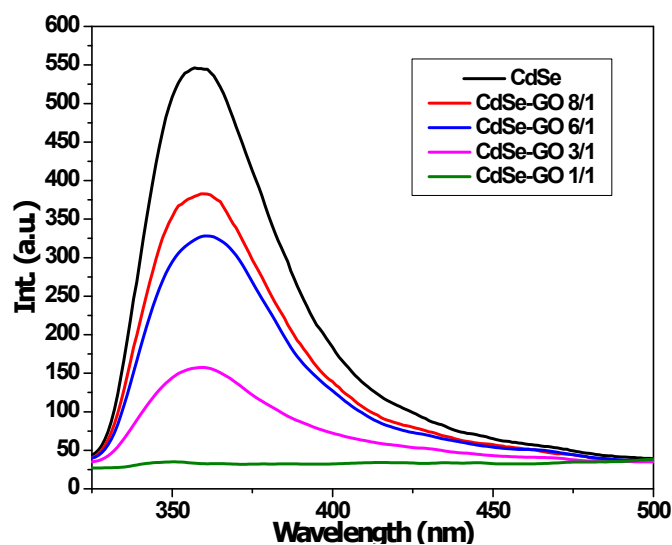
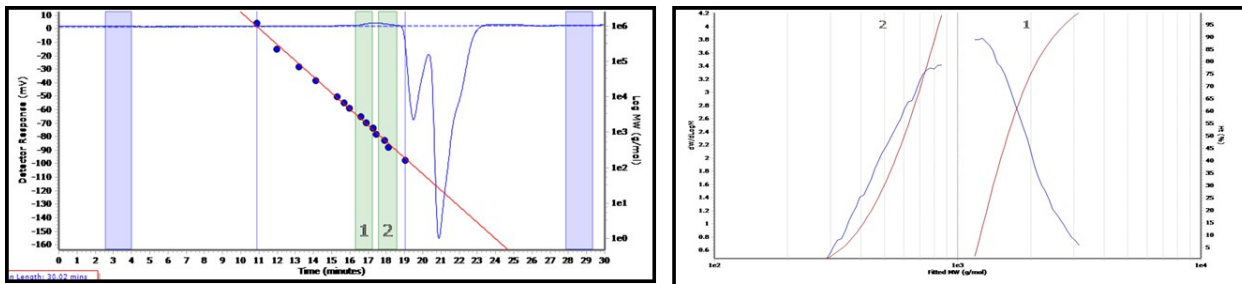


Fig. S1: Fluorescence emission modification depending on the CdSe/GO ratio



| Peak | Mn | Mw | D |
|--------|------|------|-------|
| Peak 1 | 1629 | 1738 | 1.067 |
| Peak 2 | 552 | 598 | 1.083 |

Fig. S2: GPC analysis of the species sample obtained after 100 min reaction time

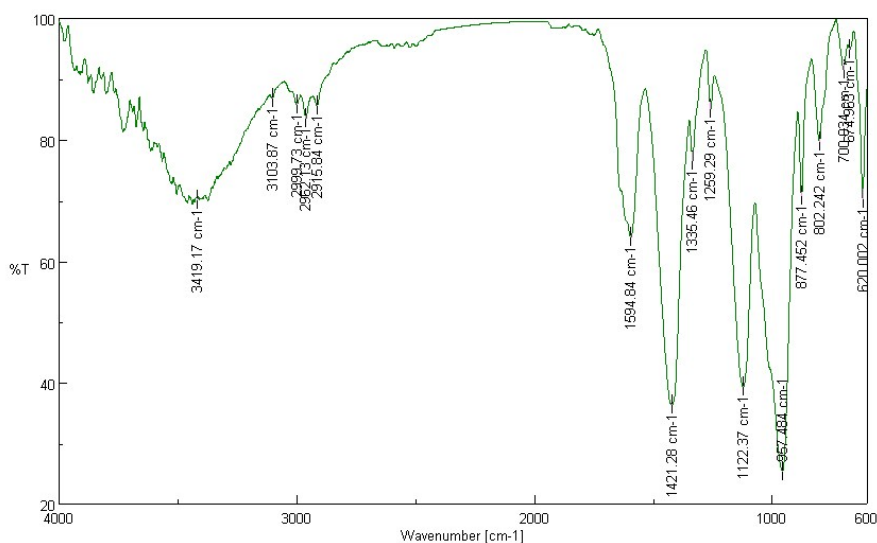


Fig. S3: FTIR analysis for polythiophen in the presence of GO

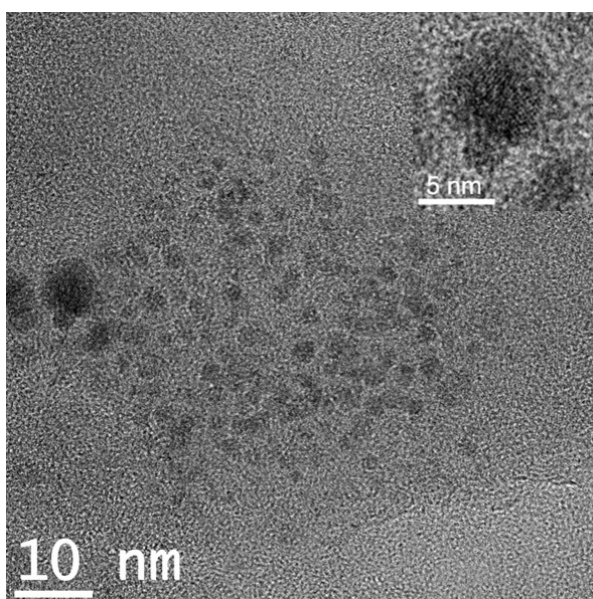


Fig. S4 HRTEM image of very small crystalline CdSe nanoparticles embedded in the amorphous polythiophene. Their average size is approximately 2 nm. Only the larger ones (inset) show atomic resolution. For the smaller ones the contrast is disturbed by the too thick

amorphous layers (polythiophene plus C-grid bar). At the bottom right corner of the figure the edge of the polythiophene layer is visible.

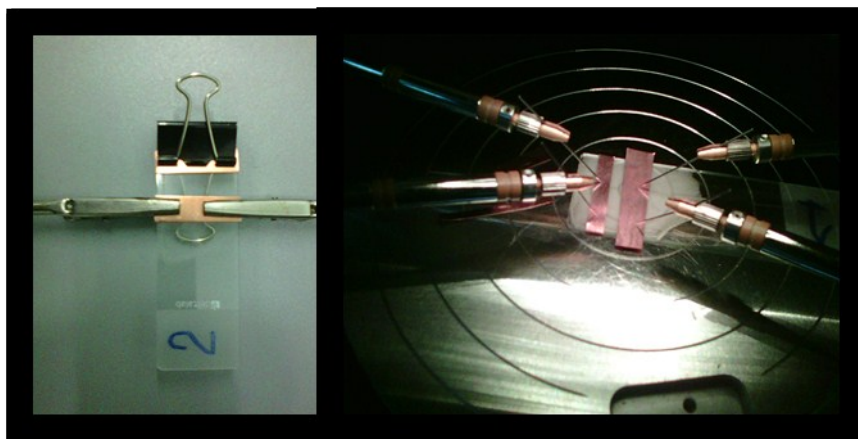


Fig. S5: Experimental setup for I-V curve generation

Electrodes prepared from soft and flexible copper foil were pressed and tightly clamped in a parallel configuration onto the glass slide supporting the films. Different types of foil and clamping systems have been tried so as to provide the best electrical contact.