Supplementary Information for

The Selective Transfer of Patterned Graphene:

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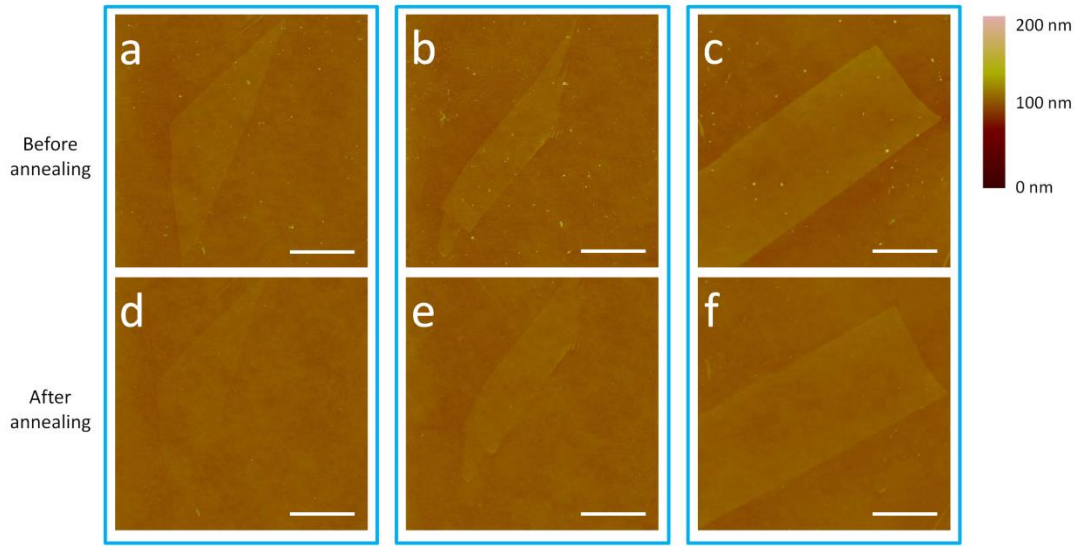

Figure S1| AFM images of few-layer grapheme flakes transferred to flat SiO_2/Si wafers using the selective transfer technique (a-c) before and (d-f) after annealing. The scale bar is 10 μm.

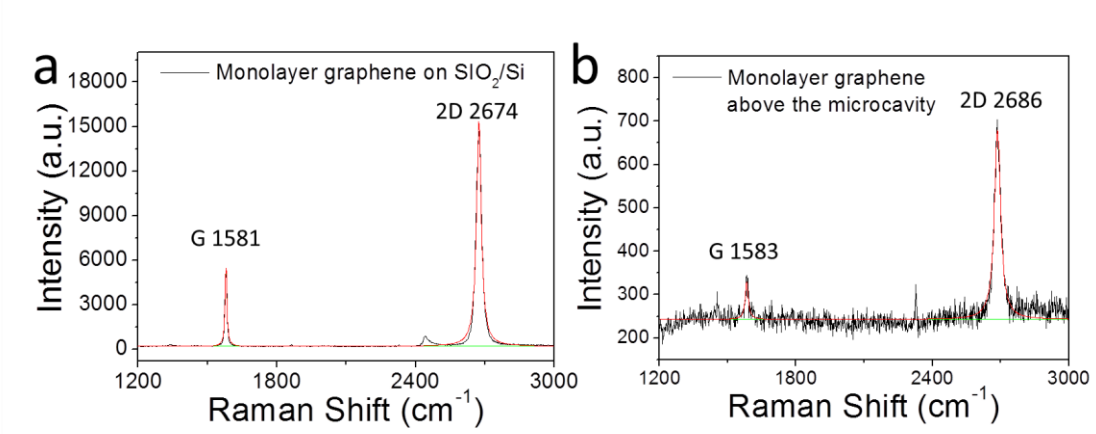

Figure S2| The Raman spectra of the monolayer graphene transferred selectively to a chosen microcavity. **a,** Graphene surrounded the microcavity and **b,** graphene above the microcavity.

