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Large area characterisation of CVD graphene electrical properties

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Jonas Due Buron: Large-area characterisation of CVD graphene electrical properties

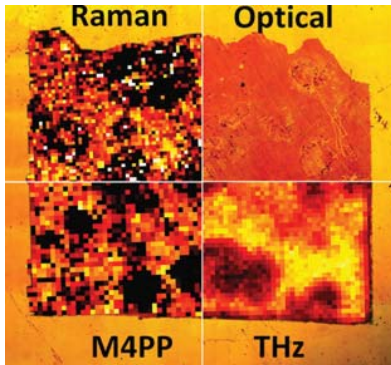
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Since shortly after graphene's discovery in 2004, major research advances have been seen in the number and quality of available techniques for the large-scale synthesis of graphene. However, this development has not been accompanied by similar advances in techniques for large-scale electronic characterization, leaving the rapidly progressing field without effective means of determining the large-scale electronic properties and uniformity of grown films. Mapping of the electrical conductivity of large-area CVD grown graphene on a cm-scale is demonstrated by non-contact Terahertz time-domain spectroscopy mapping and compared to contact based electrical measurements.



Jonas Due Buron received his B.Sc. degree in Physics and Nanotechnology 2008 and his M.Sc. degree in Physics and Nanotechnology in 2010 from the Technical University of Denmark. He is currently a Ph.D. student in the THz Technologies & Biophotonics Group at the department of Photonics Engineering, Technical University of Denmark, but is also working in close collaboration with the Nanointegration Group at the department of Micro- and Nanotechnology, Technical University of Denmark. He is primarily interested in the electronic and optoelectronic properties of graphene and other low-dimensional materials.