Supplementary Information File

Electronic structure and ultrafast charge transfer dynamics of phosphorous doped graphene layers on copper substrate: A combined spectroscopic study

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This Supporting Information is composed by one section:

1. Equation for quantification of the phosphorous element in GP/Cu graphene.
2. Supporting Figures (Figure SI1).

Figure Captions

Figure SI1. High resolution P2p XPS spectrum of GP/Cu (right) graphene layer. The two features used in the fitting procedure are also shown.

Equation for quantification of the phosphorous element amount in GP/Cu graphene.

The amount of P in the graphene film is determined from high resolution P 2p show in Figure SI1 and using the following equation.

$$X_i = 100(A_i)/(\sum_{j}^{m} A_j)$$

The A_i represents the peak intensity in this case corresponding to P 2p XPS spectrum.

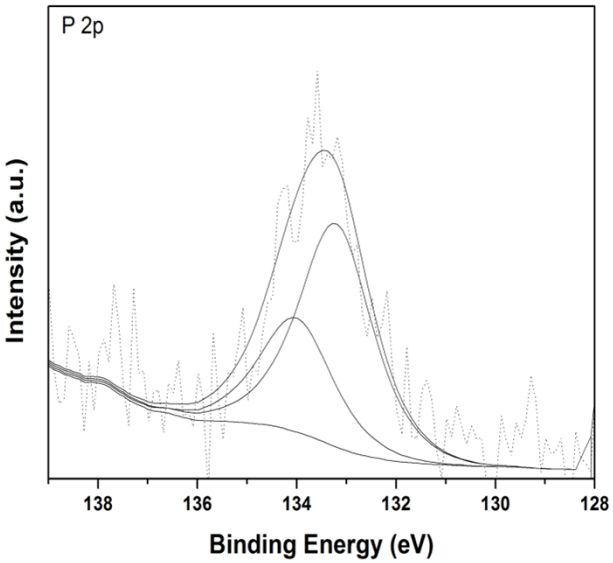

Figure SI1. High resolution P2p XPS spectrum of GP/Cu (right) graphene layer. The two features used in the fitting procedure are also shown.