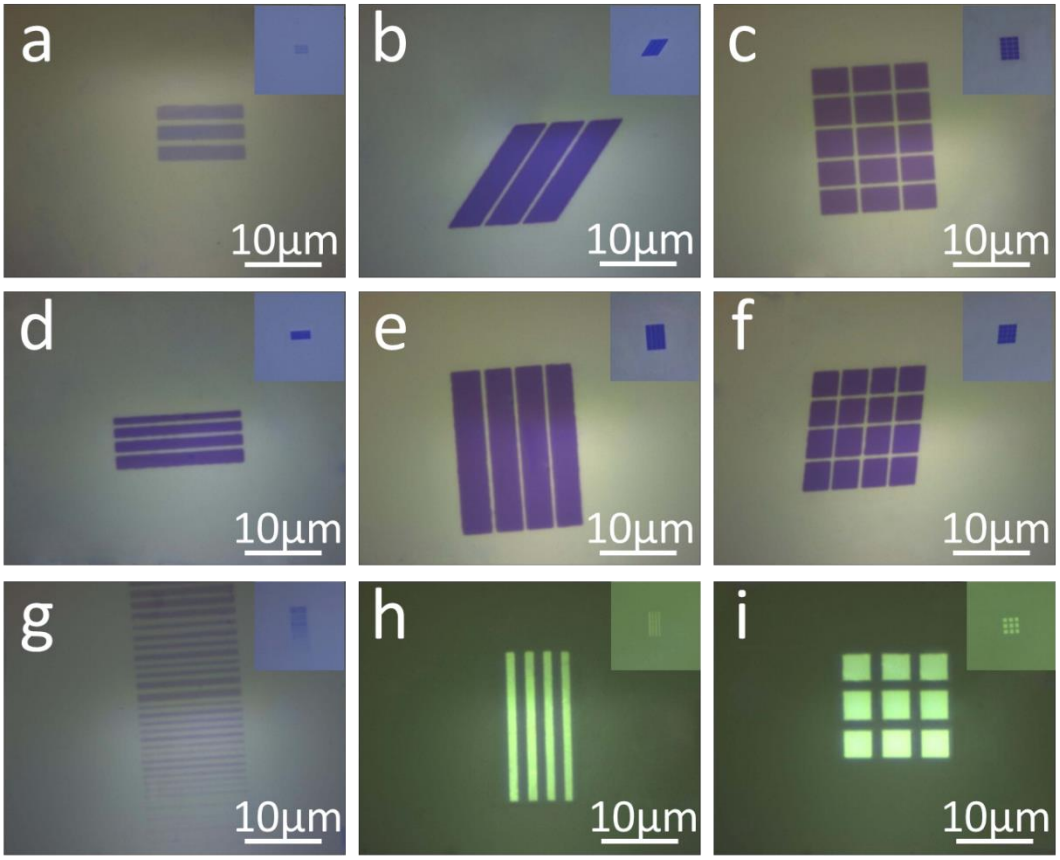

Figure S3| Optical images of different graphene patterns with different thickness transferred to (a-g) Si/SiO_2 wafers, (h) quartz, and (i) PET film.

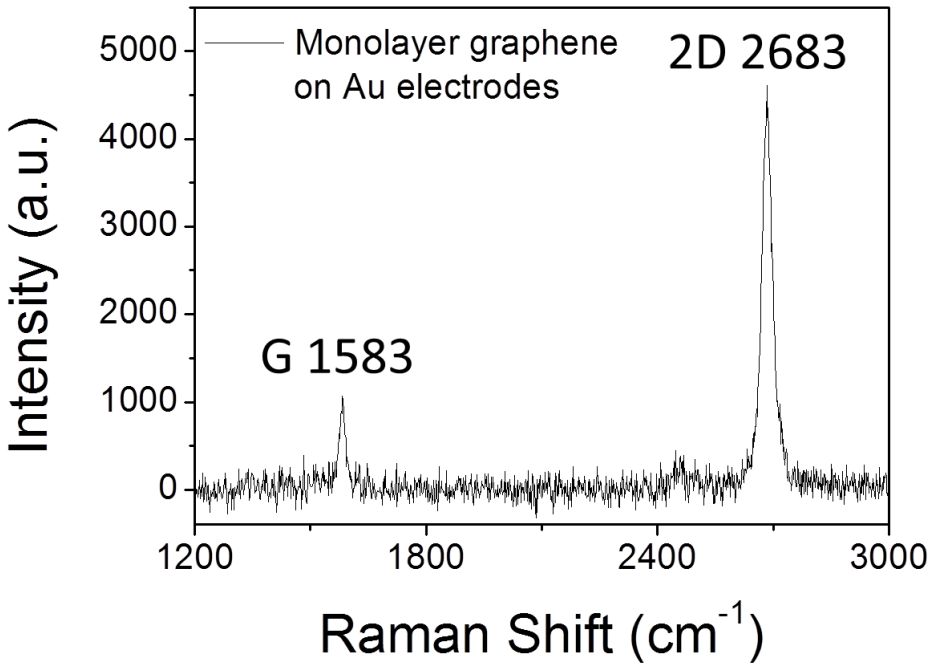

Figure S4| The Raman spectrum of the monolayer graphene on Au electrodes. The graphene was transferred onto Au electrodes using the selective transfer technique to fabricate MG-based FET.

