

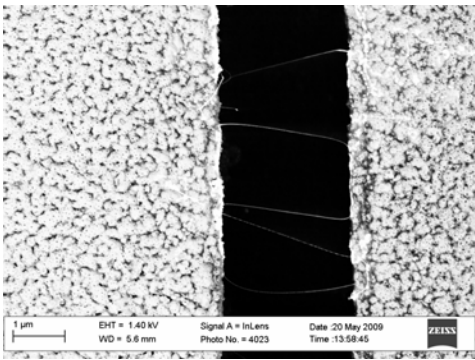
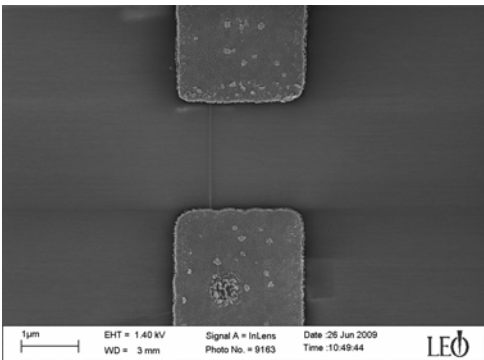




	<i>Projekt / Master Arbeit HS 2009</i>	nanoelectronics group	
<u><i>Ultraclean Nanotube Devices</i></u>			
<i>Quantum Transport</i>			
<p>goal</p> 	<p>You are going to produce “ultraclean” Carbon Nanotube devices for electronic transport measurements, using a new production method that does the Nanotube growth as the last production step, and gives very clean, disorder-free nanotubes. You will modify a recipe that has been developed in this year’s blockkurs on lowdimensional conductors to produce devices where the nanotube is freely suspended over a trench in the substrate, which will allow for the observation of vibrational effects onto the electronic transport, and also give the possibility to perform spectroscopy on the nanotube under investigation, e. g. to identify its chiral vector via Raman scattering. You will perform electron beam lithography, Carbon Nanotube growth, and electronic transport measurements at low temperatures.</p>		
	<p>Carbon Nanotubes suspended over a slit in an Si-substrate</p> 	<p>Ultraclean Carbon Nanotube device</p> 	
<p>Info</p> 	<p>starting date: 1. September 2009 or later</p> <p>duration: 2-3 months (projektarbeit) or 6 months (master)</p> <p>credit points:</p>		
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posted on 17. July. 2009 by Markus Weiss