

## MAGNETO- AND SPIN-TRANSPORT IN GRAPHENE DEVICES

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The response in magneto- and spin-transport of single graphene layers embedded into standard lateral field-effect-device layout to different external influences, such as substrate-interactions, electrode-graphene interactions, and structuring of the graphene layers is discussed on a few examples. It will be demonstrated that each of these external influences provides some characteristic impact to the graphenes electronic system and thus to its transport performance. This provides a viable route for the specific control of properties of graphene-devices while the combination of the external factors points towards the potential development of new functionalities in graphene-devices.