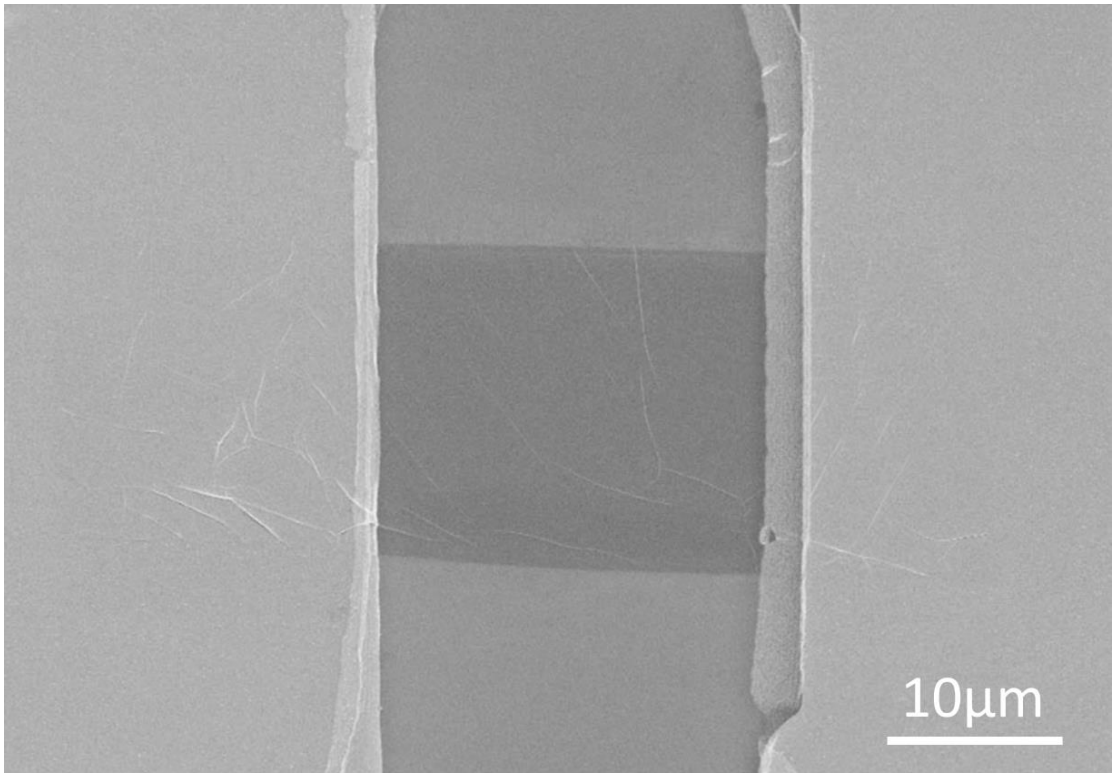

Figure S5| SEM image of the graphene FET fabricated by depositing Au electrodes on graphene. The graphene was contaminated during the fabrication process.

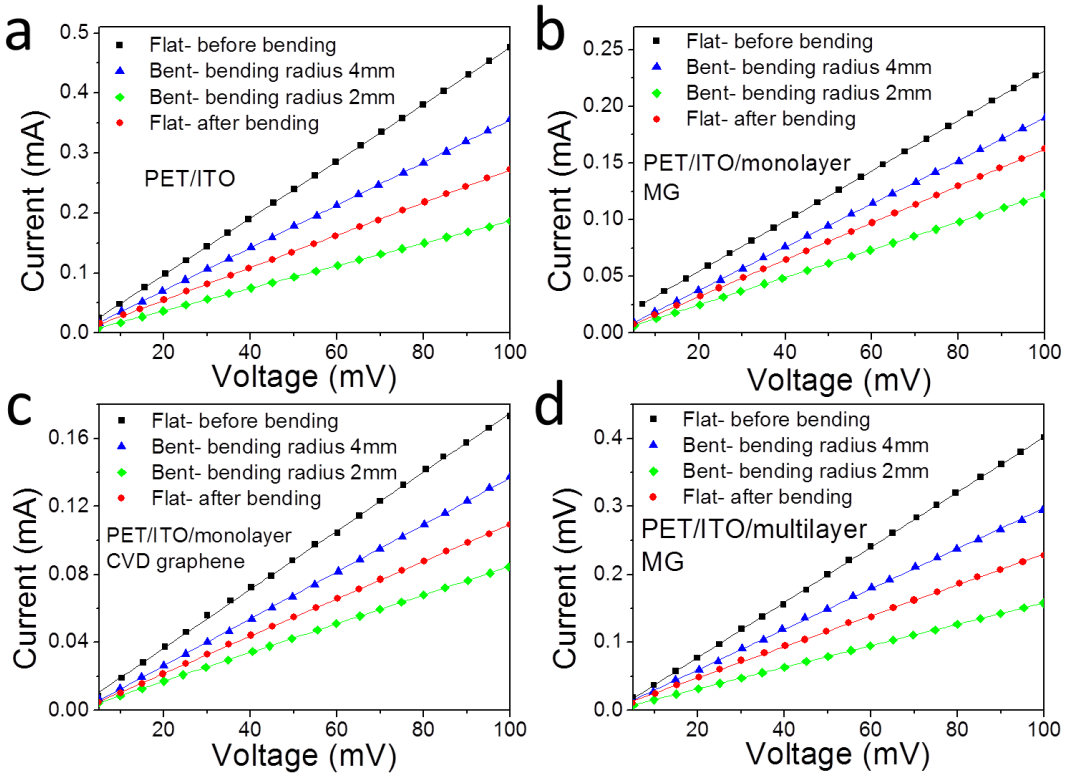

Figure S6| The current as a function of the voltage for the four devices measured during the bending tests.